

**INFLUENCE OF DIGITAL MARKETING STRATEGIES ON PERFORMANCE
OF CUTFLOWERS EXPORTING FIRMS IN KENYA**

**BY
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DECLARATION

This is my original work and has not been presented for degree award to any other University, College or Institution for Higher Learning for academic or any other purposes.

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Declaration by the supervisor

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

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DEDICATION

I dedicate this piece of work to my dear wife Bridget, and daughters Michelle and Sheena.

It is your understanding and encouragement that gave me the strength during my study.

ABSTRACT

Digital marketing is one of the strategies used by firms for marketing communication and products promotion. Digital marketing contributes to the marketing mix by connecting with clients and creating leads to new business opportunities. Digital marketing creates prospects for firms to interconnect and engage their target clients in a more efficient and effective way. Nevertheless, the prospects of this tool have remained unexploited to the full. The purpose of this research was to determine the extent of adoption of digital marketing and its influence on the performance of cut flowers exporting firms in Kenya. A qualitative and quantitative research was conducted using semi-structured interviews targeting 30 cut flowers exporting firms in Kenya. The outcomes show that Digital Marketing has an incredible impact across all elements of firms' performance. It's noted that digital marketing significantly improved revenue, improved market share, and increased profitability. Firms using digital marketing have shown better performance than their counter parts using conventional marketing strategies. Its major benefit emanates in its exceptional capability to provide information in a personalized and interactive way without the restriction of time and place. Digital marketing is a genuine strategy for marketing communication. Companies that invested to harness the power of Digital Marketing claim better returns, more customers and more sales. E-mail marketing, digital displays, websites and online advertising are the most commonly used digital strategies in cut flowers exporting firms in Kenya. For cut flower firms to remain competitive and maintain their position in the market, they should use digital marketing strategies. The study findings concludes that there is a strong correlation between digital marketing and performance of flower firms and therefore recommends that cut flower firms that have not been using digital marketing should to a large extent adopt digital marketing to be competitive and enhance organizational performance. The study recommends that further research to be done on why specific countries are more receptive to specific digital marketing strategies and on what need to be done to improve on digital marketing at the firm level.

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ABBREVIATIONS AND ACCRONYMS

ANOVA:	Analysis of variance
EU:	European Union
EPA:	Economic Partnership Agreement
US:	United States of America
GDP:	Gross Domestic product
KFC:	Kenya Flower Council
UK:	United Kingdom
ICT:	Information Communication Technology
TAM:	Technology Acceptance Model
UTAUT:	Unified Theory of Acceptance and Use of Technology
MPS:	Mileu Programma Sierteelt
IBM:	International Business Machine
DOI:	Diffusion of Innovation
KES:	Kenya Shillings
TOE:	Technology Organization and Environment Model
PDAs:	Personal Digital Assistants
RSS:	Really Simple Syndication
ERP:	Enterprise Resource Planning
SPSS:	Statistical Package for Social Sciences
SMEs:	small and medium enterprises
SEO:	Search engine optimization

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

Environment plays a critical part in the performance of an organization. Cut flowers are produced locally but consumed in the overseas; mostly in the EU nations. Firms exporting their products are influenced both by the local environment and the international environment. Local companies exporting their produce abroad are influenced both by the local environment and the international environment. The local environment impacts mostly on the internal operations of the firm while the international environment has impact on the customers. Ibrahim and Primiana (2015), implies that the external environment is beyond the control of firms. The external environment is constituted by buyers, competitors, products or service substitutes. It's the external environment, therefore, where opportunities and threats exist for the firms.

The flowers sector has been growing but there are sentiments that the sector is undergoing a period of intense changes as it responds to the challenges brought about by economic situations. Production and supply of cut flowers is increasing while demand seems to be constant in a continuously changing trade environment. Organisations will constantly seek new methods of acquiring new customers and improving their business performance. To this end, business acquisition and customer retention can only be made possible through proper marketing strategies. Marketing concept provides direction on how businesses should respond to opportunities, but marketing actions undertaken by the firms can alter the environment and create more opportunities for businesses.

The use of digital platforms for marketing purposes is fast growing. In 2014 interactive marketing was projected to near approximately \$55 billion representing 21% of all marketing spend. It's further estimated that in 2016 marketers are likely to spend approximately \$77 billion on digital marketing. This growth is attributed to shifting by marketers from the traditional media to the adoption of digital marketing which comprises use of e-mails, social media, search marketing and display advertising (VanBoskirk 2011). Consumers are increasingly using digital media, and with the tendency of more potential users joining the digital platform, more companies are adopting to digital marketing to reach existing and potential customers. (The World in 2015; ICT facts and figures, 2015) puts global internet users at 3.2 billion people and this is expected to double every 1-1.5 years. Damian and Calvin (2009) concluded that marketing is about people and technology plays a complementary role by connecting people to people more efficiently. The internet as marketing tool has enormous potential that transcends geographical boundaries in connecting buyers and sellers thus allowing businesses to access markets and maintain their presence in a more efficient manner.

