ENTREPRENEURIAL ORIENTATION AND FIRM PERFORMANCE: THE MEDIATING ROLE OF MARKETING COMMUNICATION IN MICRO-ENTERPRISES IN KERICHO COUNTY, KENYA

BY

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DECLARATION

DECLARATION BY THE CANDIDATE

This thesis is my original work and has not been presented for examination in any other University.

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This thesis preserves beauty and joy of my precious family.

DEDICATION

To my son Jordan, Dad Mathew, my late mother Esther and to the girls of Soma-Dada Initiative.

ABSTRACT

Micro-enterprise sector is paramount to economic growth and development in many countries. In Kenya the sector has provided a steady growth in employment from 67.5%-83.4% between 2010 and 2014. However; it contributes less than 20% of the Gross Domestic Product (GDP) implying that the sector is performing dismally despite its potential contribution to employment, income and equity in Kenya. In Kericho County, the sector provides about 50% employment lower than the national average at 83.4%. This disparity between national average and county averages is attributed to dismal performance of micro-enterprises in Kericho County. Performance of micro-enterprises has been linked to entrepreneurial orientation; none-the-less literature holds that this link only explains a small variation of 5.8% of performance. What remains unclear is the relationship between the 5-dimension EO and firm performance. In addition factors such as strategic flexibility, dominant logic, organizational culture and competitive advantage play a role in mediating this relationship yet marketing communication has not been considered in past studies. In addition, past studies have focused on financial measures of performance ignoring the non-financial measures. At the same time, little is known about the relationship between entrepreneurial orientation and marketing communication. The purpose of the study was to examine the relationship between entrepreneurial orientation and performance by investigating the mediating role of marketing communication in of micro- enterprises in Kericho County. Study objectives were to: examine the relationships between entrepreneurial orientation and micro enterprise performance; determine relationships between entrepreneurial orientation and marketing communication; determine the relationship between marketing communication and firm performance and examine mediating role of marketing communication on the relationship between entrepreneurial orientation and firm performance. The study is grounded on entrepreneurial orientation, marketing communication and contingency theories. The study employed correlational design, proportionate stratified and simple random sampling procedure were used to select 373 owner/managers from a population of 5700 micro-enterprises. Primary data were collected using predesigned and tested questionnaire. Data were analyzed using Pearson's correlation and Baron and Kenney's regression analysis. The study found that EO had a strong positive correlation with firm performance (r=.615, P=.000), MC was positively correlated with firm performance (r=.434, P=.000), EO was positively correlated with MC (r=.383, p=.000) and finally the indirect effect of EO on firm performance was also significant as indicated in the results, (b=.7039, p=.000), after mediation of MC. The study established that marketing communication partially mediates the relationship between entrepreneurial orientation and firm performance. The study therefore recommends that the enterprises should adopt comprehensive entrepreneurial orientation practices to improve their performance; in addition, the enterprises improve on their marketing communication activities to enhance performance. The study contributes to existing literature by introducing marketing communication as a mediator on the entrepreneurial orientation and performance of micro-enterprises field of study.

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LIST OF ABBREVIATION AND ACCRONYMS

EO	Entrepreneurial Orientation
DL	Dominant Logic
GOK	Government of Kenya
ICT	Information Communication and Technology
IMC	Integrated Marketing Communication
KICDP	Kericho Integrated County Development Plan
MARCOM	Marketing Communications
MFI	Micro- Finance Institutions
MPESA	**M-Pesa** (**M** for mobile, ***pesa*** is Swahili for money
MSEs	Micro and Small Enterprises
ROA	Return on Assets
WOM	Word of Mouth

OPERATIONAL DEFINITION OF TERMS

Autonomy: Independent action undertaken by entrepreneurial leaders and teams directed at bringing about a new venture and securing it to fruition.

Competitive aggressiveness: The intensity of a firm's effort to outperform rivals and is characterized by strong offensive posture or aggressive responses to competitors.

Entrepreneurial orientation: The positioning of an entrepreneur both internally and externally and predisposes him/her to take actions and make decisions in the business. Entrepreneurial orientation is described in five dimension (5-D) as autonomy, innovativeness, risk-taking, pro-activeness and competitive aggressiveness.

Growth: The increases in number of employees, sales revenue, and branches.

Innovation: The predisposition to engage in creativity through the introduction of new products or services as well as adapting to appropriate technology.

Innovativeness: the willingness to try new ways and new ideas to problem solving in organisations by being creative and embracing new methods and technology.

Informal sector: describes a sector characterized by ease of entry and exit, high proportion of family workers, low skilled human capital, and little capital, limited access to organized markets, credit, education and training.

Marketing Communication: A combination of communication tools the business selects to use in order to reach any customer in any location in a bid to inform them of their products and any product development information.

MPESA: A mobile phone-based money transfer, financing and microfinancing service, launched in 2007 by Vodafone for Safaricom. M-Pesa allows users to deposit, withdraw, transfer money and pay for goods and services (Lipa na M-Pesa) easily with a mobile device.

Micro-enterprises: Businesses employing one to ten workers including the owner/manager.

Performance: Performance of micro-enterprises is viewed in two broad dimensions: financial and non-financial measures. These include profitability, sales revenue, market share, growth, owner satisfaction, employee satisfaction and customer relationship performance.

Pro-activeness: Ability to take the initiative whenever a situation demands. The proactive risk performance is exhibited in prior creation of risk proactive readiness or at least pre-arranged control over some of the aspects of the imminent uncertainties.

Risk-taking: the degree to which entrepreneurs are will to make large and risky resource commitments, engage in risky projects, bold acts to achieve firm objectives

Word of Mouth: Communication media through which the entrepreneur passes information to customers via voice i.e through face to face conversations, telephone conversations.

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CHAPTER ONE
INTRODUCTION

The chapter introduces the research problem, highlighting the objectives of the study and the significance of carrying out the research.

1.1 Background to the Study

Entrepreneurial behavior as represented by entrepreneurial orientation (EO) is taken to constitute a potential source of competitive advantage (Jantuen, Puumalainen, Saarenketo, & Kylaheiko, 2005). Traditionally, EO took the personal characteristics dimension as noted by McClealland 1962 cited in Alarape (2009) to include a set of personal psychological traits, values, attributes strongly associated with a motivation to engage in entrepreneurial activities. EO is seen to comprise three key dimensions; innovation, risk-taking and pro-activeness Covin and Slevin (1991) and an additional two dimensions of competitive aggressiveness and autonomy described by Lumpkin & Dess (2001). Miller (1983) cited in Otieno (2012) further suggests that an entrepreneurial firm is one that engages in product market innovations, undertakes somewhat risky ventures and is first to formulate proactive innovation, recognition of new markets, pursuing and seizing opportunity along defined dimensions.

Entrepreneurial Orientation (EO) has been linked to firm performance (Rauch & Wiklund, 2004). Firms which are viewed to perform well are risk-takers, proactive, innovative, autonomous and competitive. EO has been conceptualized as the process and decision making activities used by entrepreneurs that lead to entry and support of business activities (Lumpkin & Dess, 2001). Although different entrepreneurs tend to have different orientations consequently this affects the operations and performance of such business. The constructs of EO have been described by Nauman and Slevin (1999) to be risk-taking, innovativeness and proactiveness. Further, Lumpkin and Dess (2001) added two more dimensions to the EO construct namely autonomy and competitive aggressiveness.

Firm performance has been measured using a variety of indicators including objective and subjective measures, as well as financial and non-financial measures (Combs, Crook & Shook, 2005; Wiklund & Shepherd, 2005).

This multi-dimensionality of performance provides a better and more accurate evaluation of firm performance for micro-enterprises. Research that considers only a single dimension or a narrow range of the performance indicators may produce misleading results. The use of subjective measures to evaluate performance is acceptable, as it shows high positive correlations with objective measures (Song, Droge, Hanvanich & Calantone, 2005).

Literature on the construct of firm performance reveals that there is no consensus among the researchers on the appropriate measures of business performance indicators. As a result, a wide diversity of performance measures; objective and subjective measures, as well a financial and nonfinancial measures have been used across studies, which leads to high diversity in EO-performance relationship (Chakravarthy, 1986, Combs et al., 2005, Murphy et al.,1996; and Venkataraman & Ramanujam, 1986).

Theoretical perspective on entrepreneurial orientation informs the present study on the nature of the dimensions of EO acknowledging the various views on the dimensions of EO as well as the possibility of combining the dimensions as they influence micro enterprise performance. This view of EO and performance is also examined by contingency theory which explains the need for a third variable in determining the EO and performance relationship. Contingency theory allows for mediator variable which is presented in the study as marketing communication. This is guided by integrated marketing communication theory which suggests that the main goal of involving in marketing communication is to enhance customer relations. Therefore IMC is the result of aligning activities, procedures, messages, and goals in order to communicate with consistency and continuity within and across formal organizational boundaries.

Marketing communications has grown in recent years because it has been seen to represent the voice by which companies can establish a dialogue with customers and other stakeholders about their product or service (Murangiri, 2014). Kitchen, Bringell, Li, and Jones, (2004) noted that the vital role of integrated marketing communication (IMC) is to build a close relationship with the customer. Therefore IMC is the result of aligning activities, procedures, messages, and goals in order to communicate with consistency and continuity within and across formal organizational boundaries (Christensen, Cornelissen, & Morsing, 2007).

In view of this IMC is a holistic system of communication in which different techniques and tools can complement each other in the achievement of a company's marketing communication objectives (Gilmore, 2011).

These three theories; entrepreneurial orientation, integrated marketing communication and contingency theories were identified to guide the study describing a theoretical model that provided sufficient information for testing hypothesis. The theoretical framework provided the necessary information as the study examined the relationship between entrepreneurial orientations, firm performance and determined the mediating effect marketing communication has on this relationship.

The informal sector has been identified by many governments worldwide to be a key engine for economic growth and development through creation of employment, innovation, competitiveness and poverty alleviation (Kropp, Lindsay & Shoham, 2006). Kenya is in no doubt one of those nations that have embraced this sector as key to the provision of employment to youth and women, who form the bulk of the population (Republic of Kenya, 2013). The sector plays a vital role in the economic development of the nation by increasing competition, fostering innovation, besides generating employment.

There is evidence that the micro-enterprise sector provides growth in the economy. This growth has been steadily progressing from 67.5% in 2010 to 83.4% in 2014 (Republic of Kenya, 2014). This growth in the sector does not however reflect in the growth of the micro-enterprise largely due to their survival rates. Most of them fail to grow in to medium and large enterprises. This is largely attributed to financial constraints; social demands compete with business capital and managing employees (Tubey, 2010). At the same time, Ongolo and Awino (2013) point out that the sector contributes about 20% of the gross domestic product (GDP). The sector spreads across the 47 counties in Kenya contributing to the economy of every county including Kericho County.

Even though the sector is deemed instrumental in provision of economic growth and prosperity, such is not the case in Kericho County whose unemployment rate stood at 47% in 2009. Moreover 38% of the population is economically inactive and this figure rises as population grows (KICDP, 2013).

The site provided a good platform for studying entrepreneurial orientation and firm performance to understand the dynamics of the county and to explain the disparity in county averages vis a vis nationwide averages. More so the site provides an important geographical space upon which the study was conducted.

The purpose of this study was to examine the relationship between entrepreneurial orientation and firm performance by testing hypothesis and examine the mediating effect of marketing communication in this relationship. Garcia and Lajara (2002) contend that there many unexplored areas in EO and micro-enterprise performance; as such they suggest contingency approach to be adopted in this regard. Marketing communication was seen in this study as a mediator in this relationship based on previous arguments that marketing communication positively influences firm performance.

Empirical literature holds that performance of micro-enterprises has been linked to entrepreneurial orientation (EO) however, this link only provides a correlation of r=.242, explaining a variation of only 5.8% leaving 94.2% unaccounted for. What remains unclear is the relationship between the 5-dimensions EO and firm performance of micro enterprises. More so, methodological differences on determining the EO and firm performance relationship arise, none of the empirical evidences used correlational design which seeks to establish relationships.

Past studies reveal that marketing communication has a positive relationship with performance. None-the-less empirical evidence largely relied on studies focusing on financial measures and limited studies measure non-financial performance. The measures of performance used were different in most studies such as Return on Assets (ROA), growth and sales performance. At the same time, scanty information is available on non- financial measures. Although increasing academic attention has been devoted to clarifying the theoretical and conceptual boundaries of marketing communication, very limited empirical evidence exist that explain the antecedents of marketing communication in the firm performance relationship. In addressing this gap the study provided empirical evidence for the antecedents of marketing communication and firm performance.

Lastly, mediators such as strategic flexibility, dominant logic, organizational culture and competitive advantage; have been examined.

Marketing communication has not been considered as a possible mediator even though literature claims that marketing communication has a positive relationship with firm performance. In addition the empirical evidence on the methods employed in the various studies use structural equation modeling (SEM) to determine mediation however, the magnitude of this relationship seems to vary across studies consequently the present study examined mediation using Baron and Kenney's regression to address the gap.

1.2 Statement of Problem

The micro-enterprise sector contributes to growth in the Kenyan economy by provision of more than 80% of employment. However; it contributes less than 20% of the Gross Domestic Product (GDP) implying that the sector is performing dismally despite its potential contribution to employment, income and equity in Kenya. Performance of micro-enterprises has been linked to entrepreneurial orientation (EO). However, this cannot be viewed in a direct perspective as suggested in past studies because this direct link provides a correlation of r=.242, explaining a variation of only 5.8% leaving 94.2% unaccounted for. Moreover, it is not clear what dimensions constitute EO and their relationship with firm performance. Other organizational factors have been established to mediate this relationship. Such include strategic flexibility, dominant logic, organizational culture and competitive advantage. None the less marketing communications has not been considered as a mediator by past studies. By testing mediators it provided a more accurate explanation of EO and firm performance relationship. Previous arguments that marketing communication influences firm performance has focused on financial measures yet non-financial measures have not been examined to reach a comprehensive understanding of this relationship for micro-enterprises. Past studies have not examined the relationship between entrepreneurial orientation and marketing communication, this relationship remains unknown. In light of this, the study extended the existing entrepreneurial orientation and firm performance literature by proposing a conceptual framework that considered marketing communication as a mediating variable in the relationship between these two constructs.

1.3 Study Objectives

The general objective of the study was to examine the relationship between entrepreneurial orientation and performance by investigating the mediating role of marketing communication in of micro- enterprises in Kenya.

More specifically the study sought to:

i.) To examine the relationship between the entrepreneurial orientation and performance of micro-enterprises in Kericho County.

ii.) To determine the relationship between marketing communications and performance of micro-enterprises in Kericho County.

iii.) To determine the relationship between entrepreneurial orientation and marketing communications of micro-enterprises in Kericho County.

iv.) To investigate the mediating effect of marketing communication on the relationship between entrepreneurial orientation and firm performance of micro-enterprises in Kericho County.

1.4 Study Hypotheses

H_0: Entrepreneurial orientation has no significant relationship with performance of micro-enterprises in Kericho County.

H_0: Marketing communication has no significant relationship with performance of micro-enterprises in Kericho County.

H_0: Entrepreneurial orientation has no significant relationship with marketing communications of micro-enterprises in Kericho County.

H_0: Marketing communication does not mediate the relationship between entrepreneurial orientation and performance of micro-enterprises in Kericho County.

1.5 Scope of Study

The study was conducted in Kericho County covering micro-enterprises found the six sub-counties including: Ainamoi, Belgut, Bureti, Kipkelion East, Kipkelion West and Soin-Sigowet. The study investigated the relationship between entrepreneurial orientation, and performance of micro-enterprises in Kericho for a three year period from 2014 to 2017.

1.6 Justification of Study

The study was intended to contribute towards a better understanding of entrepreneurial orientation and performance of micro-enterprises. The outcome of this research provides the government (County included) with information that can be used as inputs for policy development which are focused in entrepreneurship development. The results may provide additional information for policy development which target growth of micro-enterprises.

The study contributes to existing literature by introducing marketing communication as a mediator on the entrepreneurial orientation and performance of micro-enterprises field of study. The first contribution is to bring out the relationship between entrepreneurial orientation and performance; to understand the mediating effect of marketing communication on the relationship between entrepreneurial orientation and firm performance to be beneficial to firms in improving their performance. Academicians and students alike should find the study methodology and subsequent results rich enough to guide future research.

1.7 Conceptual Framework

This study examined the entrepreneurial orientation in the Kenyan context and its influence on micro enterprise performance. The objective of this research was to test the hypothesis that relates entrepreneurial orientation dimensions and firm performance, relates these entrepreneurial orientation dimensions; and marketing communication to firm performance. The conceptual framework is illustrated in figure 1. 1. According to this model, the association of entrepreneurial orientation and firm performance, marketing communication with entrepreneurial orientation, marketing communication with firm performance were tested.

The independent variable, entrepreneurial orientation: is taken to represent the process of pursuing and seizing opportunity on defined constructs. The key constructs taken in this study are those described by Lumpkin and Dess (2001) which include; risk taking, innovativeness, proactiveness, competitive aggressiveness and autonomy. The dependent variable firm performance of micro-enterprises included the non -financial measures including customer loyalty, overall owner satisfaction, competitive position and customer referrals and increase in number of employees.

Cumby and Conrod (2001), suggest non-financial factors, such as customer loyalty, employee satisfaction, internal processes, and an organisation's innovation as measures of shareholder value.

Marketing communication (MC) is hypothesized as a mediator in this relationship based on previous arguments that marketing communication positively influences firm performance. Marketing Communication is the means by which a supplier of goods, services, values and or ideas represents themselves to their target audience with the goal of stimulating dialogue

leading to a better commercial and other relationships. Key constructs: direct marketing, promotion, advertising and personal selling and public relations, word of mouth and social media marketing. The study aimed at examining the mediating effect of marketing communication on the relationship between entrepreneurial orientation and micro-enterprise performance. The model below adapted from from Zhao, Lynch and Chen (2010), was modified to include entrepreneurial orientation, marketing communication and firm performance as the variables under study.

The influence of entrepreneurial orientation (EO) on non-financial firm performance was examined using the 5-dimensions as indicated in Fig.1.1 this is noted as path c. in addition the influence of EO on MC was tested noted as path a. MC and non-financial performance was also examined(path b). Finally the mediation role of MC in the relationship between EO and non-financial performance was examined noted as c'.

The model shows the relationships examined in the study.

CONCEPTUAL FRAMEWORK

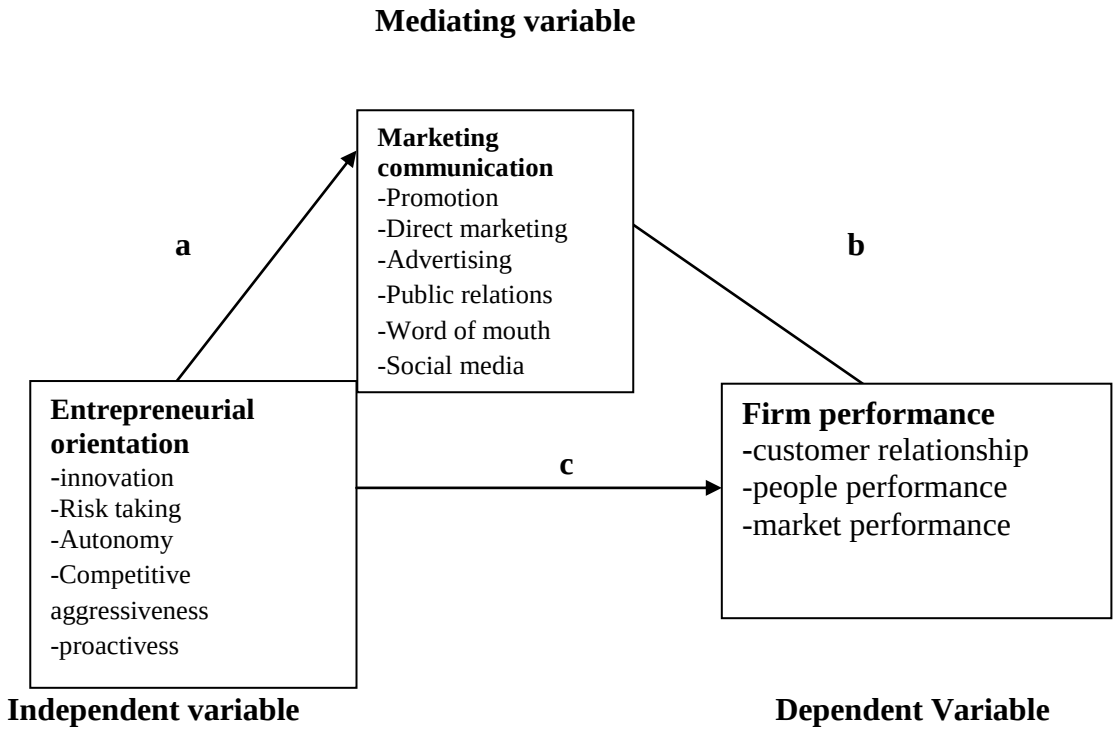


Figure 1.1: Conceptual framework adapted from Zhao, Lynch & Chen, (2010).