Cut flower firms are engaged in production and export of fresh flowers, flower buds and bulbs for indoor ornamental use. There are over 97 cut flower producers in Kenya comprising of medium to large-scale commercial operations exporting products throughout the year. The firms' exhibit considerable heterogeneity in reference to strategic features, such as size of operation, ownership structure, and level of vertical integration (Ksoll, Macchiavello, & Morjaria 2009). There have been major investments in the firms over the past two decades and the duty-free entry of fresh produce to the European Union (EU) has

contributed to vibrant growth in the sector. The industry attracts investors due to the favorable climatic conditions, productive and highly skilled workforce and global-positioning of Kenya. The firms enjoy high management standards with heavy investment in value addition by adopting modern technology in production and marketing (Floriculture in Kenya 2016). It's anticipated that over the next five years the cut flower sector will continue to grow at 5% annually with a challenge benchmarking itself against other producer countries.

1.1.1 Digital Marketing

Kotler and Levy(1969), defined marketing as that function of the organization that can keep in constant touch with the firms' clients, anticipating their needs and developing products that solve these needs while building a system of communication to express the organization's purposes'. Kotler and Keller (2013) has defined marketing as meeting needs profitably. This definition, therefore, implies marketing is ascertaining and satisfying human and social needs. The concept of online marketing been defined as the use of the internet to achieve marketing goals. The term e-marketing is used as a synonym for internet marketing, but it also includes mobile marketing. More broadly digital marketing is the use of internet and related information and communication technologies to accomplish marketing goals (Sedlacek, 2006). Digital marketing can be summed as the use of digital technologies that form channels to market and attain business objectives by achieving and surpassing clients' needs more than the competitors.

Evolution in advertising is associated with technological advancement which has altered the communication methods between businesses and clients (Damian & Calvin 2009). Sedlacek (2006) observed that online marketing is a new trend in marketing communication and its efforts to create a positive image has considerable potential. Desktops, tablets, mobile phones, and smartphones are condensed to form digital channels platforms. Digital marketing provides consistent and personalized client messaging which is cost effective compared to traditional marketing of direct mail, print, and television. Access to websites, social media and mobile applications allow firms to launch campaigns that are global and region specific (Raghunadan & Parimal 2014).

Digital marketing can immensely improve on a company's marketing leads. Raghunadan (2014) reveals that 34% of a company's leads come from inbound marketing which is implemented through online content publishing in form of portals, podcasts, social media marketing, online campaigns and search services. Outbound marketing include use of email marketing, RSS feeds among others. Digital marketing has been adopted in several sectors. Gilanina, Syed & Mousavian (2011) indicated that by 2015 digital banking was to become the norm in the financial sector Wanjuki (2014) concluded that banks are expanding their marketing efforts and fulfilling customer needs through digital marketing. With intense competition in the cut flower industry, adoption of digital marketing may enable organizations to engage their customers in a more personal way and eventually improving their performance.

1.1.2 Organizational Performance

Organizational performance is the total performance of the firm and is indicated by the sum performance of finance, marketing, and human resource functions of the organization in a given time. Organizations formulate goals and objectives to be achieved within a given time frame. Performance measures the organizations' effectiveness against these set objectives. Thus, according to (Koontz & Donnell,2003), organizational performance refers to the ability of an organization to attain its goals such as high-profit margin, product quality, larger market share, better financial results at a stipulated time and by applying the relevant strategy. Organizational performance has many dimensions which may be difficult to quantify. For the banking sector, (Rowley, 2011) both financial and non-financial indicators have been used to measure performance. The financial indicators were sales growth and percentage profit margin. In the service industry, employee productivity has been used as a measure of performance (Mishra, 2008). Performance can be measured comparative to other competitors in the industry in terms of product quality, delivery time and inventory management over a given time (Kates & Matthew, 2013).

According to Kotler (2000), marketing performance is determined by analyzing sales, analyzing market share, analyzing sales to marketing expenses, and overall financial performance. To this end, firms must properly manage their marketing activities and keenly observe their output while taking appropriate corrective action where necessary. Understanding effects of marketing on performance is important because marketing activities have direct influence on sales and to a large extend the overall performance of the firm.

1.1.3 Export Practices

Export trade is the exchange of goods and services across national boundaries (Seyoum 2009). The export trade involves execution of marketing activities for products which transcends country's borders. Export trade positively affects economic growth by facilitating capital accumulation, upgrading of the industrial structure, technological progression and improved productivity (Lee 1995). Exports have been accepted as a feasible strategy by firms searching for growth opportunities (Mayes & Soteri, 1994). Exports are important to an economy in several ways including improvement in the balance of payments, raising the standards of living, employment creation, and revenues generation in the form of profits.

Firms benefit from exports through improved capacity utilization, increasing economies of scale, diversification and smoothing out of business cycles (Gripsrud 1990). Firms select to enter into the export trade if their production is high as it allows them to reap on the investment associated with new markets. According to Katsikeas (1996), firms are motivated to export by the internal and external stimuli. The external motivator factors include unsolicited orders, profit potential, large market size, the physical proximity of the foreign market, and offer of representation by a foreign distributor. The internal motivators are market diversification, utilization of excess capacity, and accelerating the business growth rate.

A firm entering the export market faces investment in sunk costs. Entering the export market involves incurring costs such as market research costs, market development and distribution channel development costs. Credit constraints can hamper exporting due to

extra costs involved in shipping, freighting and acquisition of information about the target market, and in setting up a distribution network. Firms require adequate liquidity to pay for these costs, and constraints in the credit market may be binding. Exporting firms experience higher risks due to exchange rate fluctuations, considerably more time to process export orders and realize payment after export shipment, giving adequately liquid firms competitive edge over others (Niepmann & Tim Eisenlohr 2014).

1.1.4 Overview of Horticulture Sector in Kenya

The contribution of cut flowers has made the horticultural sector to be among the fastest growing in the Kenyan economy (Barrientos, et al., 2003). Together with fruits and vegetables, cut flowers make up Kenya's horticulture industry which generates approximately US \$1billion annually to the country's economy. Statistics show that in 2014, the contribution of horticulture to the national GDP was 2.8% out of which 1.52% was from floriculture sector (Floriculture in Kenya, 2016). Fruits and vegetables are mainly grown by small-scale farmers compared to production of cut flowers and export vegetables which are dominated by large-scale growers due to their capital intensive nature. The sector's contribution to the economy through job creation, income generation to households, foreign exchange earnings and provision of input materials to the agro-processing businesses cannot be overlooked. Approximately 4.5 million people derive their income directly from the sector and another 3.5 million are indirectly dependent on the sector countrywide (An overview of the Kenya horticulture industry, 2016). Europe forms the base market for Kenya's horticultural produce and the chief destinations being the UK, Switzerland, Germany, Switzerland, Italy, Belgium, France and the Netherlands. Other

destinations albeit small in Kenya's horticultural imports are Russia and Japan. Floricultural sub-sector alone is a source of livelihood to an estimated 500,000 people including over 90,000 direct flower firm employees (Floriculture in Kenya, 2016).

Various types of cut flowers are grown in Kenya. The main cut flower types are roses, gypsophila, carnations, lilies and alstroemeria which are dominated by large-scale greenhouse producers. Small-scale outdoor production mainly comprises of eryngiums, statice, arabicum, and hypericum. The main production areas are Isinya, Thika, Kiambu, and Mt. Kenya region. Other areas are Nairobi, Nakuru, Eldoret, Kericho and Naivasha which is the epicentre of cut flowers production in Kenya. Flower firms comprise of indoor and outdoor producers with heavy investment in modern methods of production, and marketing. The Kenya flower council (KFC) is the industry regulator and its current membership of stands at 96 firms, representing over 65% of the flowers exported (KFC Producer Members, 2016).

The cut flower industry in Kenya has recorded increase in volume and value exported yearly from 2011 to 2015. Volume exported has increased from 110 tons to 122.8 tons and value, on the other hand has grown from KES 58.8 billion to KES 62.9 billion in the same period ("Economic Survey publications," 2016). Kenya has a market share of about 38% making her the leading cut flower exporter to the EU. While 50% of Kenya's cut flower is sold through the Dutch auctions another 50% is sold directly to retail outlets in the UK, Japan, Germany and Russia (Kenya flower industry, 2015). Despite of this growth, the Kenya cut flowers sector is facing challenges and some firms have expanded their

operations to the neighbouring countries where cost of doing business makes them competitive in the global market. Kenya is facing competition from Colombia, Ethiopia, Malaysia and Ecuador due to their low cost of production and quality flowers. There is also a shift in the import countries that they no longer rely solely on the Dutch auction for their supplies. Consumers' power to spend on cut flowers is also diminishing thereby affecting the demand (The Netherlands remains the largest player, 2015). Cut flower firms have implemented several strategies to enhance their attractiveness in the international market including product portfolio management, product excellence, and efficient supply chain management and having better stakeholder engagement.