CHAPTER TWO

LITERATURE REVIEW

This chapter presents a review of relevant literature in the area of study. It provides a critical review of the available literature and highlights the gaps and issues identified in the study. In addition, the chapter brings out the theoretical and conceptual perspectives that present the theories and fundamental concepts that guided the study.

2.1 Theoretical Perspective

Entrepreneurial orientation literature is reviewed in this section according to theorists that focus on the various dimensions of enterprise behavior and the entrepreneurial context. A discussion of entrepreneurial orientation, integrated marketing communication and contingency theories ensues before a discussion on firm performance.

2.1.1 Entrepreneurship and Entrepreneurial Orientation Theory

Entrepreneurship often is thought to be within the purview of individuals only because it is frequently associated with the introduction of a revolutionary intervention (Miller, 1983 cited in Otieno, 2012). It is also considered by some theorists to apply primarily to the domain of small businesses because they are responsible for the majority of economic growth and new job creation via entry into untapped markets. The study of firm's entrepreneurial orientation (EO) is analogous to Stevenson and Jarillo's (1990) concept of entrepreneurial management; in that it reflects the organizational processes, methods and styles that firms use to act entrepreneurially. With regard to the specific dimensions of EO, Miller (1983) has provided a useful starting point by suggesting that an entrepreneurial firm is one that engages in product market innovation, undertakes somewhat risky ventures and is first to come up with proactive innovations. Traditionally, EO took the personal characteristics dimension as noted by McClealland (1962) cited in Alarape, (2009) to include a set of personal psychological traits, values, attributes strongly associated with a motivation to engage in entrepreneurial activities.

Entrepreneurial Orientation (EO) is conceptualised as the process and decision making activities used by entrepreneurs that lead to entry and support of business activities (Lumpkin & Dess, 2001). The key dimensions of entrepreneurial orientation (EO) include innovation, risk-taking, pro-activeness, competitive aggression and autonomy, (Lumpkin & Dess, 2001). EO is taken to constitute a potential source of competitive advantage.

Miller (1983) cited in Otieno (2012), describes EO as a combination of risk-taking, innovativeness and pro-activeness. Although innovativeness, risk taking and proactiveness are important, Covin and Slevin (1989) have labelled a basic unidimensional entrepreneurial orientation implies that only firms that exhibit high levels of all three dimensions should be regarded as entrepreneurial. This approach may be too narrowly construed for explaining some types of entrepreneurial behaviour. Although we argue that all five dimensions are central to understanding the entrepreneurial process, they may occur in different combinations depending on the type of entrepreneurial opportunity a firm pursues (Lumpkin & Dess, 2001).

Risk taking is described as venturing into the unknown (Lumpkin & Dess, 1996). Risk taking propensity is the tendency to take or avoid risks viewed as individual characteristic. Kropp, Lindsay and Shoham (2008) described entrepreneur's perception of risk as the uncertainty and potential losses associated with outcomes which may follow from a given set of behavior. Lumpkin and Dess (1996) identified three types of risks that businesses face in pursuing entrepreneurial activities; business risks associated with entering new markets or supporting unproven technologies; financial risks relating to the financial exposure required and the risk/return profile of the new venture. It may include borrowing heavily or committing large proportions of their resources and personal risks referring to the reputation effects of success or failure in the business.

Pro-activeness is an opportunity-seeking, forward-looking perspective involving introducing new products or services ahead of the competition and acting in anticipation of future demand to create, change and shape the environment (Lumpkin &Dess, 1996; Kreiser et al., 2002). It is manifested in aggressive behavior directed at rival firms and the organizational pursuit of favorable business opportunities.

Accordingly Wisner (2004) argues that the dimensions of micro and small enterprises (MSEs) proactive orientation include, creating a greater level of trust throughout the customers, identifying and participating in additional innovative products, establishing more frequent contact with a firm's members, creating a compatible communication and involving all supply chain members in firm's product/service marketing plans which if properly implemented will lead to high organization performance.

Competitive aggressiveness refers to a firm's propensity to directly and intensely challenge its competitors to achieve entry or improve position, that is, to outperform industry rivals in the marketplace (Krauss, Fresse, Friedrich, & Unger, 2005). It also reflects the willingness of a firm to be unconventional rather than rely on traditional methods of competing. This aspect is used to measure how entrepreneurial firms deal with threats, and it also refers to the firm responsiveness directed toward achieving competitive advantage (Frese et al., 2002; Lumpkin & Dess, 2001).

Autonomy refers to the independent action of an individual or a team in bringing forth an idea or a vision and carrying it through to completion (Lumpkin & Dess, 1996). In general, it means the ability and will to be self-directed in the pursuit of opportunities. In an organizational context, it refers to freely taken action, irrespective of organizational constraints, for establishment and smooth running of a venture (Kraus et al., 2005; Shrivasrava and Grant, 1985; Stevenson & Jarillo, 1990). Autonomy in firms may vary with the size of organization, management style, or ownership (Lumpkin & Dess, 1996).

Innovativeness of entrepreneurs is measured by the propensity by which they innovate their business, Miller and Friesen, (1982); their willingness to try new ways which are different from the existing, to adopt new ideas or new methods to their business operation; and the eagerness to implement the innovation strategy in their business (Khandwalla, 1987). Innovativeness reflects a firm's tendency to engage in and support new ideas, novelty, experimentation and creative processes (Lumpkin & Dess, 1996) that may result in new products, services, or technological processes and which may take the organization to a new paradigm of success (Swiezczek & Ha, 2003). It also implies seeking creative, extraordinary or strange solutions to problems and needs.

Innovativeness represents a basic willingness to depart from existing technologies or practices and venture beyond the current state-of-the-art (Covin & Slevin 1991).

Prior studies (Covin and Covin, 1990) argue that a basic unidimensional entrepreneurial orientation which implies that only firms that exhibit high levels of all the three dimensions; risk taking, innovation and creativity should be regarded as entrepreneurial. Lumpkin & Dess (1996) suggest that all the five dimensions are critical to understanding the entrepreneurial process. However, this approach may be too narrow in explaining EO, more so, EO can best be characterised by several dimensions of various combinations.

This perspective informs this study which intended to examine the dimensions of EO in understanding their influence on performance of micro-enterprises.

2.1.2 Integrated Marketing Communications Theory

Integrated marketing communication (IMC) is described as business strategy which is used to get maximum positive impact on the business. The theory was coined in early 1990s by American Advertising Agencies Association (AAAA) as a comprehensive plan to further evaluate the strategic roles of a range of different communication disciplines. Nowak and Phelps (1994) brought out the concept of IMC s coordinated marketing communication as the sum of all tools involved such as direct marketing, public relations and advertising, Kitchen (2000) adds that the goal of which to achieve the synergy of increasing brand image and influences behavior response from the targeted customers. Egan (2007) argues that IMC focuses on how greater values can be transferred to the customer, and aims to make close relationship with the customer. Usually it is the combination of different promotion mix which is used in same way to produce seamless message to make maximum impact on the customer. Further Egan (2007) explains that media, message consistency, design consistency, reinforcement and sales alignment are the components of IMC.

According to Jones (2008) it is a revolutionary step: because of a whole culture of agencies, in-house departments, and consultants had grown up around the notion of separation for; advertising, direct marketing, sales promotion, and public relations efforts, rather than the harmonious, customer-centered planning process that IMC requires.

Integration has become an essential concept in marketing because technological advances have changed how business stakeholders interact. Lovelock &Wirtz (2004) noted that the marketing communications mix includes advertising, personal selling, publishing, public relations, sales promotions, instructional materials and corporate designs. Customers need information about the features of the product, its price and how they can access it in order to make informed purchase decisions. This means that, having good effective communication channels add value to the product of the company as customers have confidence in their purchase (Poturi, 2008).

A constant brand message must be conveyed and tailored to how the customer interacts with specific media. The various communications mix elements are mutually reinforcing, creating synergies in uplifting the brand image of the service or product (Kotler & Keller 2005). However for these synergies to be realized, the communications mix must run through the most effective communication media. Marketing communications mix thus plays a critical role in creating awareness and arousing interest and desire of trial and ultimately purchase of the product/ service. It can contribute to the brand equity by crafting brand image and embedding the brand in the consumer's memory (Kotler, 2005).

Kitchen et al., (2004) notes that the vital role of IMC is to build a close relationship with the customer. Therefore IMC is the result of aligning activities, procedures, messages, and goals in order to communicate with consistency and continuity within and across formal organizational boundaries, (Christen et al., 2007). Message consistency is the crux of IMC, (Nowak &Phelps (1994). In view of this IMC is a holistic system of communication in which different techniques and tools can complement each other in the achievement of a company's marketing communication objectives (Low, 2000). Ventraman (2011) alludes that IMC plays an important role in building close customer relation, adds that there is a positive impact of IMC on the organizational performance. This view of IMC focuses on building customer relationship however Eagle and Kitchen (2000) recognizes that IMC builds long term and not short-term results. Tsikirayi, Muchenje and Katsidzira (2012) found budgetary restrictions, poor product quality as barriers to successful implementation of IMC.

This holistic approach of IMC whilst acknowledging the impediments to successful implementation will guide the study in addressing how marketing communication can play a role in enhancing micro-enterprise performance.

2.1.3 Contingency Theory

Strategic management scholars are concerned with the relationship between key variables; organizational structures and processes and characteristics of the business environment and performance. In order to effectively model the EO and firm performance relationship the role of contingent variables need to be considered. Contingency theory suggests that the congruence or fit among key variables such as environment, structure or strategy is critical for obtaining optimal performance (Miller, 1988). The entrepreneurship literature in referring to the causes of entrepreneurship often mentions such factors as managerial style, need for

achievement and other social motivational factors such as decentralization of decision making, may influence performance of firms with entrepreneurial orientation. Covin and Slevin (1991) discussed the relationship of strategy, structure and environment to the EO dimensions of innovativeness, risk taking and proactiveness. Using these three dimensions, several researchers have verified the importance of viewing the EO and firm performance relationship in a contingency framework like (Covin & Slevin 1991; Nauman & Slevin1999, 1988; Wiklund & Shephard, 2005).

Contingency theory is guided by the general orienting hypothesis that organizations whose internal features best match the demands of the environment. The term was coined by Lawrence and Lorsch (1967) who argued that the amount of uncertainty and rate of change in an environment impacts the development of internal features of an organization. Contingency theory holds that the relationship between two variables depends on the level of a third variable. Introducing mediators into bivariate relationships helps reduce the potential for misleading inferences and permits a more precise and specific understanding of contingency relationships (Rosenberg, 1968). Because of its concern with performance implications, contingency theory has been fundamental to furthering the development of the management sciences (Venkatraman, 1989).

Contingency theory guides the study as it informs the introduction of marketing communication as a mediator variable to allow for a more accurate and more precise understanding of the relationship between entrepreneurial orientation and firm performance.

Conceptually, a mediator is a construct that represents the generative mechanism through which the focal variable is able to influence the dependent variable of interest (Baron and Kenny, 1986). A mediator analysis is then used to establish through what mechanism an independent variable exerts its influence on a dependent variable. In the context of entrepreneurial orientation (EO), Lumpkin and Dess (1996) suggest that there may also be mediators in the relationship between EO and firm performance and as such then, the EO and firm performance direct relationship may be less meaningful. That it is through organisational activities that EO is made effective. Knowledge about these mediators informs the decision makers of the activities that are necessary to make EOs effective.

2.1.4 Concept of Firm Performance

Literature on the construct of performance reveals that there is no consensus among the researchers on the appropriate measures of business performance indicators. As a result, a wide diversity of performance measures, i.e., objective and subjective measures, as well a financial and nonfinancial measures were used across studied, which leads to high diversity in EO and firm performance relationship (Chakravarthy, 1986; Venkataraman and Ramanujam, 1986;. Murphy et al., 1996; and Combs et al., 2005).

Subjective measures can be an effective way to examine business performance, as they allow comparison across firms and contexts, such as industry type, time horizons, cultures or economic conditions (Song et al., 2005). When subjective measures are employed, managers can use the relative performance of their industry as a benchmark when providing a response (Combs et al., 2005). Measurement of Performance in strategic research subjective measures of performance are frequently used and have been found to be a reliable and valid measures. Subjective measurements are strongly correlated with objective measurements in terms of absolute changes in return on assets and sales over the same time period; for example, the correlation (r) of objective and subjective measures to total sales gives a value for r of .80, and to return on assets gives a value of .79 (Dess & Robinson, 1984). These findings support the validity of performance evaluation through subjective measures.

Performance of a firm based on non-financial measures including customer satisfaction, innovation, reliability, data storing capability, workflow improvement, and skill development (Hafeez, Malak, & Abdelmeguid, 2006). Market share, sales growth, customer satisfaction, return on investment, customer retention, and competitive position are the suitable performance measures of the business firms (Morgan & Strong, 2003). By market share, sales growth, profit growth, employee satisfaction and employee retention performance of a business can be well evaluated (Rudd, Greenley, Beatson, & Lings, 2008). Activities such as customer satisfaction, cost, flexibility, and quality, are the attributes of firm's performance.

2.2 Review of Empirical Literature

2.2.1 Entrepreneurial Orientation and Firm Performance

Entrepreneurial behaviour as represented by entrepreneurial orientation (EO) is taken to constitute a potential source of competitive advantage and that a process of pursuing and seizing opportunity along defined dimensions (Jantunen et al 2005). Traditionally, EO took the personal characteristics dimension as noted by McClealland 1962 cited in Alarape (2009) to include a set of personal psychological traits, values, attributes strongly associated with a motivation to engage in entrepreneurial activities. EO is seen to comprise three key dimensions; innovation, risk-taking and pro-activeness (Covin and Sleivin, 1991) and an additional two dimensions of competitive aggressiveness and autonomy described by Lumpkin & Dess (2001). Entrepreneurial Orientation is viewed to influence firm performance (Kiprotich et al., 2015; Osoro, 2012; Owoseni and Adeyeye, 2012; Rauch and Wiklund, 2004; Soares, Rohman, and Solimun, 2014).

However, studies have shown that EO influences performance in varying degrees, varying environments, sectors and varying dimensions (Chenuos and Maru 2015; Krauss et al., 2011; Lumpkin and Dess 1996; Naman & Slevin, 1993). The salient dimensions of EO can be derived from a review and integration of the strategy and entrepreneurship literature (e.g., Covin and Slevin, 1991). Based on Miller's (1983) conceptualization, three dimensions of EO have been identified; Innovativeness, risk taking, and pro-activeness. Lumpkin & Dess (1996) suggested that two additional dimensions, competitive aggressiveness and autonomy are salient to entrepreneurial orientation.

Lumpkin and Dess (1996) argue that the EO and firm performance relationship remains complex and suggest that this relationship should be viewed is context specific, influenced by prevailing external environment as well as internal organizational process. This argument was supported by Rauch and Wiklund (2004) discussed a meta-analysis of the relationship between EO and firm performance giving a correlation r =0.242, which accounts for 5.8% leaving 94.2% unaccounted for. They suggest that potential moderators that may affect the EO and performance relation including; firms age (older ones with more established habits of being less positively affected by EO), environmental dynamism, national culture, strategy pursued, and organizational structure. This meta -analysis was conducted in developed countries, its applicability and generalization to less developed countries like Kenya is limited.

This position is backed by Krauss, et al., (2011) adding that there are significant relationships between EO components (personal initiative, achievement-, and risk taking orientation) and business performance. The study examined the relationship of the psychological construct Entrepreneurial Orientation (EO) with business success in a sample of 248 Southern African business owners. They reintroduced the individual in EO research and show the importance of the person of the entrepreneur for business performance: Hierarchical regression analyses revealed significant relationships between EO components (personal initiative, achievement-, and risk taking orientation) as well as overall EO and business performance. In addition, confirmatory factor analysis supported a single factor construct of EO that consists of learning-, achievement-, and autonomy orientation, competitive aggressiveness, innovative- and risk taking orientation, and of personal initiative. The findings of this study none-the-less support a single factor construct that includes learning and achievement however the theory on EO suggested by Lumpkin & Dess 2001 encompasses the five dimensions.

Osoro (2012) studied the influence of entrepreneurial orientation on the performance of SMEs in the ICT sector with the aim of finding out what shaped EO in SMEs in a developing country context and what contributed to performance for SMES from 160 randomly selected SMEs in Nairobi. Study findings revealed that contextual factors did potentially shape EO and that certain 3- dimensions EO and contextual factors were associated with entrepreneurial performance. The sample size represented is small therefore it is not possible to generalize the findings from the randomly selected respondents. The findings support the conclusion that an increase in earnings potential is possible through individual behavior associated with an EO and learning related factors. Further, Kiprotich et al., (2015) alluding to this, evaluated the moderating effect of social networking on the relationship between 3-dimension EO and performance of SMEs in Nakuru. Explanatory research design guided the study which 214 SMEs were randomly selected. Results indicated that social networking had moderating effect on the risk-taking, pro-activeness and performance of SMEs.

On the contrary, Owoseni and Adeyeye (2012) concluded that there is no significant difference between low and high risk taking entrepreneurs. Further that there is no significant interaction between innovativeness, proactiveness and risk taking. A total of 310 participants from Lagos (Nigeria) were purposively selected and survey design employed in the study.

These findings from a purposively selected sample may present biased results therefore making it difficult to compare with other populations. Chenuos and Maru, (2015) extends this argument adding that there is need to control internal and external contingent factors. Using data from 333 Small and Micro-enterprises (SMEs) in Uasin-Gishu County, the study concluded that innovativeness and pro-activeness and positive effects on firm performance; however, risk-taking had a significant inverse effect on firm performance. The purpose of controlling the internal and external contingent factors have not been clearly elaborated in the study, more so, the findings of the study don't show any control applied to the dimensions of entrepreneurial orientation yet we know that it's near impossible to control external contingent factors in business.

The relationship between EO and performance of micro-enterprises cannot be viewed from a direct perspective as was established by Rauch and Wiklund (2004). Their findings from a meta-analysis of this relationship provides a correlation of r=.242, explaining a variation of only 5.8% leaving 94.2% unaccounted for. Notwithstanding the research evidence on the relationship between EO and firm performance, divergent views on the dimensions of EO emerge. On one hand Osoro (2012); Owoseni & Adeyeye (2012), Krauss et al. (2011); Lumpkin & Dess (1996) conclude that the three dimensions jointly influence firm performance. But on the other, Kiprotich et al, (2015) and Chenuos & Maru (2015) indicate that not all the three dimensions influence firm performance, highlighting risk taking has a significant inverse effect on performance.

In light of this, what remains unclear is the relationship between the 5-dimensions EO and firm performance of micro enterprises. More so, methodological differences on determining the EO and firm performance relationship arise, none of the empirical evidences used correlational design which seeks to establish relationships and therefore the present study brought more clarity on the subject matter unlocking this situation in the micro-enterprise sector in Kenya.

2.2.2 Marketing Communication and Firm Performance

Marketing communications (MC) has grown in recent years because it has been seen to represent the voice by which companies can establish a dialogue with customers and other stakeholders about their product or service (Murangiri, 2014).

Empirical literature conducted in different sectors such as banking (Abubakar (2014), food manufacturing; Isamil, Hussain, Shah and Hussain, (2012) transport Onditi et.al., (2014) and telecommunications Mulra and Ndati (2013), show that marketing communication has a positive relationship with performance.

Abubakar (2014) observes that direct marketing has a significant impact on financial performance of a firm. This observation is made out of a case study investigation carried out at First Bank of Nigeria PLC, in which two aspects of marketing communication were studied in relation to Return on Assets (ROA) as a financial measure. Correlation analysis revealed that there is positive significant relationship between advertising and ROA (r = 0.840); promotion had strong relationship with ROA (r =0.451). Isamil, et al., (2012) extends this argument and holds that there is a positive relationship between promotional expenses and sales. This was concluded after conducting a case study at Procter and Gamble Company in which the objective was to evaluate the effect of marketing communication on sales performance. This established that the strong relationship r = 0.94, p=.005 significant level. The study concludes that marketing communication helps the firm to establish good relationship with the customers and ensure its survival and attain long term objectives. The methodology in these studies (Abubakar 2014; Isamil et al., 2012) tend to limit the generalizability of the findings in micro-enterprise sector due to their population. In addition, findings were based on multinational corporations in which their business environment is diverse and completely different from the micro-enterprise sector.

Further Odunlamai and Ofoegbu (2011) support the argument adding that there is need to manage the marketing communication (MC) system for efficient performance in a competitive environment. This conclusion was drawn from a case study conducted in Sunshine Company (Oyo State, Nigeria). Moreover, implementation of promotion as marketing communication helped the company increase sales performance. Other elements of the marketing communication mix have been examined and as such, Onditi et al., (2014) adds that sales promotion, advertising and personal selling and direct marketing affect sales performance. This was concluded in a census study of public service bus companies operating in Mombasa with a fleet of 10 buses. The study aimed to determine the effects marketing communication mix elements on sales performance. Descriptive research design was adopted and a total of 21 public service bus companies.