There are several factors which have led to the success of the floriculture industry in Kenya among them being: growers' vast knowledge, adoption of technology and marketing acumen. The benefits of the internet in business notwithstanding (Muthuri, 2001) found out that the Internet is yet to be fully accepted and exploited by the flower exporters. Nzomoi, Byaruhanga, Maritim and Omboto (2007), found out that literacy level, the origin of technology, financial ability, government role and policy, firm size and professional membership of the firm managers or owners are the main determinants of technological adoption in the horticultural export sector in Kenya.

1.2 Research problem

Business performance is a complex and multi-faceted concept and it's affected by the environment. Competition characterizes business environments and therefore appropriate marketing strategies enhance business performance (Achrol & Kotler, 2011). Performance

measures the organizations' effectiveness against its set objectives. Thus, according to (Koontz & Donnell,2003), organizational performance refers to the ability of an organization to attain its goals such as high-profit margin, product quality, larger market share, better financial results at a stipulated time and by applying the relevant strategy. Businesses are designed to perform while responding environmental threats and opportunities using available and assigned resources. Failure to perform may lead to a firm being uncompetitive than other players in the industry.

Digital marketing concept is new and its impact on organizational performance needs to be determined. Some aspects of digital marketing have even been regarded adversely but to perform organizations need to have a presence and be active in the digital marketing platforms (Halligan & Shah, 2010). Marketers are not only required to contribute to organizational performance through brand building and growing sales revenue but also through customer acquisition, customer retention, customer satisfaction, and overall market share growth (Kotler & Keller 2013). With the emergence of ICT, firms are have no alternative but to adopt the use of electronic technology in their operations. It is necessary to find ways of creating a unified experience across all the ICT channels and explore how consumers use them to interact. Geyskens et al. (2002) conclude that companies that are investing in channels on the Internet show positive financial performance.

Kenya firms compete amongst themselves as well as experiencing international competition from Colombia, Ethiopia, Malaysia and Ecuador due to their low cost of

production and good quality flowers. There is also shift in the import countries who no longer rely solely on the Dutch auction for their supplies (The Netherlands remains the largest player, 2015). The shift presents Kenyan firms with opportunities to acquire these new markets and be competitive by shortening the supply chain. Flower firms are faced with a myriad of challenges. The rising wage bill, high cost of inputs and poor road infrastructure are just but a few. Demand for flowers is uneven with peaks being from month of December to April. The peaks attract good prices while the rest of the months are characterized with low demand and low prices. The future of the Kenya flower export hangs in the balance due to trade agreements. The EPA has not been signed and ratified by the respective partner states. This agreement will give Kenya flower duty free entry to the EU and failure to operationalize it by January 2017 means Kenyan produce will attract tax of at least 8% making the Kenya cut flower firms uncompetitive in the EU. With these challenges the firms' profit margins are steadily narrowing.

Flower firms in Kenya have adopted various strategies to increase their attractiveness in the international market. Portfolio management, product differentiation, product excellence, and efficient supply chain management and having better stake holder management are some of the strategies adopted by the firms (Kamau 2011). The flower industry in Kenya is self-regulating through their umbrella body, the KFC, to safe guard their image. High emphasis is placed on sustainable production incorporating environmental care and social compliance with various audits systems. The firms enhance their competitiveness locally by subscribing to various industry standards such as Fair trade, MPS with the hope of getting high prices than the non-ascribing firms.

Studies have been done in other sectors on digital marketing and its influence on organizational performance. In the banking sector (Wanjuki 2014), studied the growth of digital marketing and its impact on customer service at the Barclays bank and concluded that digital marketing enhances brand visibility. Despite this positive attribute the study didn't determine the effects of digital marketing on financial performance of banks.

Were (2011), undertook a study on the extent of adoption of e-marketing by the large dairies in Kenya and concluded that e-promotion was rated highest in terms of adoption of digital marketing campaigns. The study also did not show the relation between e-marketing and performance in the dairy sector. Kithinji (2014), researched on Internet Marketing and Performance of SMEs in Nairobi and found out that internet marketing has influence on profitability and brand visibility of the SMEs. Alexander and Cheryl (2007), researched on adoption of e-marketing by Direct-Market Farms in the North Eastern United States and the results showed that not all direct-market farmers are interested in using the Internet as a marketing tool.

Muthuri (2001), researched on export marketing in the internet and concluded that the internet is yet to be fully adopted and exploited by the flower exporters. The study did not focus on digital marketing and performance of the cut flower firms. It is hence against this background that this study intends to fill the knowledge gap by attempting to answer the question: does digital marketing influence the performance of flower firms in Kenya?

1.3 Objective of the study

The objective of this study is to determine the influence of digital marketing on the performance of cut flowers exporting firms in Kenya. Specifically this study aims:

- i. To establish the extent to which digital marketing has been adopted by cut flowers exporting firms in Kenya.
- ii. To determine the influence of digital marketing on the financial and non-financial performance of cut flower exporting firms in Kenya.

1.4 Value of the study

This study has shown that digital marketing has a positive influence on the financial and non-financial performance of cut flower exporting firms in Kenya. This study will equip managers with the requisite knowledge and guide them to make an informed decision on adoption of digital marketing strategies. Resource allocation is a critical function of management and firms derive their success from the way they utilize their scarce resources. The findings from this study will assist CEOs and firm managers to identify and allocate resources on marketing platforms and strategies with the greatest positive impact on the performance of the organization.

To the Researchers and scholars the study will be a valuable addition to the prevailing knowledge and provide a platform for more investigation on the relationship between digital marketing and other strategies implemented by business firms.

The study will guide the government and policy makers on the importance of addressing the barriers and challenges that hinder adoption of digital marketing in order to enhance its adoption in other sectors and its overall contribution to the economy.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter covers literature review and related works by other researchers. It includes review on the theoretical perspectives, Digital marketing, Digital marketing platforms and strategies, motivation to use of digital marketing and organizational performance.

2.2 Theoretical Perspectives.

The study is based on diffusion of innovation theory, technology acceptance model, and unified theory of acceptance and use of technology model to offer a wider understanding of digital marketing and organizational performance.

2.2.1 Diffusion of Innovation Theory.

Diffusion of innovation theory by Rodgers (1983), explains how, why and the rate at which new innovation is accepted. DOI sees innovation to be transferred through particular systems using certain channels (Rodgers, 1995). The members of the society are independently involved in the diffusion process which follows a common path of awareness, persuasion, deciding, implementing and confirming the result of the innovation. This model shows that adoption of technology takes a normal distribution curve over time. The adoption process according to DOI theory is divided into 5 stages thus: innovators, early adopters, early majority, late majority and laggards with innovators being the first to adapt and laggards adapt last. At the organization level, the adoption process is influenced

by the attitude of the leader towards change, internal structure of the organization and system openness (Rodgers 1995). Technology, organization and environment influence the adoption and implementation of new innovation at the firm level (Tornatzky & Fleischer, 1990) and it is in line with DOI which emphasizes both internal and external characteristics of a firm as factors influencing innovativeness in organizations (Oliveira & Martin, 2011).

2.2.2 Technology Acceptance Model

Technology acceptance model (Davis, 1989), expounds on how users consent and use technology. The model suggests that users will consider the perceived usefulness and perceived ease of use in deciding how and when to use a new technology. Perceived usefulness is defined as the extent to which an individual believed that using a particular system enhances their job quality and output while perceived ease of use is the degree to which a person believes that using a particular system would be free from effort (Davis, 1989). The theory infers, therefore, that users will adopt to technology as long as it is able to perform the task at hand effectively and efficiently. The short coming of TAM is that it doesn't take into consideration the issues of cost, structural imperative and environmental influence that forces users to adopt technology. Park (2009) confirms that TAM is a useful theoretical model in helping to understand and explain behavioural intentions in technology use.

2.2.3 Unified Theory of Acceptance and Use of Technology.

The Unified Theory of Acceptance and Use of Technology (Venkatesh, Moris, Davis & Davis 2003), proposes that in adopting technology, the users are guided by performance

and effort expectancies. According to this theory adoption of innovation is influenced by four key factors namely: effort expectancy, performance expectancy, social influence and facilitating conditions. Alawadhi & Morris (2008) carried out a study using UTAUT and concluded that performance and effort expectancies, peer influence determine behavioural intentions. In adopting new technology, consumers consider and review many factors at their disposal among them costs of adoption and use (Venkatesh *et al*, 2005).

2.3 Digital Marketing

Digital marketing can be summed as use of digital technologies that form channels to market and attain business objectives by achieving and surpassing clients' needs more than the competitors. The term digital marketing, e-marketing and internet marketing can be used interchangeably. Digital marketing is founded on the pillars of immediacy, personalization, interaction, and relevance of the messages (Rowley, 2011).

2.3.1 Motivation to digital marketing

The ease of connecting business to business and people to people has been simplified by the advent of technology and digital platforms. New technology need to be adopted for it to have impact on the intended users. Adoption according to (Hall & Khan, 2002), means the decision of using or obtaining use of a concept or an object while Rogers (1995), defined adoption as making full use of a new idea as the best course of action available. Adoption is therefore a deliberate decision to use a new model, items or knowledge upon consideration of the prevailing situation.