However public relations was established to have a very low impact on the sales performance of business companies in Mombasa. These findings if repeated with a much larger sample and the constructs tested again in a regression analysis then the findings would be worth generalizing.

Murangiriri (2014) studied the role of marketing communication mix on performance of Micro Finance Institutions with an aim to establish the effect of promotion on performance of MFIs. The study adopted descriptive design with a sample size of 13 marketing managers was selected purposively. Results indicate that sales promotion, publicity and advertisement all had influence on performance however, public relations did not influence performance of MFIs. Similarly, Mulra and Ndati (2013) investigated the IMC strategies used with MPESA money transfer services by Safaricom Limited in Nairobi. Case study design was adopted with a sample size of 48 respondents. The findings confirmed that Safaricom had used IMC strategies befitting their target market compared to its competition to diffuse information on the M-PESA innovation and thus the success of its adoption could be attributed to the unique IMC strategies.

Odunlamai and Ofoegbu (2011), and Isamil et al., (2012), argue that promotion and sales performance are positively related. In addition, Abubakar (2014) maintains that both advertising and promotion has strong relationship with sales. Notably these studies focused only on two aspects of marketing communication; promotion and advertising; how they influence sales performance whilst Onditi et al., (2014) and Murangiri (2014) indicate that public relations has a very low impact on sales. It is evident from literature that a number of studies have attempted to address the effect of marketing communication on firm performance using financial measures however there lacks empirical evidence on non-financial measures. Non- financial measures have been recommended for evaluation of performance for because it is significantly reliable as an alternative to objective measurement (Zukliffi, 2011).

Past studies reveal that marketing communication has a positive relationship with performance. None-the-less empirical evidence (Abubakar (2014), Isamil et al., (2012) Onditi et.al., (2014) Mulra & Ndati (2013) largely relied on studies focusing on financial measures ignoring non-financial performance in which the present study addressed.

2.2.3 Entrepreneurial Orientation and Marketing Communication of Micro-enterprises

Bettiol, Di Maria and Finotto (2012) proposed a framework in which the contents of marketing communication are generated from an entrepreneurial orientation perspective. MC and innovation happen in the same moment and are stimulated and started by an act of sense making made by an entrepreneur. Case studies were employed to establish this relationship from 4 purposively selected enterprises. The findings of the study indicate that entrepreneurs are engaged in the construction of interpretive frameworks that when explicated are made accessible to consumers and stakeholders, legitimate novel business ideas and logics. By examining only one dimension of EO the findings of the study tend to be biased and this may limit generalizability and application of knowledge based on purposively selected cases for study.

Given that marketing communications is one of the vectors to creating and developing relationships with client companies, SMEs need to increase their integrating communication efforts in order to maintain themselves on a market driven by information and oriented to interactive customers (Gilmore 2011). Marketing communication has therefore all the necessary tools to raise awareness, value, mobilize and persuade, in order to accomplish specific objectives of sustainable development. It is found that, especially in large companies, marketers increasingly given more time and resources to understanding and obtain consumers' / customers. Client affinity is closely linked to the idea of sustainable development, as it focuses on long-term involvement, so the decision-makers of SMEs should be encouraged to look at business development from this perspective (Jones, 2008).

An obvious link between marketing communication and sustainability is represented by the emphasis many companies put on their commitment to sustainability, in the attempt of differentiating themselves from their competitors and to enhance their corporate brand and reputation (Jones, 2008). To achieve sustainability, the promotional messages should outline honestly and accurately the environmental benefits of products, with a focus on product's attributes, and the company's interest in developing corporate socially responsible programs. In addition, include enough information used by the customers in their buying decision making process (Popescu, Vrânceanu, Dumitru and Roşca 2012).

Esposito (2013) investigated if and how integrated marketing communication (IMC) has been implemented by Italian small-and-medium-sized enterprises (SMEs). Case studies conducted indicated that small-and-medium-sized Italian enterprises implement marketing communication using a flexible approach. The most widespread communication purpose was to activate dialogues and new connections with their stakeholders. The respondents largely used communication tools were participation in fairs, sponsorships and events, although the emerging tool was online communication: digital and social media. Popescu et al (2012) investigated the role of marketing communication in sustainable business development. The study concluded that the most used tools are not necessarily the most appropriate in terms of customers. Therefore in order to promote sustainable development of business, SMEs must learn to choose the most appropriate ways of marketing communication ensuring strengthen relationships with customers and gain competitive advantage.

Mramba (2015) explored the marketing communication strategies used by street vendors in Dar es Salaam. He specifically looked at the type of marketing communicating strategies applied, the strengths and weaknesses of each. A qualitative data consisting of interviews and focus group discussions were collected from 59 street vendors. The findings show that the marketing communications strategies used are weak and relatively similar. Never the less the choice of strategy is highly influenced by costs and marketing skills among street vendors. This implies that marketing communication opportunities of street vendors are underutilized since the public is not well informed about their offerings. This calls for interventions for the street vendors, particularly in marketing communications skills development.

Lekhanya (2015) presented an insight trial to empirically apply the marketing communication approach with SMEs, in a bid to explain its impact on SME growth. Quantitative study was conducted on 374 SMEs in Kwa Zulu Natal Province; descriptive analysis revealed that marketing communication tools play a major role in SME business growth. Tsikirayi et al., (2013) adds that promotion is critical to the success of a small business enterprise; however, it cannot be applied in isolation. Other elements of the marketing communication mix contribute to the overall success of the business. The findings from the study conducted in Zimbabwe indicated that SMEs rarely invest in marketing communication tools and therefore to test its effect in relation to performance is difficult. The findings indicate that there was no deliberate marketing communication programme which involved the organization holistically, that little effort is put into implementing marketing communication by SMEs.

The literature has underscored the importance of marketing communication for SMEs (Esposito, 2015; Mramba 2015; Lekhanya 2015 and Popescu et al., 2012). However, Tsikirayi et al., (2013) contradicts this proposition. Esposito (2015) points out that SMEs adopt marketing communication using flexible approach. Mramba (2015) concurs with this and argue that there is limited use of marketing communication among micro-enterprises moreover, even if there is use, the strategies used are weak and underutilized. On the contrary, Tsikirayi et al., (2013) posits that SMEs rarely invest in marketing communication tools. Additionally, small businesses have no deliberate marketing communications program and that little effort is put into implementing marketing communications by SMEs. Theoretical and empirical evidence acknowledge the practice of marketing communication among micro-enterprises. Although increasing academic attention has been devoted to clarifying the theoretical and conceptual boundaries of marketing communication, very limited empirical evidence exist that explain the antecedents of marketing communication in the firm performance relationship. In addressing this gap the study provides empirical evidence for the antecedents of marketing communication and firm performance.

2.2.4 The mediating effect of marketing communication on the relationship between entrepreneurial orientation and firm performance.

Research indicates that performance can be improved when key variables are correctly aligned (Naman & Slevin, 1993). This is the basic premise of contingency theory which suggests that congruence or "fit" among key variables such as industry conditions and organizational processes is critical for obtaining optimal performance (Lawrence & Lorsch, 1967).

A study of the literature on EO mediation (defined as all articles on SCOPUS with “entrepreneurial orientation” and “mediat*” in their titles, abstracts or key words) reveals that the idea of mediation has been explored only in a small fraction of EO papers: Out of 311 papers that Scopus lists for EO, a search for EO mediation resulted in only 27 papers, 15 of which analyze mediators of the relationship between an EO and a dependent variable (mostly firm performance). The findings indicate that mediation of EO has been analyzed in many different contexts, with different operationalizations of EO and, most importantly, with many different potential mediators such as innovativeness, organizational structure, commitment and, most of all, organizational learning, which is analyzed in 5 out of the 15 papers.

Further, in a large majority of the papers, at least partial mediation was found, which hints at the fact that the particular mediator may be acting as a transmission mechanism between EO and firm performance (Harms, 2014).

Arief, Thoyib, Sudiro and Rohman (2013) assents that strategic flexibility mediates the relationship between EO and firm performance. This they determined in a survey conducted among 140 SMEs in Malang. The study was analyzed by using Structural equation modeling and the results indicate that the significance of the direct effect of EO on firm performance is reduced when the indirect effect of EO through strategic flexibility is included in a total effect model. Consequently, EO is positively related to firm performance, and strategic flexibility partially mediates this relationship

Campos, Nuno de la Parra and Parellada (2012) investigated the influence of dominant logic (DL) on the EO and firm performance relationship. Survey design using self-reported data obtained from 149 single informants from several parts in Mexico were used.

Data were analyzed using SEM and the study concluded that DL mediates EO-firm performance relationship. Similarly Sehu and Mahmood (2014) examined the mediating effect of organizational culture on the relationship between entrepreneurial orientation and firm performance in Nigerian small and medium enterprises (SMEs). Based on the theoretical consideration, a model was proposed to examine this relationship. A quantitative survey method was employed. The data were collected from the owner/managers of SMEs in Kano – Nigeria. Partial least squares structural equation modeling (PLS) was used for the data analysis. Based on the statistical findings, entrepreneurial orientation and organizational culture were significantly related to firm performance. Organizational culture was found to partially mediate on the relationship between EO to firm performance.

Zainin, Hadiwidjojo, Rohman and Maskie (2014) determined the direct and indirect effects of entrepreneurship orientation on marketing performance via competitive advantage. This study also examined the role of learning orientation in this relationship using structural equation modeling (SEM) to test the relationship. The study was conducted in small medium enterprises (SMEs) export in Great Malang Territory Indonesia. Results show that there was effect of entrepreneurship orientation on the performance of marketing, in addition, competitive advantage has complete mediation effect.

The relevance of EO mediation was underscored by a meta-analysis on the mediators of EO and firm performance relationship (Harms, 2014). Organizational factors have been suggested to mediate this relationship. Such factors as strategic flexibility (Arief, Thoyib, Sudiro and Rohman, 2015) dominant logic (Campos, Nuno de la Parra and Parellada, 2012), organizational culture (Sehu & Mahmood, 2014) and competitive advantage (Zainin, et al., 2014). However different mediation degrees have been established; Strategic flexibility, dominant logic, and organizational culture partially mediate this relationship. None the less competitive advantage has complete mediating effect on entrepreneurial orientation and firm performance.

Although past studies have examined these mediating relationships, marketing communication has not been considered as a possible mediator even though literature claim that marketing communication has a positive relationship with firm performance. In addition the empirical evidence on the methods employed in the various studies use SEM to determine mediation however, the magnitude of this relationship seems to vary across studies consequently the present study sought to examine mediation using Baron and Kenney's regression to address the gap.

CHAPTER THREE
RESEARCH METHODOLOGY

This chapter explains how the research objectives were achieved; data were analyzed and presented. It covers the research design, sampling procedure, and population, instruments of data collection and data analysis.

3.1 Research Design

The research work adopted correlational design. Correlational studies display the relationships among variables by such techniques as cross-tabulation and correlations (Simon, 2011). The main purpose of a correlational study is to determine relationships between variables, and if a relationship exists, to determine a regression equation that could be used make predictions to a population. Through statistical analysis, the relationship was given a degree and a direction. The degree of relationship determined how closely the variables are related (Simon, 2011). This is generally accepted in the entrepreneurship studies.

3.2 Study Area

The study was conducted in the six sub-counties of Kericho County which occupies an area of 7,326 square meters. Only 15 per cent of population lives in four urban centers, the rest 85 per cent lives in 344 rural localities. Total population of the County was 1,018,796 (KICDP, 2013). It lies between longitude 35º 02’ and 35º 40’ East and between the equator and latitude 0 23’ South. The County is composed of six sub-counties in which the study was undertaken namely; Ainamoi, Belgut, Bureti, Kipkelion East, Kipkelion West and Soin- Sigowet (KICDP, 2013). Agriculture is the major economic activity in the County, and the leading cash crop is tea production. Others include; pineapples, coffee, sugarcane, potatoes, maize and horticultural crops.

Employment by multinational companies such as tea farms and factories is another major source of income. The informal sector provides approximately 50% of employment in the county (KICDP, 2013). This is dismal compared to what is reported for the national government 83.4% (Republic of Kenya, 2013). More so, 38% of the population is economically inactive in which the rural settlement contributes a larger percentage. This creates a dependency challenge for the working and active population (KICDP, 2013).

The informal sector comprises of approximately 5700 micro enterprises which provides employment opportunities in both main trading in the rural settings. These businesses perform poorly owing to lack of skill, managerial knowledge and the owner/managers have limited knowledge of modern business techniques. In addition, they have inadequate promotional activities leading to poor performance of the enterprises (Rotich, Cheruyiot & Yegon, 2014).

3.3 Target Population

The target population of study comprised a total of 5700 owner/managers of the micro-enterprises in Kericho County. These micro-enterprises were registered at the County Revenue Office during 2013/2014 financial year specifically those that employ 1-10 persons (Kericho County Revenue Office, 2015).

3.4 Sampling Frame

3.4.1 Sample Size

The study adopted Yamane's formula of sample size with an error of 5% and with a confidence coefficient of 95% (Yamane 1967), the calculation yields 373 respondents.

$$n = \frac{N}{1 + N(e)^2}$$

…….. (3.1)

Where n is the sample size, N is the population size, and e is the level of precision.

Therefore:

$$n = \frac{5700}{1+ 5700(0.05)^2}$$

This yields 373 respondents for the study.

3.4.2 Sampling Technique

Sampling is a techniques used to gain information about a group of items from just a small section of that group. Nachmias (1996) proposes that to determine a sample size scientifically one ought to determine what level of accuracy is expected of their estimate i.e. determine large a standard error is acceptable.

The study used proportionate stratified sampling technique to identify the sub-counties; proportionate allocation of sample was considered to obtain the sample for every strata because the study covered all the 6 sub-counties spread in a large geographical area in Kericho. Thereafter, simple random samples of respondents (Owner/manager) were obtained from the sample distribution table shown below.

Table 3.1: Sample Distribution Table

Sub-County	**Registered**	**Proportionate Sample size**
Ainamoi	2332	154
Belgut	600	39
Bureti	1174	76
Kipkelion East	230	15
Kipkelion West	735	48
Soin-Sigowet	629	41
TOTAL	**5700**	**373**

Source: Kericho County Revenue Office (2015)

3.5 Data Collection Methods

3.5.1 Type and Source of Data

The study employed both primary and secondary data. Primary data were obtained directly from respondents using structured questionnaires. It involved creating new data collected from an existing source (Kothari, 2004).

The respondents were the owner/managers of micro-enterprises in Kericho County. Primary data obtained from field survey were used to draw conclusions on the objectives of the study. Secondary data were obtained from published reports from government and other relevant agencies which enable comparisons, affirmations and contradictions in the study during interpretation.

3.5.2 Data Collection Procedures

The researcher obtained permission from Maseno University before going to the field to collect data**.** Data collection procedures consisted of three categories of logistical issues, including the pre-field work, field work and post-field work logistics. The main items considered include the terms of reference, training enumerators and pre-testing the instrument. The field work logistics including distribution of the instrument, transport and supervision was done by the principal investigator. The sample size of 373 was identified for the study. Field work procedures involved dropping off the questionnaires to the owner/managers at their enterprises following the left hand rule. In every trading center, the enumerators collected data from the enterprises on the left hand side thereafter collected the filled up questionnaire from the owner/managers. Data collection was carried out for a period of three months after two weeks' post-field work logistics including data management.

3.5.3 Instruments for Data Collection

A structured survey questionnaire (see Appendix 2) was used to collect data from the owner/managers of micro-enterprises in Kericho County. The questions on firm performance are adapted from Zulkiffli and Perera, (2011) and marketing communication construct questions were adapted from Schultz and Kitchen (1997) and Eagle and Kitchen (2000). Section A determined the demographic and business profiles of the respondents. Section B measured entrepreneurial orientation using a 5- point Likert scale (1- Strongly Agree to 5- Strongly disagree), indicating the extent to which the respondents agree with the sentence. Measures for the five dimensions of entrepreneurial orientation were adapted from Lumpkin and Dess (2001), however unlike previous studies using 7 point likert scale all items here were measured using 5- point for consistency of instrument. Section C provided information on the frequency of use of marketing communication tools using a 5-point Likert scale. Section D measured the marketing communication using a 5- point Likert scale (1- Strongly Agree to 5-Strongly disagree), indicating the extent to which the respondents agree with the sentence.

Lastly section E described the non financial measures captured using a 5- point Likert scale (**5=** very poor to 1=very good), indicating the extent to which the respondents agree with the sentence.

3.5.4 Reliability Tests

Reliability refers to the extent to which the same answers can be obtained using the same instruments more than one time. Ritchie and Lewis (2003) defines it as the extent to which research findings can be replicated, if another study is undertaken using the same research methods. To ascertain the reliability of the data collection tool, a pilot test was conducted. Gall et al. (1996) attest that 20 respondents suffice for a pilot test. The 20 respondents were randomly selected from each sub-county (strata). Cooper and Schindler (2011) explain that pilot test is conducted to detect weaknesses in design, instrumentation and to provide proxy data for selection of probability sample. Cronbach's alpha statistic was used to measure the internal consistency or reliability of a research instrument. Cronbach's alpha is a common measure of internal consistency often used when you have multiple Likert questions in a survey/questionnaire that form a scale and you want to determine if the scale is reliable (Gall et al., 1996). The reliability analyses produced Cronbach's alpha coefficients ranging from 0.749 to 0.762. Alphas normally range between 0.00 and 1.00. The closer the Cronbach's alpha coefficient is to 1.00 the greater the internal consistency of the items in the scale. Alpha coefficients above 0.70 are considered acceptable (George & Mallery, 2003).

The Cronbach coefficients for the study variables; entrepreneurial orientation, marketing communications and performance were 0.762, 0.749 and 0.758 respectively.

Table 3.2: Reliability Analysis Results

Item	No. of items	Cronbach alpha
Entrepreneurial Orientation	15	0.762
Marketing communications	7	0.749
Performance	16	0.758
Overall reliability	38	0.756

Source: Pilot Survey, 2016

3.5.5 Validity of the Instrument

Validity is the ability of an instrument to measure what it is supposed to measure. According to De Vos et al (2002) the definition has two parts, namely; whether the instrument actually measures the concept in the question and whether the concept is measured accurately. It also looks the criteria for how effective the design is in employing methods of measurement that will capture the data to address the research questions. Internal validity of the instrument was assured through pilot testing. Content validity refers to the general agreement among the subjects and the researcher that the instrument has measurement items that cover all aspects of the variables being measured. This was achieved through ratings by expert judges.

Mugenda & Mugenda (2003) define validity as the degree to which results obtained from the analysis of the data actually represents the phenomenon under study. Validity refers to the degree to which an instrument measures what it purports to measure (Bryman, 2012). Validity is therefore concerned with the meaningfulness of research components. Therefore, content validity was assessed through literature search. In addition criterion validity was assessed using Cronbach Alpha; high correlation among similar constructs reveals convergent validity. Contrastingly low correlates discriminates one signifying discriminant validity (Aila & Ombok 2015). This once done assured that the instrument was valid for the purpose of the study.

The pool of items generated from this exercise that were deemed to represent the underlying dimensions of entrepreneurial orientation and marketing communications were given to expert panel of scholars drawn from the fields of entrepreneurship in the school of business. These experts expressed their degree of agreement/disagreement with the use of different items on a Likert scale of five points. Furthermore, the expert panel, in an interactive manner, revised questions and response-options such that all evaluators concurred that each question accurately reflected the underlying dimensions of each construct. Therefore, the entire instrument has sound measure theoretically.

Convergent validity which means variables within a single factor are highly correlated was examined through factor loading (Bearden *et al.,* 2011). In this regard, all constructs indicated a significant alpha level ($p<0.0000$) for Bartlett's test of Sphericity stating that there was sufficient correlation between the variables (Meyer *et al.,* 2006).

Furthermore, the Bartlett's Test of Sphericity for each subscale is significant at p=0.000 meaning each scale is unidimensional (Field, 2005).

The results indicated that none of the questionnaire items correlated too highly with other items, but some correlated too lowly with several other items. That does not necessarily mean that the items should have been eliminated: the variables with which they do not correlate enough could constitute another factor. If Barlett'stest gives a significant result, we can assume that the items correlate anyhow, like in this data set: all the $\chi 2$ values were significant (0.000) as shown in Table 3.3 Since the Barlett's test gives a significant result and the items correlate at most with a third of the items too lowly, items were not excluded before the factor analysis was conducted.

Table 3.3: Summary of Validation Tests

Subscale	Factors retained	Items retained	Scale reliability	KMO	χ^2	Bartlett's Sig.(p-values)	Variance explained (%)
EO	5	15	0.762	0.745	58.345	0.000	84.223
MC	3	7	0.749	0.637	213.235	0.00	73.752
EP	5	16	0.758	0.579	84.683	0.000	85.322

EO=Entrepreneurial Orientation; MC=Marketing Communication; P= Performance; Varimax rotation

Source: Pilot Survey, 2016

From Table 3.3, the subscale Kaiser-Meyer-Olkin measure of sampling adequacy ranges between $0.579 \leq KMO \geq 0.745$ showing a good sampling adequacy (Field, 2005). Additionally, subscales are unidimensional as was shown by Bartlett's Test of Sphericity significant at p=0.000 (Field, 2005). Moreover, each subscale explained adequate variance $73.752 \leq VE \leq 85.322$.

3.6 Data Analysis

Karl Pearson's coefficient of correlation also known as the product moment correlation coefficient was used to test the relationship between variables under study. Objectives one, two and three were testing relationships hence this measure was valid. The coefficient of correlation value 'r' lies between ±1.

Positive values of r indicate positive correlation between the two variables (i.e., changes in both variables take place in the statement direction), whereas negative values of 'r' indicate negative correlation i.e., changes in the two variables taking place in the opposite directions. A zero value of 'r' indicates that there is no association between the two variables. When r= (+) 1, it indicates perfect positive correlation and when it is (–) 1, it indicates perfect negative correlation, meaning thereby that variations in independent variable (X) explain 100% of the variations in the dependent variable (Y). We can also say that for a unit change in independent variable, if there happens to be a constant change in the dependent variable in the same direction, then correlation will be termed as perfect positive. But if such change occurs in the opposite direction, the correlation will be termed as perfect negative. The value of 'r' nearer to +1 or –1 indicates high degree of correlation between the two variables (Kothari, 2004)

Baron and Kenny's regression was applied to test the mediating effect of marketing communication on the relationship between entrepreneurial orientation and firm performance. Baron and Kenya (1986) proposed a four step approach in which several regression analyses are conducted and significance of the coefficients is examined at each step. However, before carrying out these analyses, several assumption for regression model are tested to ensure that data is up to standards to reflect what is needed in the study.

3.6.1 Diagnostics Tests

Diagnostic test conducted involved test for linearity, Normality, homoscedasticity; and collinearity diagnostics

3.6.1.1 Tests for Normality of Residuals

It was necessary to establish the assumptions of linear regression and ensure that they were not violated as proposed by Hair et al., (1988). One of the assumptions of linear regression analysis is that the residuals are normally distributed. The study sought to examine the normality of residuals distribution using Kolmogorov-Smirnov and Shapiro-Wilk tests, as shown in Table 3.2 using ordinal data that was computed to result in ration scale data.

Table 3.2: Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	df	Sig.
EO	.016	353	.074	.468	353	.063
MC	.030	353	.051	.437	353	.071
Micro-enterprises Performance	.035	353	.080	.492	353	.053

a. Significance Correction

Source: Pilot survey (2016)

From Table 3.2, it was evident that all of the results from Kolmogorov-Smirnov and Shapiro-Wilk suggested that the residuals were normally distributed (sig. >.05). This implies that the skewness and kurtosis were near 0, meaning that tests of normality were significant.

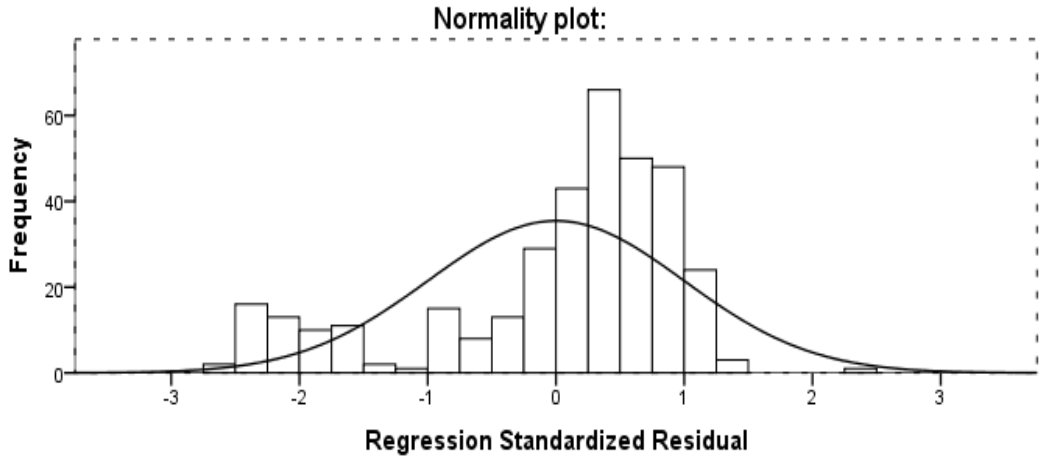


Figure 3.1: Normality Plot

Source: Research Data (2016)

Similarly, this normality was also shown by the Q-Q plots which looked normal. Based on these results, the residuals from this regression appear to conform to the assumption of being normally distributed.

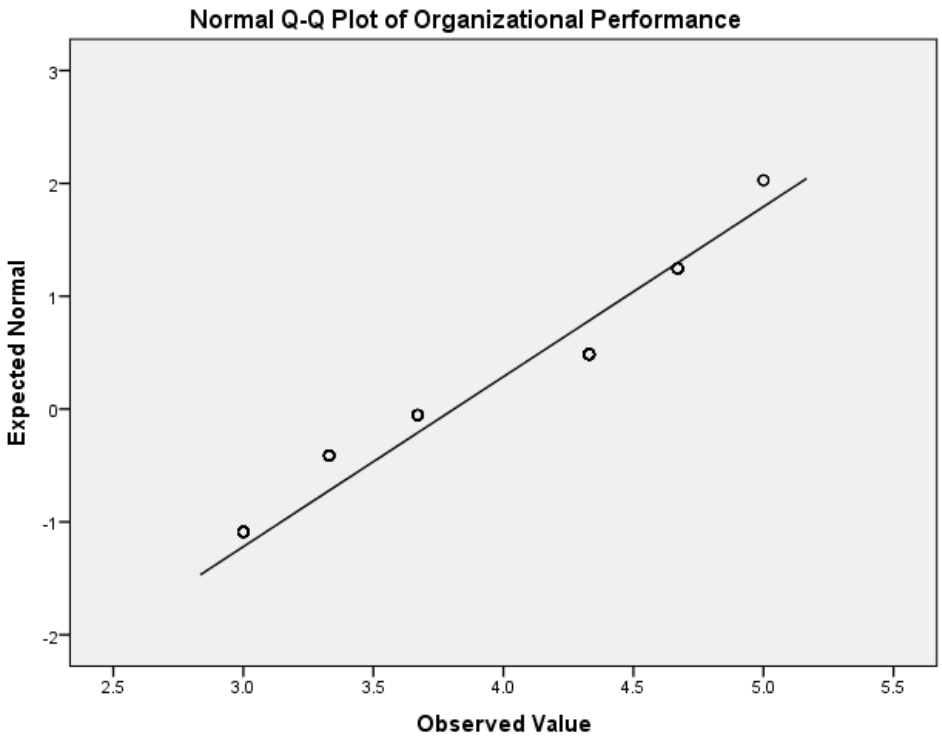


Figure: 3.2: Q-Q plot

Source: Research Data (2016)

3.6.1.2 Heteroscedasticity/ Homoscedasticity

This was used to determine whether the variance of error term is constant and the same for all observations. Violation of homoscedasticity makes standard error of estimators biased and inconsistent. Therefore, tests of hypothesis are no longer valid and standard errors are incorrect. A scatter plot was used to plot *zresid (standardized residuals) by *pred (the predicted values), that is to show the residuals versus fitted (predicted) values, as in Figure 3.3.Generally, lack of pattern of the residuals and the fitted values in the plot demonstrate heteroscedasticity.

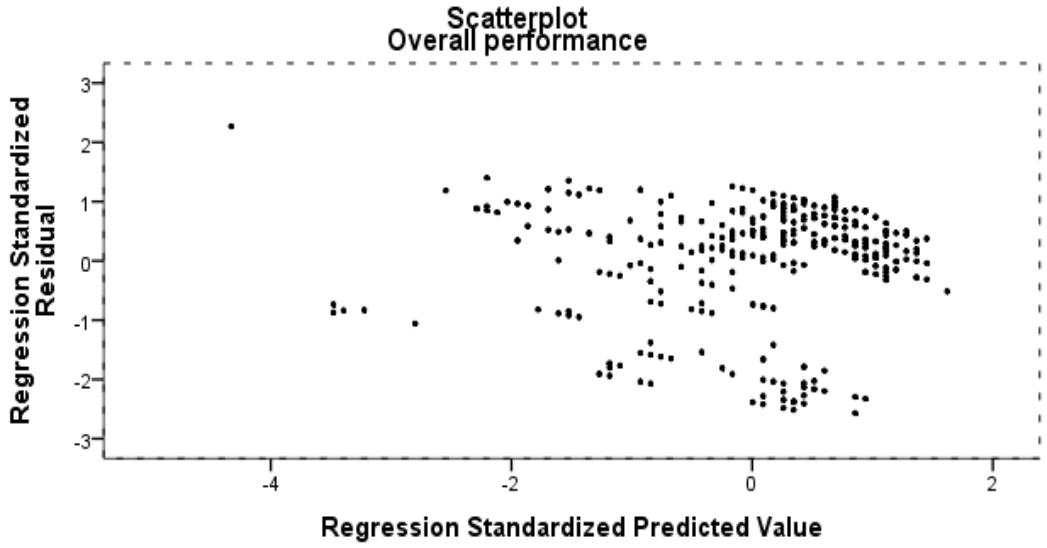


Figure 3.3: Scatter Plot

Source: Research Data (2016)

In this plot the pattern of the data points seem to be running diagonally, an indication of very mild heteroscedasticity. This therefore implies that the variance of the residuals was homogeneous across levels of the predicted values; hence data transformation was carried out for the distribution of the residuals.

3.6.1.3 Multicollinearity

The study sought to investigate whether there is a perfect multi-collinear relationship among the predictors, because the estimates for a regression model cannot be uniquely computed when there is perfect multi-collinearity among the predicators. This was necessary because as the degree of multi-collinearity increases, the regression model estimates of the coefficients become unstable and the standard errors for the coefficients can get wildly inflated. Tolerance and Variance Inflation Factor (VIF) values for each predictor are used as a check for multi-collinearity. The data were tested for these assumptions and the result presented as shown in Table 3.3

Table 3.3: Coefficients[a] of Multicollinearity Test

Model		T	Sig.	Collinearity Statistics	
				Tolerance	VIF
	(Constant)	4.497	.001		
1	MC	-1.481	.271	.461	1.783
	EO	7.462	.001	.461	1.783

a. Dependent Variable: Organizational Performance

Source: Research Data (2017)

From the regression model predicting organization performance from entrepreneurial orientation and marketing communication, the tolerance and VIF values for both entrepreneurial orientation and marketing communication were all acceptable; tolerance value > .10 and VIF value < 10. This therefore implies that the assumption of multi-collinearity was met.

3.6.1.4 Issues of Independence

Durbin-Watson in regression model summary was used to test for independence in the variables as shown in Table 3.4

Table 3.4: Durbin-Watson statistic

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.338[a]	.114	.112	.97406	1.97

a. Predictors: (Constant), entrepreneurial orientation

b. Dependent Variable: organizational performance

Source: Research Data (2017)

The Durbin-Watson statistic had a range from 0 to 4 with a midpoint of 2. The results in Table 3.4 in this case, showed the observed value of Durbin-Watson statistic as less than 2, indicating that the assumption of independence was not violated. In conclusion, the findings of the diagnostic tests have confirmed that all the assumptions of regression were not violated.

3.6.2 The Mediation Model

The mediation model sought to explicate the underlying mechanism of an observed relationship existing between the dependent (Entrepreneurial Orientation) and an independent variable (firm performance) through including a mediator variable (marketing communication). The primary hypothesis of interest in a mediation analysis was to see whether the effect of the independent variable on the outcome can be mediated by a change in the mediating variable. Primary hypothesis is tested; if we accept the null hypothesis then full mediation. If we reject the null hypothesis then partial mediation was achieved. Inference of the direct and indirect and total effects was performed using Bootstrap method.

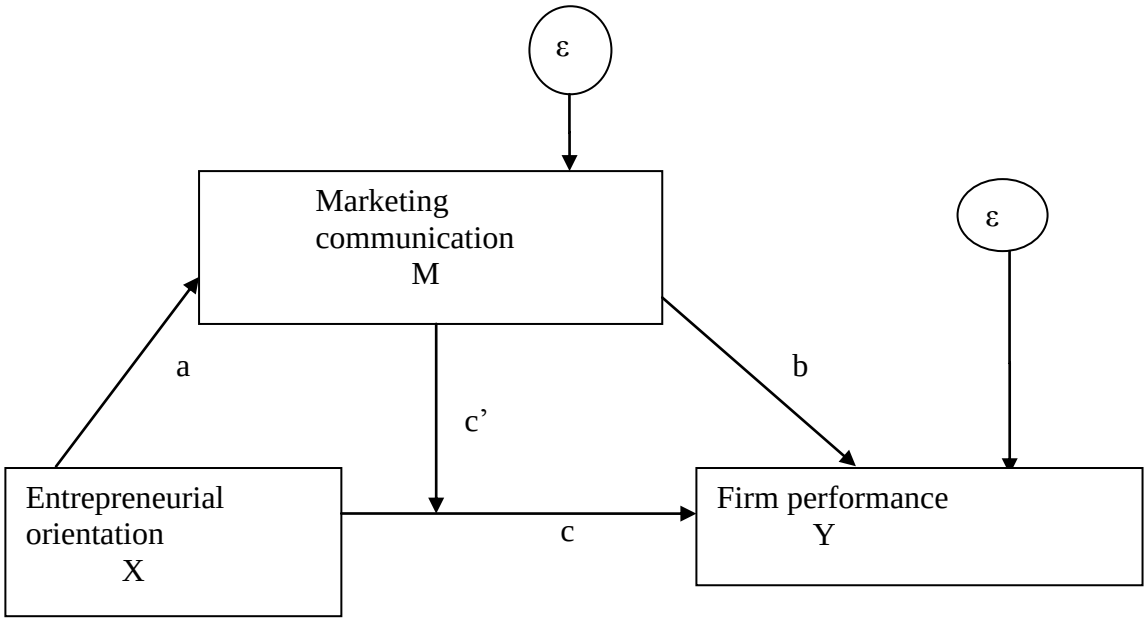


Figure 3.4: Mediation model for testing mediation adapted from Zhao, Lynch & Chen, (2010).

The mediation model is given by:

Direct effect c with X predicting Y

Indirect effect= ab

Total effect= ab+ c

Regression equations:

Baron and Kenny (1986) regressions were used to analyse data on specific objective four which determines mediation. The equations for the regression equations are as below:

Simple regression analysis with X predicting Y (path c)

$$Y = \beta_0 + \beta_1 X + \varepsilon \quad (3.2)$$

X predicting M (path a)

$$M = \beta_0 + \beta_1 X + \varepsilon \quad (3.3)$$

M predicting Y (path b)

$$Y = \beta_0 + \beta_1 M + \varepsilon \quad (3.4)$$

Multiple regressions X and M predicting Y (path c′)

$$Y = \beta_0 + \beta_1 X + \beta_2 M + \varepsilon_3 \quad (3.5)$$

Where:

Y - Firm performance (Dependent variable)

M - Marketing communication (Mediator variable)

X – Entrepreneurial Orientation (Independent variable)

ε- Error term

Source: Baron and Kenny (1986)

3.7 Data presentation

The results of the data analysis were presented according to the APA publications guidelines 6thEdition. First is textual presentation or in narrative form. Second are the SPSS outputs in tabular presentation showing exact numerical values in rows and columns. The results from descriptive statistics, cross tabulations, analysis of variance and correlation analysis were presented in texts and tables for easier interpretation, drawing of conclusions, and making appropriate recommendations.

CHAPTER FOUR
RESULTS AND DISCUSSION

In this chapter, the first section presents the results on response return rate followed by characteristics of the micro- enterprises in Kericho County, Kenya in terms of type of enterprise, location of enterprise, who runs the enterprise, and period of operation of the enterprise. The second section presents the results as per the objectives but begins with an overview of performance of micro-enterprises in the county. The subsequent sections are basically the objectives of the study that are tested using null hypotheses.

4.1 Response Return Rate

The questionnaire was administered to 373 respondents; however, not all the respondents gave their feedback. More so, some of those who responded had their questionnaires dropped during data cleaning as described in chapter three. Out of the 373 respondents under the proposed sample size, only 355 respondents were considered for data analysis. Perry (2002) attests that a representative sample of a population in a study for a degree of doctor of philosophy requires at least 350 respondents in a quantitative survey. In addition, the sample size is also fit for regression analysis since it incurred very minimal errors leading to the generalization of the findings.

4.2 Characteristics of Micro-and Small Enterprises Firms

To establish the firm characteristics, respondents were asked to share their knowledge on the type of enterprise, location of enterprise, who runs the enterprise, and period of operation of the enterprise. The findings are presented as shown in Table 4.1.

Table 4.1: Characteristics of Micro-Enterprises in Kericho County

Characteristics	Category	F	%
Type of enterprise	single owner	252	71.0
	Partnership	85	23.9
	limited company	18	5.1
	Total	**355**	**100.0**
Location of enterprise	rural area	90	25.4
	peri-urban area	212	59.7
	urban area	53	14.9
	Total	**355**	**100.0**
Duration of operation	0-3 years	115	32.4
	3-5 years	124	34.9
	5-7 years	73	20.6
	Total	**355**	**100.0**
Who runs enterprise	Self	113	31.8
	self & family	95	26.8
	family members	21	5.9
	self & employees	126	35.5
	Total	**355**	**100.0**

Source: Research Data (2017)

From Table 4.1 findings, it is clear that majority of the enterprises 252(71.0%) are single owner, 85(23.9%) are partnership, and 18(5.1%) are limited company enterprises. Concerning their location, majority of them 212(59.7%) are located peri-urban area, 90 (25.4%) are in rural areas and 53(14.9%) are in urban areas.

This is a clear picture of the location of most of the micro-enterprises in Kericho County, Kenya. It was also clear from the findings that majority of the enterprises 124(34.9%) have been operating for a period of 3-5 years, 115 (32.4%) have been operating for a period of 0-3 years and 73(20.6%) have operated for a period of 5-7 years. This means that the average duration of most of these enterprises is approximately 3-5 years. Finally, it emerged that majority of the enterprises 126 (35.5%) are operated by self and employees, 113(31.8%) are operated by individuals, 95(26.8%) self and family and 21(5.9) are run by family members.

The MSE ACT (2012) provides benchmarks on what qualifies as a micro-enterprise in Kenya and so the findings of this study complies with the description laid out by the ACT and this therefore was the required representation of micro-enterprises satisfactory for the current study and thus the data obtained was considered valuable.

4.3 Performance of Micro-enterprises

The study sought to establish an overall performance of micro-enterprises based on the aforementioned dimensions. These were market performance which entailed increased market share, competitive position, increase in sales; people performance that entailed owner satisfaction of overall performance, employee satisfaction of overall performance, employee turnover, employee retention rate, shareholder and overall satisfaction. The final measure of performance was customer satisfaction which entailed resolution of customer complain, customer loyalty, quality reputation and award achievement, product returns rate, speed of order handling and processing, and finally customer satisfaction.

These measures are generally referred to as non-financial measures of performance which allow comparison across firms and contexts (combs et al., 2005) therefore this study has employed these measures in the micro-enterprise sector as a benchmark for providing responses. These measures have been employed in strategic research and have been found to be reliable and valid. These measures were presented in Table 4.2 below:

Table 4.2: Performance of Micro-enterprises in Kericho County

Statements on performance of micro-enterprises	Mean	SD.
Market Performance		
Increase in market share	2.95	0.93
Competitive position	2.15	1.26
Increase in sales	2.08	1.28
Overall mean	2.40	0.84
People Performance		
Owner satisfaction on overall performance	2.09	1.16
Employee satisfaction on overall performance	2.43	1.35
Employee turnover rate	2.71	1.32
Employee retention rate	2.44	1.32
Shareholder overall satisfaction	2.34	1.35
Overall mean	2.40	1.13
Customer Relationship Performance		
Resolution of customer complaint	2.13	1.27
Customer loyalty	2.05	1.24
Quality reputation and award achievement	2.14	1.22
Product returns rate	2.20	1.33
Speed of order handling and processing	2.36	1.42
Customer satisfaction	2.14	1.43
Customer retention	2.09	1.31
Overall mean	2.15	1.17
Overall mean of performance	2.31	0.96

Source: Research Data (2017)

The findings in Table 4.2 indicate the level of performance of micro-enterprises in Kericho County. From the findings, market performance had an overall mean of 2.40 and standard deviation of 0.84. It entailed increased market share which had a mean of 2.95 and standard deviation of 0.93, competitive position which had a mean of 2.15 with a standard deviation of 1.26, and low increase in sales with a mean of 2.08 and a standard deviation of 1.16. This performance was low and therefore market performance was generally considered low.