Adoption of ICT in the agricultural sector has been low in comparison to other sectors (Teye et al, 2012). Selection and adoption of technology are influenced by cost, hardware platforms, and functionality. The ease of system maintenance, updates and installation of new modules are key the functionality factors in technology adoption. Sabuhoru and Wunisch (2003), studied the use of computers and internet in Canadian farms and found out that the nature of firm operations was the major factor influencing computer and internet use. Smith, Richard, Kemey and Catherine (2004) did a similar study in the Great Plains region of the US and established that computer education had the greatest influence on computer and internet use by farmers. Hoag, Ascough and Frasier (1999), found out that firm size and sales output have positive influence on computer and internet use by farmers. This study is in line with (Smith et al, 2004), that established a positive correlation between firm gross sales and adoption of technology.

In the Dutch horticultural sector perceived benefits are the major drivers of technology adoption and low compatibility with the firms' values as the major hindrance in adopting technology. Herath, Zoysa and Karunananda (2004), identified the need to gain knowledge, acquire global market information, higher profits, and optimization of the production processes as some of the major drivers of ICTs adoption in Srilanka's floriculture firms. The Srilanka flower farmers are therefore motivated to adopt digital marketing by reduction in production costs and enhancement of their profitability.

Although some researches point out cost of ICTs deployment and inability to quantify ICT benefits as the main impediment of technology adoption, there is consensus among many

researchers that profitability is a function of cost which can be improved through adoption of ICTs (Maumbe & Okello, 2010). Taragola and Gelb (2011) also notes that different factors drive ICTs adoption in the Kenyan floricultural firms and that educated farmers have the ability to search for new markets and therefore more likely to adopt to ICT technology. It can be summed therefore that, many researchers agree that drivers of ICTs adoption are either or all of the factors: technical, functional, strategic, and economic.

2.3.2 Digital Marketing Platforms and Strategies

Digital Platform is set of components used in common by several stakeholders and whose functionality can be supported by third parties. Platforms are the foundational building blocks upon which network of firms develop complementary product technologies and services (Gawer, 2009). Parker and Alstynne (2011), add that digital platforms are characterized by network effects and include Desktops, PDAs, network Switches, Multimedia, and mobile devices like smartphones and ERP systems to link the demand side to the supply side of businesses. Digital marketing is characterized by various strategies which all operate electronically. Online advertising is a very significant portion of digital marketing through which companies convey messages about their products or services (Ryan & Jones, 2009).

Social networking sites such as Twitter, LinkedIn, Myspace and Facebook have proved to be popular online activities in relation to time spent (Nielsen, 2010). According to (Pradiptarini, 2011), Facebook is the most common social media site followed by Twitter, LinkedIn, MySpace and YouTube in popularity. Social media which is user-generated

communication represents a widespread source of information (Michaelidou, 2011) and create empowered clients who are more influenced by other clients than by advertising (Leeflang et al., 2014).

Social media has changed the strategies and tools firms use to communicate, emphasizing that information control lies with the clients rather than the seller (Mangold & Faulds, 2009). Social media also generates incredible increase in client insights, including how they interrelate with each other and the products and services they consume. The widespread acceptance of digital marketing practices have greatly contributed to the personalization of marketing where commercial entities progressively links with individual clients and users and gaining feedback on a one-to-one basis. Social media has therefore, become significant as a means of internet marketing given its wider adoption.

The effectiveness of social media marketing is highly subjective to content quality; involvement; and integration with the other media platforms (Pradiptarini, 2011) and there is mixed indications of correlation between a company's social media activities and its performances. Through social media platforms, companies can promote events concerning their products and services, run promotions and explore new opportunities to increase awareness and visibility of their brand and share information with their clients.

Mobile application for marketing implies the use of the portable media as a means of marketing communications (Bauer, Barnes, Reichardt & Neumann 2005). Mobile applications offer several networks to reach customers through various strategies ranging

from short messaging services, pictures, videos and multimedia messaging service to the mobile Internet with short messaging being the most popular and highly effective for generating brand awareness. Mobile applications are designed for quick messaging and are used for reminders, updates and confirmations. The remarkable success of SMS is credited to its strategic features, such as ease of use, low cost, message forwarding ability, and unobtrusive nature (Doyle 2011).

Websites generates new ways of communication, cooperation and content sharing (Enders, Denker, Hungenberg & Mauch 2008). Most organizations have websites that define their core business activities and detailing the products and services they offer. However, the numerous websites on the internet make it challenging to market products on the websites and therefore SEO strategy is extensively used to improve the visibility and thus the volume and quality of traffic to a firm's website (Khraim 2015). Firms with higher rankings for their websites appear at the top of the search result page, and more frequently, the greater the likelihood that potential customers will visit these sites. SEO focuses on image search, local search, video search, news search and industry-specific vertical searches. SEO provides a variety of strategy including increasing links from other websites to the firm's webpages, editing the content of the website and restructuring contents of a company's website. Effectiveness of a primary website in attracting visitors is improved by supplementary activities like social network activities, frequent actualization of website and creation of secondary websites linked to it (Khraim 2015).