The dimension of performance was people performance which was also low. It had an overall mean of 2.40 and a standard deviation of 1.13. It has several aspects of performance which were owner satisfaction of overall performance which had a mean of 2.09 and a standard deviation of 1.16, employee satisfaction of overall performance which had a mean of 2.43 with a standard deviation of 1.35, employee turnover with a mean of 2.71 and a standard deviation of 1.32, employee retention rate that had a mean of 2.44 and a standard deviation of 1.32 and finally, shareholder overall satisfaction (M=2.34, SD=1.35). This dimension also indicated low overall performance of the enterprises.

The final measure of performance was customer satisfaction which entailed resolution of customer complain (M=2.13, SD=1.27), customer loyalty (M=2.05. SD=1.24), quality reputation and award achievement (M=2.14, SD=1.22), product returns rate, (M=2.20, SD=1.43), speed of order handling and processing (M=2.36, SD=1.42), customer retention, (M=2.09, SD=1.31), and finally customer satisfaction (M=2.14, SD=1.31). The overall performance had a mean of 2.15 and a standard deviation of 1.17. This mean shows small improvement in performance, even though it does not reflect the expected performance measures. The expected performance measures would be a measure of at least a mean above the moderate mean of 3.0 and therefore this would imply that the enterprises have good performance.

4.4 Entrepreneurial Orientation

The study sought to determine the level of entrepreneurial orientation among small and micro enterprises in Kericho County. This was done to ascertain the variable that mainly forms the predictor variable with its break down of several dimensions.

These included autonomy, proactiveness, risk taking, competitive aggressiveness and innovativeness. The findings on the level of practice of these aspects are presented in the subsequent sections using descriptive statistics.

4.4.1 Autonomy

In regard to findings entrepreneurial orientation among micro-enterprises in Kericho County, the study used various aspects under the autonomy dimension. These included independence of employees to do their work, space for creativity among employees, ability of the employees to make their own decisions among other aspects. The findings are presented as shown in table 4.3 using means and standard deviations.

Table 4.3: Autonomy

Autonomy Among micro-enterprises	Mean	SD
My employees do not have enough independence in their job to do their work without continual supervision.	2.79	.771
My business does not allow my employees and i to be creative and try different methods to do our job.	2.45	.747
Employees in our business are not allowed to make decisions without going through elaborate justification and approval procedures.	2.93	.785
Employees in our business are not encouraged to manage their own work and have flexibility to resolve problems.	2.90	.801
Employees don't have to follow the same work methods or steps while performing major tasks from day to day	2.89	0.94
Overall mean on autonomy service orientation	2.76	0.47

Source: Research Data (2017)

The findings in Table 4.3 indicate that the autonomy as an entrepreneurial orientation had an overall mean of 2.76 and a standard deviation of 0.47.

This mean is less than 3.0 which is the average mean, but closely approaching it and therefore this implies that autonomy orientation is practiced among micro-enterprises in Kericho County. Examining the extent to which each of the dimensions of autonomy orientation was practiced, the findings revealed the highest form and lowest form that were practiced among the enterprises. Business did not allow employees to be creative and try different methods to do their job (M=2.05, SD=0.747). In addition, the study found that employees did not have enough independence in their job to do their work without continual supervision (M=2.26, SD=0.771). It was also found that employees in the business were not encouraged to manage their work and have flexibility to resolve problems (M=2.26, SD=0.801). However, it was

evident that employees have to follow the same work methods or steps while performing major tasks from day to day (M=1.89, SD=0.94), an aspect that indicates absolute lack of autonomy form of orientation among the micro-enterprises in the county. These findings imply that autonomy orientation is rarely practiced by small and micro enterprises in Kericho County, Kenya.

4.4.2 Innovativeness

To determine the extent to which micro-enterprises were innovative in Kericho County, the study enquired views from the respondents on the regularity of introducing new services/products/processes, emphasis on new innovative products/services among other aspects. The findings are presented as shown in Table 4.4 using means and standard deviations.

Table 4.4: Level of Innovativeness among Micro-enterprises in Kericho County

Statements on micro-enterprise innovativeness	Mean	SD
Our business does not regularly introduce new services/products/processes.	1.93	0.98
Our business does not place a strong emphasis on new and innovative products/services.	2.03	1.02
Our business does not have a widely held belief that innovation is an absolute necessity for the business future.	1.93	0.99
Our business is not very often the first to introduce new products/services	1.83	0.98
Our business typically fails to initiates actions that competitors respond to.	1.90	0.94
Our business does not continuously seek out new products/services.	2.50	1.02
Overall level of innovativeness	2.00	0.79

KEY: SD-Standard Deviation

Source: Research Data (2017)

From the findings as indicated in Table 4.4, it is clear that micro-enterprise warming up to innovativeness as indicated by a mean of 2.00 and standard deviation of 0.79. Narrowing down to each of the aspect of innovativeness, the findings indicate that the enterprises do not regularly introduce new services/products/processes (M=1.93, SD=0.98). Furthermore, the findings clearly indicate that the businesses do not place a strong emphasis on new and innovative products/ services (M=2.03, SD=1.02). The findings also indicate that the businesses are not often the very first to introduce new products or services as indicated by a mean of 1.83 and a standard deviation of 0.98.

Inability of the businesses to typically initiate actions that competitors respond to was evident (mean=1.90, sd dev=0.94) but the businesses had the drive to continuously seek out new products or services (mean=2.50, sd dev=1.02). These findings imply that the micro-enterprises have gained some innovativeness and therefore there is an indication of growth in entrepreneurial orientation.

4.4.3 Proactiveness

The level of Proactiveness among micro-enterprises in Kericho County was measured using several sub-dimensions as indicated in Table 4.5. Some of the aspects were the extent of proactiveness in number of services/products offered, continued pursue of new opportunities, rapid changes in services and products. The findings are presented in the table using means and standard deviations.

Table 4.5: Level of Proactiveness among micro-enterprises in Kericho County

Statements of Proactiveness among micro-enterprises	Mean	SD
Our business has not increased the number of services/products offered during the past two years.	1.90	0.95
Our business does not continually pursuing new opportunities	1.82	0.92
Over the past few years, changes in our processes, services and product lines have not been quite dramatic.	1.87	1.02
In our business there is no strong relationship between the number of new ideas generated and the number of new ideas successfully implemented.	2.23	1.26
Our business places do not have a strong emphasis on continuous improvement in products/service delivery.	2.20	1.30
Overall level of Proactiveness among Micro-enterprises	1.95	0.78

KEY: SD-Standard Deviation

Source: Research Data (2017)

From the findings as indicated in Table 4.5, it is clear that micro-enterprises are somehow proactive as revealed by a mean (M=1.95) and standard deviation (SD=0.74). Each of the dimensions of proactiveness was considered and the results revealed that there have been small dramatic changes in services, processes and products over the past few years as indicated by a mean of 1.87, and a standard deviation of 1.02. Furthermore, the findings reveal that the enterprises are sometimes in pursuit of new opportunities as indicated by a mean of 1.82 and standard deviation of 0.92. The business have increased the number of services/products to some extent (mean=1.90) and (SD=0.95).

These findings imply that micro-enterprises in Kericho County are proactive to some extent and therefore could boost their orientation.

4.4.4 Risk Taking

The study further endeavored to determine whether micro enterprise have the nature of taking risks as a form of orientation. In approach, several aspects of this type of orientation were measured. These included the enterprises maximize value from opportunities without constraints to existing model, adoption of bold posture upon being confronted with uncertain decisions, strong inclination towards high risk projects among other aspects. The findings are presented as shown in table 4.6 using means and standard deviations.

Table 4.6: Risk Taking Practice among Micro-enterprises

Statements on Risk among Micro-enterprises	Mean	SD
Our leaders seek to maximize value from opportunities without constraint to existing models, structures or resources.	2.30	1.11
When confronted with uncertain decisions, our business typically adopts a bold posture in order to maximize the probability of exploiting opportunities.	2.21	1.07
In general, our business has a strong inclination towards high-risk projects.	2.83	1.25
Owing to the environment, our business believes that bold, wide-ranging acts are necessary to achieve the business objectives.	2.01	1.13
Employees are not often encouraged to take calculated risks concerning new ideas.	1.81	0.99
The term ‘risk-taker’ is considered a positive attribute for employees in our business.	2.00	0.98
Level of Risk taken among Micro-enterprises	2.33	0.76

Source: Research Data (2017)

From the findings as indicated in Table 4.6, it is clear that micro-enterprises do not take risk (Mean=2.33, SD 0.76). Each of these elements was also assessed and the findings revealed that employees among these enterprises were often encouraged to only take calculated risk (Mean=1.81, SD=0.99). The findings further indicate that when confronted with uncertain decisions, the business could sometimes adopt a bold posture in order to maximize the probability of exploiting opportunities (mean=2.21, SD=1.07).

There is a tendency of failing to maximize value from opportunities without constraints among leaders (Mean=2.30, SD=1.11), and finally, the enterprises did not consider the term risk taker as a positive attribute for employees (Mean=2.00, SD=0.98). These findings depict micro-enterprises in Kericho County as risk takers to some extent.

4.4.5 Competitive Aggressiveness

The final dimension of micro-enterprise orientation was competitive aggressiveness. In order to determine whether these enterprises were competitively aggressive, the study assessed whether they monitored market trends and identified future needs, they adopted very competitive postures when dealing with competitors, the businesses assumed an aggressive posture to combat trends that may threaten their survival among other aspects of this dimension. Results are presented as indicated in Table 4.7 using means and standard deviations.

Table 4.7: Competitive Aggressiveness

Statements on Competitive Aggressiveness'	Mean	SD
Our business continuously monitors market trends and identifies future needs of customers	2.16	1.13
In dealing with competitors our business typically adopts a very competitive "undo-the-competitor" posture.	1.81	0.99
Our business is very aggressive and intensely competitive	2.00	1.03
Our business effectively assumes an aggressive posture to combat trends that may threaten our survival or competitive position.	2.00	0.98
Our business knows when it is in danger of acting overly aggressive (this could lead to erosion of our business's reputation or to retaliation by our competitors).	2.10	0.98
Overall level of Competitive Aggressiveness of Enterprises	2.06	0.76

Source: Research Data (2017)

The findings in Table 4.7 indicate that these businesses did not effectively assume an aggressive posture to combat trends that may threaten their survival or competitive position (mean=2.00, SD=0.98). In addition, these enterprises were not very aggressive and intensely competitive as indicated by a mean of 2.00 and standard deviation of 1.03. Furthermore, the micro- enterprises did not continuously monitor market trends and identify future needs of customers (mean =2.16, SD=1.13) in addition to failing to adopt competitive posture when dealing with competitors.

The overall mean on the nature of aggressiveness of micro-enterprises indicated that they were to some extent competitively aggressive (mean=2.01, SD=0.76).

The summary statistics for all the five dimensions of entrepreneurial orientation were also presented as shown in Table 4.8

Table 4.8: Summary of Entrepreneurial orientation

Dimensions of EO	Mean	Std. Deviation
Autonomy	2.76	.724
Proactiveness	1.95	.782
Risk taking	2.01	.846
Innovativeness	2.00	.850
Competitiveness	2.06	.820
Overall mean EO	2.23	.762

Source: Research Data (2017)

The findings in Table 4.8 shows the dimensions of entrepreneurial orientation and its overall mean. From these results, the highest form of EO practiced among the firms in Kericho County is autonomy (mean=2.76), implying that most of the small scale enterprises are autonomous. The findings also indicate that the firms are competitive (mean=2.06) and aggressive (mean=2.00). It is also clear that these enterprises also embraced risk taking business practices (mean=2.01). The only dimension that was practiced to a low level was proactiveness (mean=1.95).

However, the overall mean on entrepreneurial orientation revealed that small scale and micro enterprises in Kericho County embraced entrepreneurial orientation (mean=2.23) and the standard deviations for all the dimensions and the overall mean indicates that there were no much variation in the findings because they are less than one standard deviation.

4.5 Entrepreneurial Orientation and Performance of Micro-enterprises in Kericho County

The study sought to determine the relationship between these two variables in order to achieve the objective. It therefore employed null hypotheses which stated that "H_0: Entrepreneurial orientation has no significant relationship with performance of micro-enterprises in Kericho county".In order to establish the relationship between EO and performance, Pearson product moment correlation was carried out.

Correlations were therefore obtained between all the elements of entrepreneurial orientation and the mean of performance. These were done to establish the strength and magnitude of the relationship between the two variables. The results are presented as shown in Table 4.9.

Table 4.9: Correlation between Performance and EO

Pearson Correlations		**Performance**	**Mean EO**
Performance	Pearson Correlation	1	.615**
	Sig. (2-tailed)		.000
	N	355	355
EO	Pearson Correlation	.615**	1
	Sig. (2-tailed)	.000	
	N	355	355

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

Source: Research Data (2017)

The findings in Table 4.9 indicate that there were positive significant correlations among the elements of EO and performance of micro enterprises. The overall correlation between EO and performance was however high, positive and significant.

These findings imply that EO is positively associated with performance of micro enterprises as indicated by a positive correlation (r=.615). It also implies that as the small enterprises improve their entrepreneurial orientation, their performance also improves and thus EO could positively boost performance. A deeper insight into the results also reveals much beyond correlation. For instance, when the correlation between EO and performance is squared and multiplied by 100%, the percentage variance in performance accounted for by EO is obtained (r^2=0.3785×100=37.85%). This means that EO accounts for a significant change in performance of micro enterprises.

These findings are almost similar to those of Rauch and Wiklund (2004) who provided a meta-analysis of the relationship between EO and firm performance giving a correlation r =0.242. The present findings explain a slightly larger variation due to the different nature of variables used. The context of the study variables in the meta analysis conducted by Rauch and Wiklund (2004) was in developed countries, unlike the present study carried out in developing country where new governance structures of devolution were being implemented. This devolution of resources creates more opportunities for micro-enterprises and may explain the high correlation between EO and performance of micro-enterprise.

Further the conceptual context of this study differ from previous studies such as Krauss et al,. (2011), who established a significant relationship between the psychological characteristics and performance. More so, Osoro (2012) established that an increase in earning potential is possible through individual behaviour associated with EO.

The findings of this study focused on the 5-dimension EO and performance conceptually with a view on the business EO rather than individual characteristics of an entrepreneur. On the other hand Kiprotich et al., (2015) explained the relationship between the 3-dimension EO and performance. Owoseni and Adeyeye (2012) also found a positive relationship between innovativeness and pro-activeness, and firm performance; however, risk-taking had a significant inverse effect on firm performance. In addition the performance indicators for the present study focused on the non-financial aspects of performance which explains the variation of the findings. It is therefore clear that 5 dimensions-EO has a positive relationship with performance of micro-enterprises and therefore rejecting the null hypothesis.

4.6 Marketing Communication and Performance of Micro-enterprises in Kericho County

The second objective of the study sought to determine whether a relationship existed between marketing communication and performance of micro-enterprises. The first step therefore entailed measuring the level of marketing communication among micro-enterprises in the county. In effect, various aspects under marketing communication were assessed. The findings are presented using means and standard deviations as shown in Table 4.10.

The study therefore sought to determine whether a relationship existed between marketing communication and performance of micro-enterprises in Kericho County Kenya. This was carried out in response to the test of the null hypothesis which stated that "there is no relationship between MC and performance of micro-enterprises in Kericho County" Pearson product moment correlation was therefore used to determine this relationship. MC scores were correlated with performance scores to establish the strength and direction of the relationship between the two variables. The findings are presented as shown in Table 4.10.

Table 4.10: Correlation between MC and Performance

Pearson Correlations		Performance	Marketing Communication
Performance	Pearson Correlation	1	.434**
	Sig. (2-tailed)		.000
	N	355	355
Marketing Communication	Pearson Correlation	.434**	1
	Sig. (2-tailed)	.000	
	N	355	355

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

Source: Research Data (2017)

The findings in Table 4.10 indicates that there is a positive significant correlation between marketing communication and performance of micro enterprises (r=.434, p=.000). This means that as marketing communication improved, there was an improvement in the performance of the enterprises. The study therefore rejects the null hypothesis that said 'marketing communication has no significant relationship with performance of micro-enterprises in Kericho County.

These findings when looked at in terms of correlation, are almost similar to those of Abubakar (2014) who explained a positive significant relationship between advertising and Return on assets (r = 0.840); and also promotion had strong relationship with Return on assets (r =0.451). His findings on effect of marketing communication on sales performance established a strong relationship r = 0.94 at p=.005 significant level. However, his studies slightly explained a large percentage change when the r value is squared which is not at large variance with the present findings, which though use more variables.

The present findings agree with Odunlamai and Ofoegbu (2011), and Isamil et al., (2012), who argue that promotion and sales performance are positively related. In addition, Abubakar (2014) maintains that both advertising and promotion has strong relationship with sales. Notably these studies focused only on two aspects of marketing communication; promotion and advertising; how they influence sales performance whilst Onditi et al., (2014) and Murangiri (2014) indicate that public relations has a very low impact on sales. The present study focused on many more aspects of marketing communication and conceptually investigated the non-financial measures of performance.

The measures of performance used were different in most studies such as Return on Assets (ROA), growth and sales performance however; the present study examined the following non-financial measures: market performance, people performance and customer relationship. More so the previous studies conducted in the large and medium enterprises while the present study concentrated on the micro-enterprise sector. In addition the previous studies were conducted in international context and some were conducted locally however, the use of census and case studies brought out the methodological difference in the present study. It can be concluded that there is a relationship between marketing communication and performance of micro-enterprises in Kericho County.

4.7 Entrepreneurial Orientation and Marketing communication for Micro-Enterprises in Kericho County

In this objective, the study sought to determine whether a relationship existed between entrepreneurial orientation and marketing communication among micro-enterprises in Kericho County. The null hypothesis was that "Entrepreneurial orientation has no significant relationship with marketing communication". The scales on entrepreneurial orientation and marketing communication were computed in means and each dimension of entrepreneurial orientation treated in terms of a function, such that marketing communication became a function of each of the variables on entrepreneurial orientation. Data on marketing communication was reverse coded to reflect the true findings after response was obtained so as to be in line with the questionnaire findings. This implied that the former scale that indicated a score of one as never and 5 as always was reversed to reflect 5 as never and 1 as always in alignment with the rest of the scales.

In order to test the null hypothesis that "there is no relationship between EO and MC" Pearson product moment correlation was carried out between the two variables. EO scores were correlated with performance scores with the aim of establishing the strength and direction of the relationship. The findings are presented as shown in Table 4.11.

Table 4.11: Correlation between EO and MC

Pearson Correlations		Mean MC	Mean EO
Mean MC	Pearson Correlation	1	.383**
	Sig. (2-tailed)		.000
	N	355	355
Mean EO	Pearson Correlation	.383**	1
	Sig. (2-tailed)	.000	
	N	355	355

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

Source: Research Data (2017)

The findings in Table 4.11 indicate that there are significant correlations among the variables. The main aim was to get the correlation between MC and EO which indicate an overall positive significant correlation (r=.383, p=.000). This means that as MC scores improve, there is an improvement in the scores of EO. It can therefore be concluded that the two variables are positively associated and therefore we reject the null hypothesis and adopt the alternative hypothesis that the two variables are positively associated.

Previous studies underscored the importance of marketing communication for SMEs (Esposito, 2015; Mramba 2015; Lekhanya 2015 and Posepscu et al., 2013). However, Tsikirayi et al., (2013) contradicts this proposition. Esposito (2015) points out that SMEs adopt marketing communication using flexible approach. Mramba (2015) concurs with this and argue that there is limited use of marketing communication among micro-enterprises in Dar-es Salaam moreover, even if there is use, the strategies used are weak and underutilized. The present study confirms that EO influences marketing communication in Kericho County and may explain the use of marketing communication given the different business environments in which these micro-enterprises operate in. On the contrary, Tsikirayi et al., (2013) posits that SMEs rarely invest in marketing communication tools. Additionally, small businesses have no deliberate marketing communications program and that little effort is put into implementing marketing communications by SMEs. It has however been established in the present study that an increase in EO would result in a positive increase in marketing communication. The past studies did not examine the influence of EO on marketing communication and this could possibly explain their findings.

4.8 Mediating effect of marketing communication on entrepreneurial orientation and performance of micro-enterprises

The final objective of the study was to investigate the mediating effect of marketing communication on the relationship between entrepreneurial orientation and firm performance of micro-enterprises in Kericho County. In the first step of the mediation process, the regression of Performance on EO was carried out.

Simple linear regression model was therefore used to determine the influence of entrepreneurial orientation on performance of the enterprises. In order to determine the unique contribution of entrepreneurial orientation on performance of the enterprises, standardized coefficients were used as shown in Table 4.12.

Table 4.12: Influence of entrepreneurial orientation on performance of enterprises

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	-Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	.455	.132		3.445	.001			
	EO	.823	.056	.615	14.673	.000	.615	.615	.615

Source: Research Data (2017)

The findings in Table 4.12 indicate that without introducing entrepreneurial orientation in the model, other factors contributed to the performance of (B=.455), However, based on the standardized scale used, the findings indicate that entrepreneurial orientation uniquely contributed to the performance of micro-enterprises (β=.615, $t(355)$=14.673, p=.000) from Equation 3.1. This implies that entrepreneurial orientation was correlated with performance and therefore had a unique significant contribution to performance. Another implication of these findings is that a one unit standard deviation in entrepreneurial orientation will lead to a 0.615 standard deviation change in performance of the same institutions. Given an overall performance measure of 2.31 which is low, which could also be termed as the outcome, it is clear that entrepreneurial orientation mean measure of 2.09 could have contributed to this. Comparatively, these two means are slightly different at glance, such that the mean of performance is higher than that of EO.

This could result to another explanation as to the type of percentage or variance that EO could account for performance. A slight significant variation in the corresponding means of the two variables could spell low strength of the relationship. The equation therefore becomes, $Y = .455 + .823X$ whereby .455 is the constant, 0.823 is the unstandardized beta coefficient. The t value as validated by significant value indicates that the findings are significant. The summary findings were also presented in order to find the percentage change in performance explained by entrepreneurial orientation in Table 4.13.

Table 4.13: Summary Model on the Influence of Entrepreneurial Orientation on Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.615[a]	.379	.377	.80515	.379	215.288	1	353	.000

Source: Research Data (2017)

From the findings as indicated in Table 4.13, R value (.615) indicates the correlation in the model. This can as well be said to be the measure of the relationship between the two variables. When the value is squared, an R square value of 0.379 is obtained, which is the percentage change or variance in performance explained by entrepreneurial orientation. This value with the overall model is significant as indicated by an F-value [F (1, 353) =215.288, p=.000]. Model significance in this case leads to the adoption of the alternative hypothesis that none of the multiple R in the population is equal to zero. Furthermore, R square change more of similar to R square value since no other independent variable has been introduced to the model. It is therefore clear that after multiplying the R square value with 100%, entrepreneurial orientation explains a significant 37.9% variation in the performance of micro-enterprises.

When the overestimation or under estimative power of R value is controlled for (in a process of shrinkage), the resultant value is the adjusted R Square value, whose predictive power is low as compared to R square value thus giving 37.7% change in performance. The remaining percentage could be explained by other factors not tested in the present model; however, this percentage is significance due to the nature of newness of entrepreneurial orientation among these enterprises.

4.8.1 Effect of marketing communication on performance of Micro-enterprises in Kericho County

The aim of this step two as part of mediation process was to establish whether MC has a significant effect on performance of micro-enterprises in Kericho County. The findings on the effect of marketing communication are presented in Table 4.14.

Table 4.14: Effect of Marketing Communication on Performance of Micro-enterprises in Kericho County

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.717	.180		3.981	.000
	Mean MC	.596	.066	.434	9.054	.000

a. Dependent Variable: Performance

Source: Research Data (2017)

From the findings as indicated in Table 4.14, it emerged that marketing communication has a unique influence on performance of micro-enterprises (β=0.434, p=.000) from Equation 3.2. This implies that there is a positive significant relationship between marketing communication and micro-enterprise performance. As a result, marketing communication has an influence on their performance. One more implication is that a one unit standard deviation of 1.05 changes in marketing communication leads to 0.434 standard deviation units in performance of micro-enterprises changes.

It can be concluded that there is a relationship between marketing communication and performance of micro-enterprises in Kericho County. Therefore, marketing communication has an influence on the performance of these enterprises. The study therefore determined the summary model results on the influence of marketing communication on performance of micro-enterprises as shown in Table 4.15.

Table 4.15: Model Summary Results on Marketing Communications

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.434[a]	.188	.186	.92030	.188	81.972	1	353	.000

a. Predictors: (Constant), mean MC

Source: Research Data (2017)

From the findings in Table 4.15, it is clear that marketing communication explains 18.6% change in performance of micro-enterprises [F (1, 353) =81.972, p=.000]. This implies that a variance in performance of micro-enterprises is as a result of change in marketing communications and therefore it has an influence of performance of micro-enterprises.

Using a simple linear regression model Equation 3.3 was used to determine marketing communication as a function of entrepreneurial orientation. This was achieved by regressing marketing communication on entrepreneurial orientation on path (b) of the Mediation model for testing mediation adapted from Zhao, Lynch & Chen, (2010). It was important to find out the level of contribution of EO variable included in the model in the prediction of the MC. From the output box of coefficients, Table 4.16, a look at the Beta value under standardized coefficients reveals that EO contributes to the model. The model effect (coefficients) findings are presented as shown in Table 4.16.

Table 4.16: Model Coefficients on the influence of EO on MCs

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.802	.113		16.001	.000
	Mean EO	.373	.048	.383	7.800	.000

a. Dependent Variable: mean MC

Source: Research Data (2017)

From the findings as indicated in Table 4.16, it is clear that marketing communication has a unique influence of entrepreneurial orientation (β=.373, t (355) =7.800, p=.000). To compare the different variables, a standardized coefficient was used because the values for each of the different variables were converted to the same scale so that they could be easily compared. These findings are significant and therefore have several implications.

First, it is clear that there is a relationship between EO and MC and therefore the null hypothesis is rejected. We therefore adopt an alternative hypothesis that there is a relationship between entrepreneurial orientation and MC. The second implication is that EO has an effect or influences MC. The results also show that there is a significant positive constant of 0.468. This implies that in the absence of EO there will still be MC outcome though minimal. However, in constructing a regression equation, the unstandardized coefficient values listed as B were used. The equation thus became ($M = 1.802 + .373X$) where M stands for marketing communication. The beta value obtained in this analysis was also used for other more practical purposes than the theoretical model testing discussed. Standardized beta value (β=.383) indicate the number of standard deviations that scores in MC of ME would change if there was a one standard deviation unit change in the EO. Given the establishment of the contribution of EO on ME in the model, the summary model results were therefore presented with the main aim of determining the overall percentage change in MC explained by EO.

A multiple correlation coefficient (R) indicated the relation between MC and EO variables. The adjusted R^2 in this model indicates the percentage variation in MC explained by changes in the EO.

The higher the adjusted R^2 the greater is the confidence level of the researcher in the explanatory power of the model. The model enabled the researcher to know how much unique variance, in the MC, the EO variable explained. The results of the summary model for the effect of EO on MC are presented in Table 4.17.

Table 4.17: Summary Model Results on percentage change in MC explained by EO.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.383[a]	.147	.145	.68682	.147	60.834	1	353	.000

a. Predictors: (Constant), EO

Source: Research Data (2017)

The results in the Model Summary, Table 4.17 show that the degree of association between EO and MC is positive as indicated by multiple coefficient of correlation (R= 0.383). The adjusted R Square is 0.147 indicating that 14.7% of the variance in MC was explained by the model which consists of EO. This value expressed as a percentage means that the model explains 14.7 percent of the variance in MC of micro-enterprises.

To assess the statistical significance of the result it is necessary to look at the F change value (F (1, 353) =60.834, p=.000). The value of F-tests for the null hypothesis that multiple R in the population equals 0 or EO was not related to MC. It is evident that the model reached statistical significance. This implies that the model was highly significant and adequate enough to explain the variance in MC among micro-enterprises in Kericho County. The findings therefore reveal that EO has a significant effect of causing variability in the MC.

This study is almost similar in results with various studies that were carried though with different variables on the same topic. Studies such as Esposito (2013), Mramba (2015), and (Jones, 2008) support these findings. Popescu et al., (2012) observed that the most widespread communication purpose is to activate dialogues and new connections with their stakeholders and the most used communication tools are participation in fairs, sponsorships and events, but the very emerging tool is online communication: digital and social media. However, in the present study, these tools did not reflect those findings. Popescu et al., (2012) investigated the role of marketing communication in sustainable business development. The study concluded that the most used tools are not necessarily the most appropriate in terms of customers. Therefore in order to promote sustainable development of business, micro-enterprises must learn to choose the most appropriate ways of marketing communication ensuring strengthen relationships with customers and gain competitive advantage. The present study thus indicates a positive relationship between some of these communication tools and EO implying that micro-enterprises must improve on their use of marketing communication tools.

To determine whether there was statistical significant mediating effect of MC on the relationship between EO and organization performance, the study had to prove that performance is a function of multiple factors (MC and EO). Specifically, hierarchical multiple regression analysis was conducted to test mediation, that is, the effect between EO on micro-enterprises performance via MC, and whether or not such an effect was significant in predicting the organization performance of micro-enterprises. The first step was to establish the combined effect of both MC and EO on performance of micro-enterprises in Kericho County. Finally, the study reported the variance in the change of performance accounted for by EO when MC was added in the model. The findings for the model coefficients are presented as shown in Table 4.18.

Table 4.18: Effect of MC and EO on Performance

Outcome MC Model summary						
R	**R-sq**	**MSE**	**F**	**df1**	**Df2**	**P**
.3834	.1470	.4717	60.834	1.00	353.00	.000
Model	coeff	Se	T	p	LLCI	ULCI
constant	1.8016	.1126	16.0011	.0000	1.5802	2.0231
EO	.3732	.0478	7.7996	.0000	.2791	.4673
Outcome Performance						
Model summary						
R	**R-sq**	**MSE**	**F**	**df1**	**df2**	**P**
.6518	.4249	.6019	130.0099	2.0000	352.0000	.0000
Model	Coeff	Se	T	p	LLCI	ULCI
Constant	-.1201	.1671	-.7190	.4726	-.4487	.2084
MC	.3191	.0601	5.3070	.000	.2008	.4373
EO	.7039	.0585	12.0284	.000	.5888	.8190
TOTAL EFFECT						
Model Summary						
R	**R-sq**	**MSE**	**F**	**df1**	**df2**	**P**
.6155	.3788	.6483	215.2879	1.0000	353.0000	.000
	Coeff	**Se**	**T**	**P**	**LICI**	**ULCI**
Constant	.4547	.1320	3.4452	.0006	.1951	.7143
EO	.8230	.0561	14.6727	.000	.7127	.9333

TOTAL, DIRECT, AND INDIRECT EFFECT

Total effect of X on Y

Effect	**SE**	**t**	**p**	**LLCI**	**ULCI**
.8230	.0561	14.6727	.0000	.7127	.9333

Direct effect of X on Y

Effect	**SE**	**t**	**p**	**LLCI**	**ULCI**
.7039	.0585	12.0284	.0000	.5888	.8190

Indirect effect of X on Y

	Effect	Boot SE	BootLLCI	BootULCI
MC	.1191	.0320	.0658	.1929

R-squared mediation effect size (R-sq_med)

	Effect	Boot SE	BootLLCI	BootULCI
MC	.1424	.0326	.0849	.2131

Normal theory tests for indirect effect

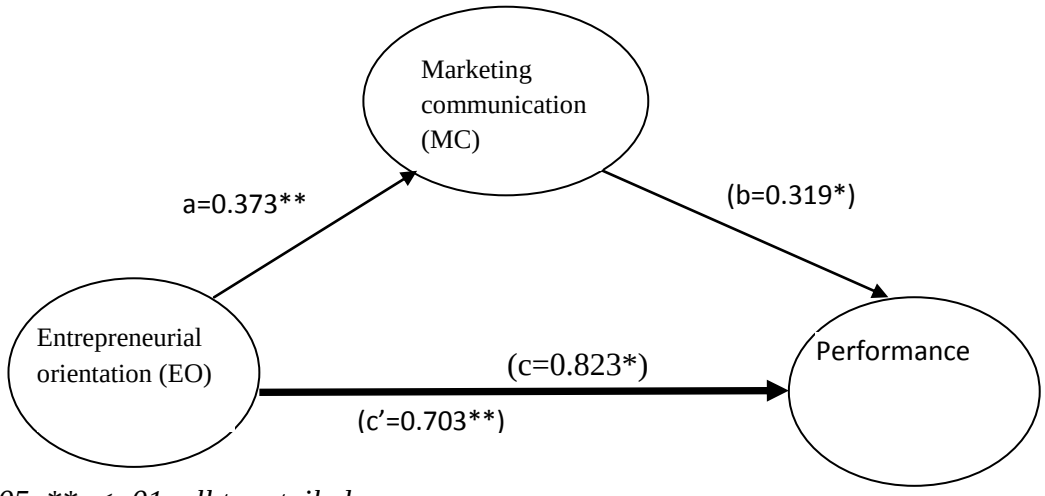
Effect	se	Z	p
.1191	.0273	.3632	.0000

Source: Research Data (2017)

The findings in Table 4.18 indicate a series of regression models that are fitted, first predicting the marketing communication using entrepreneurial orientation (step 2). In this case, the findings are similar to the standard multiple regression model presented earlier, showing that there was a relationship between marketing communication and entrepreneurial orientation (R=.3834) and EO explained 14.7% change in marketing communication (R square=0.1470) findings that were significant (F (1, 363) =60.834, P=.00). The coefficients also indicated a significant effect of EO on MC (b=.3732, t (355) =16.00, p=.000. Thereafter, prediction of the dependent variable (entrepreneurial performance) using the independent variable (entrepreneurial orientation) and the mediator (marketing communication), steps 3 and 4 were presented. An overview of these findings indicated that both EO and MC were positively correlated to EP (R=.6518) and explained 42.49% variance in EP (R square=.4249, F (2, 352) =130.00, p=.000). The coefficient row also indicates that MC, (b=.3191, t (355) =5.3070, p=.000) and EO, (b=.7039, t (355) =12.0284, p=.000 had a significant effect on EP. Finally the prediction of the dependent variable (EP) using the independent variable (EO), step 1, results were presented. Here the results confirm that EO was positively correlated with EP (R=.6155) and accounted for 37.88% change in EP (R square=.3788, F (1, 353) =215.2879, p=.000 as indicated in the table under total effect columns. The model coefficients also indicated that EO had a significant effect on EP (b=.8230, t (355) =14.6727, p=.000).

From the findings, it is clear that in step one of the mediation model, the regression of EO with EP, ignoring the mediator, was significant, b = .823, t (355) = 14.6727, p = <.001. Step 2 showed that the regression of EO on the mediator (MC), was also significant, b = .3732, t (355) = 7.799, p = <.001. Step 3 of the mediation process showed that the mediator (MC), controlling for EO, was significant, b = .3191, t (355) = 5.3070, p = .000. Step 4 of the analyses revealed that, controlling for the mediator (MC), EO scores was also a significant predictor of EP, b = .7039, t (355) = 12.0284, p=.000. In summary, the total effect of EO on EP was significant (b=.823, t (355) =14.6727, p=.000) without mediation. The indirect effect of EO on EP was also significant as indicated in the results, (b=.7039, t (355) =12.0284, p=.000. Finally after the regression models, the indirect effect of EO on EP was significantly greater than zero with an effect size of .1191 at 95% confidence interval. This means that MC partially mediated the relationship between EO and EP.

These findings are in line with those of Arief, Thoyib, Sudiro and Rohman (2013) who found that strategic flexibility mediates the relationship between EO and firm performance. The findings are also supported by Campos, Nuno de la Parra & Parellada (2012) investigations on the influence of dominant logic (DL) on the EO and firm performance relationship. Based on the statistical findings, the findings revealed that entrepreneurial orientation and organizational culture were significantly related to firm performance. Organizational culture was found to partially mediate on the relationship between EO to firm performance. These studies and others, though on different scope and variables supports the present findings leading to the conclusion that MC mediates the relationship between EO and performance of micro-enterprises.



**p< .05, **p< .01, all two-tailed.*

Figure 4.1: Path coefficients for EO, MC and performance mediation analysis

Source: Research Data (2016)

In this diagram, the thickness of the arrow shows the strength of the relationship, a = regression weight on X when predicting M, b and c' are the regression weights on M and X, respectively, when both are used together to predict Y, c = regression weight on X when predicting Y.

In this case, c is the unstandardized regression weight of 0.823 -entrepreneurial orientation (X) on performance of small and micro-enterprises (Y) while c' is the unstandardized regression weight of 0.703 for EO (X) in predicting Y (performance) when controlling for M (marketing communication).

The mediation effect was therefore measured as the reduction in the regression weight for X on Y when M was included: **c- c'** = (0.8230) – (0.7039) = 0.1191. Equivalently (within rounding error), the mediation effect can be calculated as the product of the indirect paths from X to Y through M: (0.7039) * (0.319) = 0.224 when rounded off to 3 decimal places. Based on baron and Kenny (1986), step four is not satisfied and therefore we have partial mediation.

In order to test to mediation, the study examined the product of the, *b* coefficients for the mediated path. The null hypothesis in this case was H_0: ab=0. Therefore, an estimate for the standard error of this ab product was then computed to find the z statistic. Sobel (1982) approximation formula was therefore used. Normal theory test for indirect effect using Sobel test indicated that there was partial mediation (z=4.3632, p=.000). Based on bootstrapping, the Indirect procedure also provides a 99% CI for the value of the indirect effect *ab* (again, this is in terms of unstandardized coefficients). The lower limit of this CI is .588; the upper limit is .810. Because this CI does not include zero, the null hypothesis that *ab* = 0 can be rejected. This corresponds to the findings for Baron and Kenny's analysis of mediation.

Contingency theory holds that the relationship between two variables depends on the level of a third variable. Introducing mediators into bivariate relationships helps reduce the potential for misleading inferences and permits a more precise and specific understanding of contingency relationships (Rosenberg, 1968). In the context of entrepreneurial orientation (EO), Lumpkin and Dess (1996) suggest that there may also be mediators in the relationship between EO and firm performance and as such then, the EO and firm performance direct relationship may be less meaningful. That it is through organisational activities that EO is made effective. Knowledge about these mediators informs the decision makers of the activities that are necessary to make EOs effective. The finding of this study rejects the null hypothesis that marketing communication does not mediate the relationship between EO and performance of micro-enterprises in Kericho County.

The findings are linked to contingency theory which explains that there is a need to establish possible transmitter variables in order to explain the relationship between EO and performance. These findings add to the existing literature where the idea of mediation has been examined only in a small fraction of EO papers.

Further, the context of mediation has been examined in developed economies and Asian economies which have a more advanced micro-enterprise sector unlike the micro-enterprise sector in Kericho County. Conceptually, marketing communication has not been investigated before yet theoretically, marketing communication has been known to influence performance of firms. Through the mediation analysis conducted, marketing communication partially mediates the relationship between EO and performance of micro-enterprises in Kericho County.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

The chapter is organized into these sections: introduction; summary of the findings; conclusion; recommendations; limitations and suggestions for further research. The first section provides a brief introduction of the aim of the chapter. The second section provides a summary of the findings, the fourth section, recommendations emerging from the study are explained, the fifth section highlights limitations of the research and the final section highlights suggestions for further research

5.1 Summary of Findings

Research objective one sought to examine the relationship between the entrepreneurial orientation and performance of micro-enterprises in Kericho County.

The application of EO was considered from the following five dimensions; innovation, risk-taking, pro-activeness, competitive aggression and autonomy, as proposed by Lumpkin & Dess (2001). The findings indicate that there were high, positive and significant correlations among the elements of EO and performance of micro enterprises. These findings imply that EO is positively associated with performance of micro-enterprises and that as the small enterprises improve their entrepreneurial orientation, performance also improves.

Research objective two sought to determine the relationship between marketing communication and performance of micro-enterprises in Kericho County. Using the dimensions of marketing communication tools and activities, the overall finding of this study was that marketing communication is has significant relationship with organizational performance. The study findings reveal that marketing communication was a determinant of micro-enterprise performance.

Research objective three sought to determine the relationship between entrepreneurial orientation and marketing communication for micro-enterprises in Kericho County. The study revealed that there was a relationship between entrepreneurial orientation and marketing communication for micro-enterprises in Kericho County.

Study objective four sought to investigate the mediating effect of marketing communication on the relationship between entrepreneurial orientation and firm performance of micro-enterprises in Kericho County. The findings reveal that MC partially mediates the relationship EO and organizational performance of micro-enterprises in Kericho County.

5.2 Conclusions of the Study

The following conclusions were made in relation to the findings of the study. Research objective one sought examine the relationship between the entrepreneurial orientation and performance of micro-enterprises in Kericho County. The study concludes that EO is important determinant of organizational performance in micro-enterprises in Kericho County, Kenya.

Research objective two sought to determine the relationship between marketing communication and performance of micro-enterprises in Kericho County. The study concludes that marketing communication is a major determinant of organizational performance.