E-mail is one of exciting innovative strategies facilitating interactive marketing. Kinnard (2000) define e-mail marketing as the act of conveying marketing communication to recipients who primarily request for it while Roberts and Berger (1999) define e mail marketing as information focussed interpersonal marketing practise that takes place in a context of accountability for the privacy of the customers. These definitions show a clear difference between permission based, focused e-mail marketing and spontaneous, and untargeted mass mailings.

Email Marketing involves transmitting product information via email to the existing and potential customers. It involves use of email to send advertisements and request for sales while building trust and loyalty with current customers to encourage repeat business and also acquiring new customers. E-mail marketing is a form of direct and interactive marketing strategy which is used in acquiring and retaining customers analyzing individual customers (Tapp, 2000). E mail marketing is considered cost-effective favourite method of communication for many people and can be customized for each recipient. It allows easy interaction, it is traceable and its effects readily measured. Performance of e mail marketing is enhanced by seeking the clients' permission to be contacted by the marketer at any time through e-mails (MacPherson, 2001)

2.4 Organisational Performance.

Lebas and Euske (2006) define performance as comprising of monetary and non-monetary pointers which offer evidence on the degree of attainment of the organization's objective. Lebas (1995), explain that performance should be supported by philosophies of

performance management which include the validity of cause-effect relationship among variables. Performance measurement has been limited to a financial perspective, ensuing to various restrictions like emphasis on the internal factors of the company and delayed accessibility of performance-related information. To overcome these restrictions performance has to be measured as a multidimensional subject. Good organizational performance can be attained by improving product quality, improving production efficiency, and better responsiveness to clients' needs.

There are other factors that determine organization's performance besides money. From the various literature review, performance may be summed as valuable contributions to attain the objectives of a firm in a given time period (Anthony, 1965). Performance of an organization can thus be evaluated in several dimensions namely a company's productivity, its efficiency, the profitability, and lastly its market share. Performance measurement involves identification, monitoring and communication of the results using performance indicators (Brudan, 2010). Marketing performance management include: marketing planning, implementing, and evaluating marketing results for performance improvement. In the floriculture sector several factors add to the total financial performance of the firm. The product quality, productivity aspects, the operating costs, marketing prowess of the firms and tax implications all have a bearing on performance.

2.5 Digital marketing and organizational performance

Digital marketing can be used to enhance a firm's marketing communication mix. Digital marketing enables firms to interact with its customers and has the ability to positively

influence on the performance of business (Kariuki et al, 2014). With heightened competition marketers are compelled to find alternative ways to appeal to and retain customers. Marketing activities employed by businesses are expected to add value and deliver on the goals of the organizations. Kimani (2015), found out that social media influences consumer awareness, information acquisition and buying behaviour thus an effective tool in brand monitoring.

The use of digital marketing impacts positively on performance of small and medium enterprises by harmonizing their clients and business processes with technology to achieve profitable growth (Nyawira & Karugu, 2015). According to Kithinji (2014), Digital marketing enables firms' reach to new customers, enhance brand awareness and mitigate clients complains thereby improving on profitability. Websites play critical role in the implementation of digital marketing and (Mwarania, 2012), connects this to increase in market share and profitability of tour firms in Kenya.

In the insurance sector, the use of digital marketing platforms in advertising, promotion, and responding to customer queries has led to higher insurance policy sales. Digital marketing create brand and products awareness, leading to better sales networks and market share. The website marketing has been indicated to assist insurance firms in collecting information on the prospective clients visiting their websites (Hossinpour, Hasanzade, & Feizi 2014).

In the farming sector not many studies have been done on the digital marketing and organizational performance. Taleghani, Akhlagh and Sani (2013), found that Digital-marketing has direct effect on performance of Pistachio-exporting companies in Iran. The firms achieve higher assets turnover, more export share, sales and export growth, more client attraction and retention in export markets, and thereby improved on their financial and non- financial performance. The internet, support the firms' distributors and agents in enhancing their marketing activities and filling the knowledge gap on their products, promotions, price and competition to their clients. From the literature reviewed, it's evident that Digital marketing if properly utilized leads to better performance of organizations.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

In this chapter brief description of the research methodology used in the study is outlined. The main highlights are on research design, population of the study, data collection and instruments of data collection.