Research objective three sought to determine the relationship between entrepreneurial orientation and marketing communication for micro-enterprises in Kericho County. The study concludes that marketing communication is a major determinant of organizational performance.

The study established EO significantly predicts the variance in MC among micro-enterprises in Kericho County. From this finding it is concluded that EO is a major factor in determining MC.

Research objective four sought to investigate the mediating effect of marketing communication on the relationship between entrepreneurial orientation and firm performance of micro-enterprises in Kericho County. It is therefore concluded that MC lowers the relationship between orientation and firm performance of micro-enterprises in Kericho County.

5.3 Recommendations of the Study

Based on the findings, the study has several recommendations per the objectives used in the study. First, for objective one, the study found that EO was significantly related to performance of micro-enterprises in Kericho County. However, it was evident that the practices on EO were not fully carried out. For instance, firms were not risk takers. The study therefore recommends that the enterprises should adopt comprehensive EO practices to improve their performance.

On objective two, the study also found a significant relationship between MC and performance of micro-enterprises in Kericho County. Even though marketing tools were slightly employed to achieve their marketing communications, the study recommends that the enterprises improve on their marketing communications activities to enhance performance.

From objective three, the study recommends that when the firms should enhance their EO beyond marketing communication in order to improve their promotion practices. This may lead to improvement and expansion of the firms

Finally, the study found that MC mediated the relationship between EO and performance of micro-enterprises partially. It should be taken into consideration that both variables enhance performance of the firms; however, EO should be given special attention to avoid overriding the influence of MC to enhance performance.

5.4 Limitations of the Study

In this study Entrepreneurial Orientation (EO) was conceptualised as the process and decision making activities used by entrepreneurs that lead to entry and support of business activities with the key variables as innovation, risk-taking, pro-activeness, competitive aggression and autonomy, as recommended by Lumpkin & Dess, (2001) of which most of them were applicable to small and medium enterprises therefore the study could not capture all the aspects of EO.

Secondly, the study relied on cross-sectional data survey where the respondents were asked to assess viewpoints on the item in the instrument. But some factors of entrepreneurial orientation, marketing communication and performance are known to be strategic and dynamic in nature.

Lastly, since the questionnaire was related to the EO practices and firm performance, the respondents might not have given the correct position for fear of exposing their fundamental drivers to performance.

5.5 Suggestions for Further Study

In this study Entrepreneurial Orientation (EO) was conceptualised as the process and decision making activities used by entrepreneurs that lead to entry and support of business activities with the key variables as innovation, risk-taking, pro-activeness, competitive aggression and autonomy, as recommended by Lumpkin & Dess, (2001).

Most of them were applicable to small and medium enterprises (SMEs), therefore the study on microenterprises could not capture all the aspects of EO. A more holistic approach to EO capturing both individual and business orientation would provide better understanding of EO and firm performance.

Secondly, the study relied on cross-sectional data survey where the respondents were asked to assess viewpoints on the item in the instrument. But some factors of entrepreneurial orientation, marketing communication and performance are known to be strategic and dynamic in nature. Therefore, a longitudinal study would be more preferable as it could provide a better perspective of the effect of entrepreneurial orientation on the firm performance in Kenya.

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APPENDICES

Appendix 1: Letter of Introduction

Patricia Chepkwony

P. O. Box 1120, 20200

KERICHO.

Dear Respondent,

RE: COMPLETION OF A QUESTIONNAIRE FOR A DEGREE OF DOCTOR OF PHILOSOPHY STUDY

I am a postgraduate student in the School of Business at Maseno University, currently collecting data for a study in partial fulfillment for PhD in Business Administration-Entrepreneurship entitled: '**Entrepreneurial orientation and firm performance. The mediating role of marketing communication on micro-enterprise performance in Kenya.** The aim of the study is to determine the relationship between entrepreneurial orientation and firm performance in Kericho county. The information given is confidential and shall be applied for the purposes of this study only. The results of the survey are to form a basis for formulating ways of improving growth of the micro-enterprises Kericho County specifically and in Kenya generally. To collect data, a questionnaire has been designed for your completion. Read each question carefully and follow instructions preceding each section. Please answer all the questions. Your responses will be treated with utmost confidentiality. Do not write your name on the questionnaire.

The purpose of this letter is, therefore, to request you to willingly provide the required information. If you have any questions, contact me using telephone numbers: 0721221073 or email address: kokipatricia@gmail.com.

Yours Sincerely,

Patricia Chepkwony.

Appendix 2: Questionnaire

SECTION A: Enterprise Profile

This part contains questions relating to the micro-enterprise background. Please TICK the responses that best suits your situation.

1. Type of enterprise
   - Single owner ( )
   - Unregistered single owner ( )
   - Partnership ( )
   - Limited company ( )

2. Classification of enterprise
   - Rural ( )
   - Urban ( )
   - Peri-urban

3. Who runs this business on a day-to-day basis?
   - Self ( )
   - Self & family ( )
   - Family members ( )
   - Self & employees ( )

4. How long have you been in business?
   - 0-3 years ( )
   - 3-5 years ( )
   - 5-7 years ( )
   - Over 7 years ( )

5. What line of business are you pursuing?
   - Agriculture ( )
   - Hospitality ( )
   - Educational ( )
   - Health and personal care ( )
   - Industrial (hardware, mechanic, electrical) ( )
   - Others (please specify) _____

SECTION B: ENTREPRENEURIAL ORIENTATION

The following statements concern your attitude towards the entrepreneurial orientation of the business. Please rate the extent to which you agree or disagree with the following statements by making an "X" over the appropriate number on the 1 to 5-point scale next to the statement. [5]=Strongly agree [4] Agree [3]= Neutral [2]= Disagree [1]=Strongly disagree

B1	My employees have enough autonomy in their job to do their work without continual supervision.	**1**	**2**	**3**	**4**	**5**
B2	My business allows me and my employees to be creative and try different methods to do our job.					
B3	Employees in our business are allowed to make decisions without going through elaborate justification and approval procedures.					
B4	Employees in our business are encouraged to manage their own work and have flexibility to resolve problems.					
B5	Employees seldom have to follow the same work methods or steps while performing major tasks from day to day.					
B6	Our business regularly introduces new services/products/processes.					
B7	Our business places a strong emphasis on new and innovative products/services.					
B8	Our business has increased the number of services/products offered during the past two years.					
B9	Our business is continually pursuing new opportunities					
B10	Over the past few years, changes in our processes, services and product lines have been quite dramatic.					
B11	In our business there is a strong relationship between the number of new ideas generated and the number of new ideas successfully implemented.					
B12	Our business places a strong emphasis on continuous improvement in products/service delivery.					

B13	Our business has a widely held belief that innovation is an absolute necessity for the business‟ future.					
B14	Our leaders seek to maximise value from opportunities without constraint to existing models, structures or resources.					
B15	When confronted with uncertain decisions, our business typically adopts a bold posture in order to maximise the probability of exploiting opportunities.					
B16	In general, our business has a strong inclination towards high-risk projects.					
B17	Owing to the environment, our business believes that bold, wide-ranging acts are necessary to achieve the business‟ objectives.					
B18	Employees are often encouraged to take calculated risks concerning new ideas.					
B19	The term „risk-taker‟ is considered a positive attribute for employees in our business.					
B20	Our business continuously seeks out new products/services.					
B21	Our business is very often the first to introduce new products/services					
B22	Our business typically initiates actions that competitors respond to.					
B23	Our business continuously seeks out new products/services.					
B24	Our business continuously monitors market trends and identifies future needs of customers					
B25	In dealing with competitors our business typically adopts a very competitive “undo-the-competitor" posture.					
B26	Our business is very aggressive and intensely competitive.					
B27	Our business effectively assumes an aggressive posture to combat trends that may threaten our survival or competitive position.					
B28	Our business knows when it is in danger of acting overly aggr our business's reputation or to retaliation by our competitors).					

7. To what extent do you think that the following elementsentrepreneurial orientation influences the performance of your business? (tick appropriately)

Entrepreneurial orientation elements	Not sure	Very low	Low	High	Very high
Autonomy					
Pro-activeness					
Competitive aggressiveness					
Risk taking					
Innovation					

8. Overall, how would you describe entrepreneurship orientation in your business?

- Very high ( )
- High ( )
- Low ( )
- Very low ( )
- Not sure ( )

SECTION C: Marketing Communication Activities

Please indicate the extent to which you agree with each of the following statements regarding your marketing communications activities. Please rate the extent to which you agree or disagree with the following statements by making an "X" over the appropriate number on the 1 to 5-point scale next to the statement. [5] =Strongly agree [4] Agree [3]= Neutral [2]= Disagree [1]=Strongly disagree

#	**Statement**	**1**	**2**	**3**	**4**	**5**
C1	Our business's advertising , PR, direct marketing and sales promotion all present the same clear consistent message to our target audience					
C2	Our business incorporates data sources into communication planning					
C3	We need to outsource some marketing communication to specialists					
C4	Our business decisions on marketing communication are based on increasing our competitiveness in the market					

C5	We do not invest in creative marketing communications for our business					
C6	We consider marketing communication to be statistically important for our business					
C7	Our business uses marketing communications to provide information about our products					
C8	Our business uses marketing communications to stimulate demand					
C9	Our business uses marketing communications to differentiate the product/service from competition					
C10	Our business uses marketing communications to combat competitive promotional efforts					
C11	Our business uses marketing communications to retain loyal customers					
C12	Our business uses marketing communications to identify prospects and new customers					
C13	Our business uses marketing communications to encourage product trial					
C14	Our business uses marketing communications to reduce sales fluctuations					

Please rate the level at which the business engages in business communication activities

- Very high ( )
- High ( )
- Low ( )
- Very low ( )
- Not sure ( )

Section D: Performance Scale

Listed below are statements describing the performance of a firm. Please rate the performance of your business using the scale (5-1) 1=very poor, 2=poor, 3= neutral, 4=good,5=very good

#	Statement	1	2	3	4	5
D1	**Market Performance**					
	Increase in market share					
	Competitive position					
	Increase in sales					
D2	**People Performance**					
	Owner satisfaction on overall performance					
	Employee satisfaction on overall performance					
	Employee turnover rate					
	Employee retention rate					
	Shareholder overall satisfaction					
D3	**Customer Relationship Performance**					
	Resolution of customer complaint					
	Customer loyalty					
	Quality reputation and award achievement					
	Product returns rate					
	Speed of order handling and processing					
	Customer satisfaction					
	Customer retention					

Thank you for participating!

Appendix 3: Budget

Details of expenditure: **1.** Equipment and facilities			
Consumables	**Quantity**	**Unit Price**	**Total (Ksh**
373 questionnaires for entrepreneurs, 4 pages @ 10	1492 pages	10/=	14,920
Typing costs	40 pages	20/-	800
Printing costs	40 pages	3/-	120
Data analysis			10,000
Internet			3,000
Other stationery: flash disk, backpack, notepads and pens			5,000
Literature search: Purchase of books, government publications and internet material Development of draft instruments			5,000 30,000 15, 000
Sub-total			**83,840**
Pre-testing the draft instrument: 1 assistant @ kshs. 2,000/- for 2days Copies 5*40 pages @ kshs. 3 per page Transport 2*5 days @ ksh. 500/- per day Supervision; 1 supervisor @ 1, 500/- * 2 days Transport for 2 days			 4,000 360 10,000 3,000 9, 000
Data collection Research assistant	10 days	2,000	20,000
Transport			18,000
Air time			2,000
Data analysis			30,000
Report writing			20000
Grand Total			**200,200**

Appendix 4: Work Plan

ACTIVITY	TIME FRAME	REMARKS
Presentation of concept paper	March 2015	Presentation at faculty
Preparation of proposal: problem statement, objectives and literature review, Methodology	April 2015-April 2016	Library search, online, meetings with supervisors, write-up
Presentation of proposal to Faculty	May 2016	Oral Presentation of proposal
Corrections and proceeding to and presentation to graduate school	June- October 2016 November 2016	Corrections done, proceed to School of Graduate Studies for approval
Data Collection	February to April 2017	Field work
Data analysis	May 2017	Sorting, coding and editing Data analysis using Baron and Kenny's regression
Publications of findings	June 2017	Completion and submission of thesis for pre submission defense
Pre-submission defense	July 2017	Faculty submission
Final presentation of findings	November 2017	Final defense School of Graduate Studies

Appendix 5: Data Set

	Autonomy	Proactive	Risk-taking	Innovative	Competitive aggresiveness	Mean-EO	Mean-performance	Mean-MC
1	4.25	4.00	4.00	4.25	3.40	3.98	4.13	2.06
2	2.75	2.25	2.25	2.25	2.20	2.34	4.40	3.63
3	3.75	4.25	4.25	3.50	4.40	4.03	4.33	3.00
4	3.75	1.00	1.00	1.00	1.40	1.63	1.53	2.00
5	3.00	2.50	2.50	2.75	2.40	2.63	3.20	2.38
6	3.00	1.00	1.00	1.25	1.80	1.61	1.13	2.19
7	2.75	2.75	2.75	1.25	2.00	2.30	1.87	3.94
8	2.00	3.00	3.00	2.00	2.80	2.56	2.27	2.25
9	3.00	1.50	1.50	1.00	1.20	1.64	1.73	2.19
10	1.50	2.50	2.50	1.75	2.40	2.13	2.40	4.06
11	2.00	3.50	3.50	2.75	2.00	2.75	2.33	3.00
12	4.25	4.75	4.75	4.75	4.60	4.62	1.40	1.63
13	2.25	1.00	1.00	1.50	1.60	1.47	2.07	2.13
14	2.50	3.00	3.00	3.25	3.00	2.95	1.40	2.44
15	2.00	2.75	2.75	2.25	1.40	2.23	2.27	2.38
16	2.00	2.50	2.50	2.25	2.00	2.25	1.73	2.44
17	2.00	2.50	2.50	2.50	1.80	2.26	2.07	2.38
18	2.25	2.00	2.00	2.25	1.80	2.06	2.07	2.38
19	2.00	1.00	1.00	1.25	1.60	1.37	1.53	3.69
20	2.25	3.50	1.73	1.73	1.73	1.73	1.73	1.73
21	2.50	1.75	1.87	1.87	1.87	1.87	1.87	1.87
22	3.00	3.25	2.27	2.27	2.27	2.27	2.27	2.27
23	2.00	2.00	4.60	4.60	4.60	4.60	4.60	4.60
24	3.00	2.00	4.33	4.33	4.33	4.33	4.33	4.33
25	2.75	2.25	4.40	4.40	4.40	4.40	4.40	4.40
26	2.00	2.75	4.47	4.47	4.47	4.47	4.47	4.47
27	1.50	1.50	1.73	1.73	1.73	1.73	1.73	1.73
28	3.00	3.00	2.93	2.93	2.93	2.93	2.93	2.93
29	2.25	1.50	3.27	3.27	3.27	3.27	3.27	3.27
30	2.25	1.00	2.07	2.07	2.07	2.07	2.07	2.07
31	3.50	1.00	1.40	1.40	1.40	1.40	1.40	1.40
32	2.25	1.50	2.13	2.13	2.13	2.13	2.13	2.13
33	1.50	1.50	4.20	4.20	4.20	4.20	4.20	4.20
34	1.75	2.25	4.07	4.07	4.07	4.07	4.07	4.07
35	1.75	2.00	4.00	4.00	4.00	4.00	4.00	4.00
36	2.75	1.75	4.47	4.47	4.47	4.47	4.47	4.47

37	1.50	2.00	1.20	1.20	1.20	1.20	1.20	1.20
38	5.00	3.25	2.20	2.20	2.20	2.20	2.20	2.20
39	2.75	2.25	3.13	3.13	3.13	3.13	3.13	3.13
40	2.25	2.25	2.20	2.20	2.20	2.20	2.20	2.20
41	2.75	1.50	1.47	1.47	1.47	1.47	1.47	1.47
42	2.50	1.00	1.73	1.73	1.73	1.73	1.73	1.73
43	2.75	1.25	2.07	2.07	2.07	2.07	2.07	2.07
44	2.75	1.25	2.13	2.13	2.13	2.13	2.13	2.13
45	4.25	1.75	1.80	1.80	1.80	1.80	1.80	1.80
46	4.50	1.25	1.25	1.75	1.20	1.99	1.47	2.13
47	2.00	1.25	1.25	1.00	1.00	1.30	1.80	2.06
48	2.50	1.00	1.00	1.00	1.20	1.34	1.53	2.19
49	2.25	1.25	1.25	1.75	1.80	1.66	1.47	2.56
50	3.50	1.25	1.25	1.00	1.20	1.64	1.27	2.25
51	4.00	1.00	1.00	1.00	1.00	1.60	1.80	2.13
52	3.00	2.00	2.00	1.75	1.80	2.11	1.40	2.13
53	3.50	1.00	1.00	1.25	2.20	1.79	1.07	2.06
54	3.75	1.75	1.75	2.00	1.40	2.13	1.27	2.44
55	2.75	1.75	1.75	1.50	1.60	1.87	1.60	2.19
56	2.75	2.25	2.25	1.25	2.00	2.10	2.13	2.56
57	1.50	2.00	2.00	1.75	2.00	1.85	1.67	2.19
58	2.00	2.00	2.00	2.00	2.00	2.00	1.60	2.00
59	2.00	2.50	2.50	2.75	2.40	2.43	4.27	2.38
60	1.00	2.75	2.75	2.50	4.00	2.60	2.13	3.38
61	3.50	3.00	3.00	2.25	2.40	2.83	2.73	2.25
62	1.75	3.50	3.50	1.75	3.00	2.70	2.67	1.81
63	2.50	2.50	2.50	2.00	2.20	2.34	2.00	2.00
64	2.75	2.25	2.25	2.25	2.60	2.42	2.40	2.81
65	1.75	1.25	1.25	1.25	1.40	1.38	2.00	2.31
66	4.25	3.00	3.00	2.50	2.60	3.07	1.60	3.38
67	1.50	2.50	2.50	2.00	1.60	2.02	1.67	3.69
68	2.00	2.50	2.50	2.75	2.60	2.47	1.47	3.31
69	3.25	1.50	1.50	4.00	2.40	2.53	3.47	1.38
70	3.75	1.00	1.00	1.00	1.00	1.55	1.13	2.38
71	4.25	1.00	1.00	1.25	1.00	1.70	1.13	2.38
72	3.25	1.00	1.00	1.00	1.20	1.49	1.13	2.75
73	4.50	1.25	1.25	1.00	1.00	1.80	1.13	2.63
74	3.75	1.50	1.50	1.25	1.20	1.84	1.07	2.19
75	3.75	1.00	1.00	1.25	1.60	1.72	1.53	3.38

76	2.25	1.00	1.00	1.25	1.20	1.34	1.73	2.00
77	2.75	2.00	2.00	1.00	1.80	1.91	1.73	2.00
78	2.50	1.25	1.25	1.50	1.00	1.50	1.13	2.56
79	2.00	1.00	1.00	1.50	1.00	1.30	1.47	2.81
80	2.00	1.50	1.50	1.25	1.20	1.49	1.13	2.00
81	2.50	1.00	1.00	1.00	1.00	1.30	1.60	3.69
82	3.75	1.00	1.00	1.25	1.20	1.64	1.27	2.88
83	2.00	1.00	1.00	1.00	1.00	1.20	1.53	4.31
84	4.25	1.00	1.00	1.00	1.00	1.65	1.20	2.81
85	3.25	1.50	1.50	1.00	1.80	1.81	1.20	3.06
86	3.00	1.75	1.75	1.75	1.00	1.85	2.33	3.88
87	3.25	2.50	2.50	2.75	2.80	2.76	1.87	3.00
88	2.25	2.50	2.50	2.25	2.00	2.30	1.73	2.44
89	2.50	2.50	2.50	2.50	1.80	2.36	2.07	2.38
90	3.75	2.00	2.00	2.25	1.80	2.36	2.07	2.38
91	2.75	1.00	1.00	1.25	1.60	1.52	1.53	3.69
92	2.25	3.50	3.50	3.25	2.80	3.06	1.73	2.88
93	2.50	1.75	1.75	1.50	2.80	2.06	1.87	2.75
94	2.50	3.25	3.25	4.00	3.20	3.24	2.27	3.56
95	1.75	2.00	2.00	2.25	2.00	2.00	4.60	3.50
96	3.00	2.00	2.00	1.25	1.60	1.97	4.33	3.13
97	2.75	2.25	2.25	2.50	2.80	2.51	4.40	3.00
98	1.75	2.75	2.75	2.75	2.80	2.56	4.47	3.19
99	1.75	1.50	1.50	1.50	1.60	1.57	1.73	1.44
100	1.75	3.00	3.00	3.00	2.40	2.63	2.93	3.25
101	3.50	1.50	1.50	2.00	2.80	2.26	3.27	2.56
102	2.50	1.00	1.00	1.00	1.00	1.30	2.07	2.19
103	3.25	1.00	1.00	2.25	1.20	1.74	1.40	3.25
104	3.00	1.50	1.50	1.25	1.40	1.73	2.13	4.69
105	1.75	1.50	1.50	2.00	1.40	1.63	4.20	3.19
106	2.25	2.25	2.25	1.75	2.40	2.18	4.07	3.06
107	1.75	2.00	2.00	1.75	2.20	1.94	4.00	3.69
108	3.00	1.75	1.75	2.25	1.40	2.03	4.47	3.44
109	2.50	2.00	2.00	1.50	1.80	1.96	1.20	1.44
110	2.50	3.25	3.25	3.25	3.80	3.21	2.20	4.25
111	2.50	2.25	2.25	1.75	1.80	2.11	3.13	2.25
112	2.75	2.25	2.25	3.50	3.20	2.79	2.20	2.44
113	2.25	1.50	1.50	1.50	1.80	1.71	1.47	2.50
114	2.75	1.00	1.00	1.00	1.60	1.47	1.73	2.50

115	3.00	1.25	1.25	1.25	1.60	1.67	2.07	2.44
116	3.00	1.25	1.25	1.25	1.00	1.55	2.13	2.00
117	3.50	1.75	1.75	1.25	2.20	2.09	1.80	2.13
118	3.50	1.25	1.25	1.75	1.20	1.79	1.53	2.13
119	2.75	1.25	1.25	1.00	1.00	1.45	1.87	2.06
120	3.00	1.00	1.00	1.00	1.20	1.44	1.53	2.19
121	3.50	1.25	1.25	1.75	1.80	1.91	1.53	2.56
122	3.25	1.25	1.25	1.00	1.20	1.59	1.27	2.25
123	3.25	1.00	1.00	1.00	1.00	1.45	1.80	2.13
124	3.25	2.00	2.00	1.75	1.80	2.16	1.47	2.13
125	2.75	1.00	1.00	1.25	2.20	1.64	1.07	2.06
126	3.25	1.75	1.75	2.00	1.40	2.03	1.27	2.44
127	2.50	1.75	1.75	1.50	1.60	1.82	1.60	2.19
128	3.00	2.25	2.25	1.25	2.00	2.15	2.07	2.56
129	2.25	2.00	2.00	1.75	2.00	2.00	1.60	2.19
130	2.75	2.00	2.00	2.00	2.00	2.15	1.60	2.00
131	2.50	2.50	2.50	2.75	2.40	2.53	4.07	2.38
132	2.25	2.75	2.75	2.50	4.00	2.85	2.13	3.38
133	3.25	3.00	3.00	2.25	2.40	2.78	2.67	2.25
134	2.25	3.50	3.50	1.75	3.00	2.80	2.47	1.81
135	2.50	2.50	2.50	2.00	2.20	2.34	2.20	2.00
136	2.75	2.25	2.25	2.25	2.60	2.42	2.40	2.81
137	2.00	1.25	1.25	1.25	1.40	1.43	2.00	2.31
138	3.50	3.00	3.00	2.50	2.60	2.92	1.60	3.38
139	3.25	2.50	2.50	2.00	1.60	2.37	1.67	3.69
140	3.50	2.50	2.50	2.75	2.60	2.77	1.47	3.31
141	3.50	1.50	1.50	4.00	2.40	2.58	3.47	1.38
142	3.50	1.00	1.00	1.00	1.00	1.50	1.13	2.38
143	2.75	2.50	2.50	2.25	2.00	2.40	1.73	2.44
144	1.75	2.50	2.50	2.50	1.80	2.21	2.07	2.38
145	3.25	2.00	2.00	2.25	1.80	2.26	2.07	2.38
146	2.75	1.00	1.00	1.25	1.60	1.52	1.53	3.69
147	3.00	3.50	3.50	3.25	2.80	3.21	1.73	2.88
148	2.50	1.75	1.75	1.50	2.80	2.06	1.87	2.75
149	3.00	3.25	3.25	4.00	3.20	3.34	2.27	3.56
150	2.50	2.00	2.00	2.25	2.00	2.15	4.60	3.50
151	3.00	2.00	2.00	1.25	1.60	1.97	4.33	3.13
152	2.75	2.25	2.25	2.50	2.80	2.51	4.40	3.00
153	3.00	2.75	2.75	2.75	2.80	2.81	4.47	3.19

154	2.25	1.50	1.50	1.50	1.60	1.67	1.73	1.44
155	2.75	3.00	3.00	3.00	2.40	2.83	2.93	3.25
156	2.00	1.50	1.50	2.00	2.80	1.96	3.27	2.56
157	2.50	1.00	1.00	1.00	1.00	1.30	2.07	2.19
158	2.75	1.00	1.00	2.25	1.20	1.64	1.40	3.25
159	2.75	1.50	1.50	1.25	1.40	1.68	2.13	4.69
160	2.50	1.50	1.50	2.00	1.40	1.78	4.20	3.19
161	3.50	2.25	2.25	1.75	2.40	2.43	4.07	3.06
162	2.75	2.00	2.00	1.75	2.20	2.14	4.00	3.69
163	3.50	1.75	1.75	2.25	1.40	2.13	4.47	3.44
164	2.50	2.00	2.00	1.50	1.80	1.96	1.20	1.44
165	3.00	3.25	3.25	3.25	3.80	3.31	2.20	4.25
166	2.50	2.25	2.25	1.75	1.80	2.11	3.13	2.25
167	2.75	2.25	2.25	3.50	3.20	2.79	2.20	2.44
168	4.00	1.50	1.50	1.50	1.80	2.06	1.47	2.50
169	3.75	1.00	1.00	1.00	1.60	1.67	1.73	2.50
170	3.00	1.25	1.25	1.25	1.60	1.67	2.07	2.44
171	3.00	1.25	1.25	1.25	1.00	1.55	2.13	2.00
172	3.25	1.75	1.75	1.25	2.20	2.04	1.80	2.13
173	3.25	1.25	1.25	1.75	1.20	1.74	1.47	2.13
174	3.25	1.25	1.25	1.00	1.00	1.55	1.80	2.06
175	2.50	1.00	1.00	1.00	1.20	1.34	1.53	2.19
176	2.25	1.25	1.25	1.75	1.80	1.66	1.47	2.56
177	2.75	1.25	1.25	1.00	1.20	1.49	1.27	2.19
178	2.75	1.00	1.00	1.00	1.00	1.35	1.80	2.13
179	3.50	2.00	2.00	1.75	1.80	2.21	1.40	2.13
180	3.25	1.00	1.00	1.25	2.20	1.74	1.07	2.06
181	4.25	1.75	1.75	2.00	1.40	2.23	1.27	2.44
182	3.75	1.75	1.75	1.50	1.60	2.07	1.60	2.19
183	3.00	2.25	2.25	1.25	2.00	2.15	2.13	2.56
184	3.50	2.00	2.00	1.75	2.00	2.25	1.67	2.19
185	1.25	2.00	2.00	2.00	2.00	1.85	1.60	2.00
186	1.25	2.50	2.50	2.75	2.40	2.28	4.07	2.38
187	2.00	2.75	2.75	2.50	4.00	2.80	2.07	3.38
188	1.75	3.00	3.00	2.25	2.40	2.48	2.60	2.25
189	1.00	3.50	3.50	1.75	3.00	2.55	2.40	1.81
190	2.75	2.50	2.50	2.00	2.20	2.39	2.00	2.00
191	3.25	2.25	2.25	2.25	2.60	2.52	2.40	2.81
192	2.75	1.25	1.25	1.25	1.40	1.58	1.87	2.31

193	2.00	3.00	3.00	2.50	2.60	2.62	1.67	3.38
194	1.50	2.50	2.50	2.00	1.60	2.02	1.67	3.69
195	2.00	2.50	2.50	2.75	2.60	2.47	1.67	3.31
196	3.50	1.50	1.50	4.00	2.40	2.58	3.40	1.38
197	3.50	1.00	1.00	1.00	1.00	1.50	1.13	2.38
198	2.75	2.50	2.50	2.25	2.00	2.40	1.80	2.44
199	2.50	2.50	2.50	2.50	1.80	2.36	2.13	2.38
200	2.75	2.00	2.00	2.25	1.80	2.16	2.00	2.38
201	3.25	1.00	1.00	1.25	1.60	1.62	1.60	3.69
202	3.00	3.50	3.50	3.25	2.80	3.21	1.73	2.88
203	2.50	1.75	1.75	1.50	2.80	2.06	1.87	2.75
204	3.00	3.25	3.25	4.00	3.20	3.34	2.27	3.56
205	2.75	2.00	2.00	2.25	2.00	2.20	4.60	3.50
206	1.50	2.00	2.00	1.25	1.60	1.67	4.33	3.13
207	2.50	2.25	2.25	2.50	2.80	2.46	4.40	3.00
208	3.00	2.75	2.75	2.75	2.80	2.81	4.47	3.19
209	2.75	1.50	1.50	1.50	1.60	1.77	1.73	1.44
210	1.75	3.00	3.00	3.00	2.40	2.93	2.93	3.25
211	2.50	1.50	1.50	2.00	2.80	3.27	3.27	2.56
212	3.25	1.00	1.00	1.00	1.00	2.07	2.07	2.19
213	3.00	1.00	1.00	2.25	1.20	1.40	1.40	3.25
214	2.75	1.50	1.50	1.25	1.40	2.13	2.13	4.69
215	2.75	1.50	1.50	2.00	1.40	4.20	4.20	3.19
216	2.50	2.25	2.25	1.75	2.40	4.07	4.07	3.06
217	2.75	2.00	2.00	1.75	2.20	4.00	4.00	3.69
218	3.00	1.75	1.75	2.25	1.40	4.47	4.47	3.44
219	2.50	2.00	2.00	1.50	1.80	1.20	1.20	1.44
220	3.25	3.25	3.25	3.25	3.80	2.20	2.20	4.25
221	2.25	2.25	2.25	1.75	1.80	3.13	3.13	2.25
222	2.25	2.25	2.25	3.50	3.20	2.20	2.20	2.44
223	3.00	1.50	1.50	1.50	1.80	1.47	1.47	2.50
224	3.00	1.00	1.00	1.00	1.60	1.73	1.73	2.50
225	3.00	1.25	1.25	1.25	1.60	2.07	2.07	2.44
226	3.00	1.25	1.25	1.25	1.00	2.13	2.13	2.00
227	3.50	1.75	1.75	1.25	2.20	1.80	1.80	2.13
228	3.00	1.25	1.25	1.75	1.20	1.47	1.47	2.13
229	2.25	1.25	1.25	1.00	1.00	1.80	1.80	2.06
230	3.00	1.00	1.00	1.00	1.20	1.53	1.53	2.19
231	3.00	1.25	1.25	1.75	1.80	1.47	1.47	2.56

232	2.75	1.25	1.25	1.00	1.20	1.27	1.27	2.13
233	3.50	1.00	1.00	1.00	1.00	1.80	1.80	2.13
234	3.00	2.00	2.00	1.75	1.80	1.40	1.40	2.13
235	3.00	1.00	1.00	1.25	2.20	1.07	1.07	2.06
236	3.25	1.75	1.75	2.00	1.40	1.27	1.27	2.44
237	2.75	1.75	1.75	1.50	1.60	1.60	1.60	2.19
238	3.00	2.25	2.25	1.25	2.00	2.13	2.13	2.56
239	2.50	2.00	2.00	1.75	2.00	1.67	1.67	2.19
240	2.25	2.00	2.00	2.00	2.00	1.60	1.60	2.00
241	2.75	2.50	2.50	2.75	2.40	4.27	4.27	2.38
242	3.00	2.75	2.75	2.50	4.00	2.13	2.13	3.38
243	3.00	3.00	3.00	2.25	2.40	2.73	2.73	2.25
244	1.50	3.50	3.50	1.75	3.00	2.67	2.67	1.81
245	4.00	2.50	2.50	2.00	2.20	2.00	2.00	2.00
246	2.25	2.25	2.25	2.25	2.60	2.40	2.40	2.81
247	1.75	1.25	1.25	1.25	1.40	2.00	2.00	2.31
248	2.50	3.00	3.00	2.50	2.60	1.60	1.60	3.38
249	2.75	2.50	2.50	2.00	1.60	1.67	1.67	3.69
250	3.50	2.50	2.50	2.75	2.60	1.47	1.47	3.31
251	3.75	1.50	1.50	4.00	2.40	3.47	3.47	1.38
252	3.50	1.00	1.00	1.00	1.00	1.13	1.13	2.38
253	4.00	2.50	2.50	2.25	2.00	1.73	1.73	2.44
254	2.50	2.50	2.50	2.50	1.80	2.07	2.07	2.38
255	2.25	2.00	2.00	2.25	1.80	2.07	2.07	2.38
256	2.25	1.00	1.00	1.25	1.60	1.53	1.53	3.69
257	2.50	3.50	3.50	3.25	2.80	1.73	1.73	2.88
258	2.00	1.75	1.75	1.50	2.80	1.93	1.93	2.75
259	2.75	3.25	3.25	4.00	3.20	2.20	2.20	3.56
260	2.00	2.00	2.00	2.25	2.00	4.33	4.33	3.50
261	3.50	2.00	2.00	1.25	1.60	4.07	4.07	3.13
262	1.75	2.25	2.25	2.50	2.80	4.13	4.13	3.00
263	2.75	2.75	2.75	2.75	2.80	4.33	4.33	3.19
264	2.00	1.50	1.50	1.50	1.60	1.67	1.67	1.44
265	2.50	3.00	3.00	3.00	2.40	2.93	2.93	3.25
266	2.25	1.50	1.50	2.00	2.80	3.13	3.13	2.56
267	1.75	1.00	1.00	1.00	1.00	2.20	2.20	2.19
268	2.50	1.00	1.00	2.25	1.20	1.53	1.53	3.25
269	2.50	1.50	1.50	1.25	1.40	2.07	2.07	4.69
270	2.75	1.50	1.50	2.00	1.40	4.07	4.07	3.19

271	1.75	2.25	2.25	1.75	2.40	4.00	4.00	3.06
272	2.50	2.00	2.00	1.75	2.20	3.73	3.73	3.69
273	2.50	1.75	1.75	2.25	1.40	4.33	4.33	3.44
274	2.75	2.00	2.00	1.50	1.80	1.20	1.20	1.44
275	3.00	3.25	3.25	3.25	3.80	2.20	2.20	4.25
276	2.50	2.25	2.25	1.75	1.80	3.13	3.13	2.25
277	2.75	2.25	2.25	3.50	3.20	2.20	2.20	2.44
278	3.25	1.50	1.50	1.50	1.80	1.47	1.47	2.50
279	3.25	1.00	1.00	1.00	1.60	1.73	1.73	2.50
280	3.00	1.25	1.25	1.25	1.60	2.07	2.07	2.44
281	2.50	1.25	1.25	1.25	1.00	1.45	2.13	2.00
282	3.50	1.75	1.75	1.25	2.20	2.09	1.80	2.13
283	3.50	1.25	1.25	1.75	1.20	1.79	1.53	2.13
284	2.50	1.25	1.25	1.00	1.00	1.40	1.80	2.06
285	2.25	1.00	1.00	1.00	1.20	1.29	1.60	2.19
286	2.25	1.25	1.25	1.75	1.80	1.66	1.47	2.56
287	2.75	1.25	1.25	1.00	1.20	1.49	1.33	2.06
288	2.75	1.00	1.00	1.00	1.00	1.35	1.87	2.13
289	2.50	2.00	2.00	1.75	1.80	2.01	1.40	2.13
290	2.50	1.00	1.00	1.25	2.20	1.59	1.07	2.06
291	2.75	1.75	1.75	2.00	1.40	1.93	1.27	2.44
292	2.25	1.75	1.75	1.50	1.60	1.77	1.60	2.19
293	1.75	2.25	2.25	1.25	2.00	1.90	2.13	2.56
294	2.00	2.00	2.00	1.75	2.00	1.95	1.67	2.19
295	2.25	2.00	2.00	2.00	2.00	2.05	1.60	2.00
296	2.25	2.50	2.50	2.75	2.40	2.48	4.27	2.38
297	2.50	2.75	2.75	2.50	4.00	2.90	2.13	3.38
298	3.50	3.00	3.00	2.25	2.40	2.83	2.73	2.25
299	1.00	3.50	3.50	1.75	3.00	2.55	2.67	1.81
300	2.25	2.50	2.50	2.00	2.20	2.29	2.00	2.00
301	1.75	2.25	2.25	2.25	2.60	2.22	2.40	2.81
302	2.25	1.25	1.25	1.25	1.40	1.48	2.00	2.31
303	4.25	3.00	3.00	2.50	2.60	3.07	1.60	3.38
304	3.00	4.00	4.00	3.25	3.00	3.45	2.53	2.81
305	3.75	2.50	2.50	2.75	2.60	2.82	1.47	3.31
306	4.25	1.50	1.50	4.00	2.40	2.73	3.47	1.38
307	5.00	1.00	1.00	1.00	1.00	1.80	1.13	2.38
308	2.50	2.50	2.50	2.25	2.00	2.35	1.73	2.44
309	3.50	2.50	2.50	2.50	1.80	2.56	2.07	2.38

310	4.25	2.00	2.00	2.25	1.80	2.46	2.07	2.38
311	2.75	1.00	1.00	1.25	1.60	1.52	1.53	3.69
312	4.50	3.50	3.50	3.25	2.80	3.51	1.73	2.88
313	2.50	1.75	1.75	1.50	2.80	2.06	1.87	2.75
314	2.75	3.25	3.25	4.00	3.20	3.29	2.27	3.56
315	2.75	2.00	2.00	2.25	2.00	2.20	4.60	3.50
316	2.75	2.00	2.00	1.25	1.60	1.92	4.33	3.13
317	2.75	2.25	2.25	2.50	2.80	2.51	4.40	3.00
318	2.75	2.75	2.75	2.75	2.80	2.76	4.47	3.19
319	2.75	1.50	1.50	1.50	1.60	1.77	1.73	1.73
320	1.75	3.00	3.00	3.00	2.40	2.63	2.93	2.93
321	3.25	1.50	1.50	2.00	2.80	2.21	3.27	3.27
322	2.50	1.00	1.00	1.00	1.00	1.30	2.07	2.07
323	3.00	1.00	1.00	2.25	1.20	1.69	1.40	1.40
324	2.75	1.50	1.50	1.25	1.40	1.68	2.13	2.13
325	2.75	1.50	1.50	2.00	1.40	1.83	4.20	4.20
326	2.75	2.25	2.25	1.75	2.40	2.28	4.07	4.07
327	1.25	2.00	2.00	1.75	2.20	1.84	4.00	4.00
328	2.75	1.75	1.75	2.25	1.40	1.98	4.47	4.47
329	2.50	2.00	2.00	1.50	1.80	1.96	1.20	1.20
330	3.50	3.25	3.25	3.25	3.80	3.41	2.20	2.20
331	2.75	2.25	2.25	1.75	1.80	2.16	3.13	3.13
332	1.25	2.25	2.25	3.50	3.20	2.49	2.20	2.20
333	2.50	1.50	1.50	1.50	1.80	1.76	1.47	1.47
334	4.75	1.00	1.00	1.00	1.60	1.87	1.73	1.73
335	3.00	1.25	1.25	1.25	1.60	1.67	2.07	2.07
336	3.00	1.25	1.25	1.25	1.00	1.55	2.13	2.13
337	2.00	1.75	1.75	1.25	2.20	1.79	1.80	1.80
338	4.50	1.25	1.25	1.75	1.20	1.99	1.47	1.47
339	4.75	1.25	1.25	1.00	1.00	1.85	1.80	1.80
340	2.75	1.00	1.00	1.00	1.20	1.39	1.53	1.53
341	4.50	1.25	1.25	1.75	1.80	2.11	1.47	2.56
342	2.75	1.25	1.25	1.00	1.20	1.49	1.27	2.19
343	3.75	1.00	1.00	1.00	1.00	1.55	1.80	2.13
344	2.25	2.00	2.00	1.75	1.80	1.96	1.40	2.13
345	1.75	1.00	1.00	1.25	2.20	1.44	1.07	2.06
346	4.00	1.75	1.75	2.00	1.40	2.18	1.27	2.44
347	3.00	2.00	2.00	2.50	3.80	2.66	2.87	3.50
348	1.50	3.50	3.50	2.25	3.00	2.75	2.00	2.25

349	3.25	1.50	1.50	2.25	2.40	2.18	2.27	2.75
350	3.75	4.50	4.50	4.00	4.40	4.23	4.27	3.94
351	3.50	4.00	4.00	3.75	4.00	3.85	4.20	1.88
352	3.75	4.50	4.50	3.75	4.40	4.18	4.40	3.88
353	1.75	1.75	1.75	2.00	2.20	1.89	1.67	2.13
354	3.00	1.00	1.00	2.00	2.20	1.84	1.73	2.06
355	2.25	1.50	1.50	2.50	2.00	1.95	2.20	1.81

Source: Research Data (2017)