3.2 Research Design

Kothari and Garg (2014) defined research design as the arrangements of circumstances for gathering and examination of data in a way that aims to combine relevance to the research objective in a more efficient manner. It is the basis on which this research was conducted and it specifies the background on which data was collected, measured and analyzed. Quantitative and qualitative data was captured by use of a semi-structured questionnaire. This design was suitable for rapid data collection and its cost effectiveness (Schindler 2000).

3.3 Target Population

Research population, according to Kothari and Garg (2014), is the sum total of all the entities under consideration by researcher. In this study the research population was the flower firms who are members of the Kenya Flower Council. There are as at September 2016, 96 cut flower firms who fully subscribe to the association.

3.4 Sampling

Firms who are members of KFC as of September 2016 were used to formulate a sampling frame. Simple stratified random sampling was adopted to ensure all firms from all the regions have an equal opportunity of being selected. A sample of 30% of the total population was selected for the study considering the distribution of the entire population. Kothari et al (2014) approve at least 25% of the target population as a fair representative of the whole population. The flower firms are clustered into region as Mt. Kenya, Nairobi and its environs, Naivasha, Nakuru and North Rift.

3.5 Data Collection

Primary data was collected from the respondents using a semi-structured questionnaire designed to capture the variables of investigation in line with the research objectives. The questionnaire comprised of nominal and closed ended questions to which respondents gave their views through a face to face interview (Abugah 2009). The questionnaires were divided into three sections to capture the background information of the respondents, digital marketing and performance indicators. Respondents in the study are General Managers, Farm managers and Marketing managers who were deemed to be conversant with marketing operations of the cut flower firms.

3.6 Data Analysis

Data cleaning was done on the filled questionnaire to ensure correctness and consistency of the information provided. Financial and non-financial data were analyzed in line with the different sections on digital marketing and performance using the Likert scale, linear

regression and analysis of variance (ANOVA) to separate the means. The findings of the research have been presented in form of statistical measures that encompasses percentages, frequencies, mode, and mean. To establish the relationship between digital marketing and performance levels in the floricultural firms, regression analysis, using t-test was adopted. Multiple regression analysis expressed as, $Y = \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \varepsilon$ was suitable for estimating the relationships between two variables (Kothari & Garg, 2014).

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSION

4.1 Introduction

This chapter presents the findings of the research study whose objectives are:

- (i) To establish the extent to which digital marketing has been adopted by cut flower exporting firms in Kenya and
- (ii) Determine the influence of digital marketing on the financial and non-financial performance of cut flower exporting firms in Kenya.

The chapter is divided into four sections: questionnaire distribution and return rate, reliability, descriptive analysis and hypothesis testing. To analyze the data, descriptive analysis using frequencies, means, correlation, linear regression and analysis of variance (ANOVA) were used.

4.1.1 Response rate

The study targeted a sample size of 30 flower firms. A total of 26 questionnaires were filled and returned giving a response rate of 86.7% and representing 27% of the study population. This response is rated excellent according to Mugenda and Mugenda (2003) and Kothari et al (2014) approve at least 25% of the target population as a fair representative of the whole population.

4.1.2 Reliability

Cronbach's alpha was used to measure internal consistency of the data collected. The Cronbach's alpha (α) generated from IBM SPSS 23 for the overall instrument was 0.922;

Digital marketing strategies had a scale of (0.834) and non-financial performance scale was (0.911). According to Cronbach (1951), an alpha (α) above 0.7 indicates good internal consistency of the data.

Table 4.1: Reliability measures showing internal consistency in the data.

Scales & Subscales	Number of items	Cronbach's Alpha
Overall instrument	26	0.922
Digital marketing platforms scale	9	0.834
Non-financial performance scale	17	0.911

Source: Research data

4.2 Demographic characteristics

The demographic characteristics were analysed using descriptive method including frequencies across the four variables; size of the flower firm, region, years of firm's existence and number of employees in the firms.

The study was conducted in 5 cut flowers growing regions as shown in Table 4.2. About 80% of the responses were received in Nairobi, Nakuru and Naivasha. The findings of Table 4.2 indicated that many of the flower firms are in the range of 16-20 hectares in size.

The results of the findings also indicated that most firms, 73%, have been in business for more than 10 years. It also emerged that majority of the flower firms (61.5%) have more than 400 employees. Majority of the flower firms have the average cost of producing a

single unit of sale to be between KES 5-9. Table 4.2 has more information on demographic analysis of the study flower firms.

Table 4.2: Breakdown of the demographic characteristics

	Frequency	%
Size of firm(hectares)		
<10	2	7.7
11-15	4	15.4
16-20	6	23.1
21-25	2	7.7
26-30	3	11.5
31-35	4	15.4
36-40	3	11.5
>45	2	7.7
Region		
Nairobi	7	26.9
Naivasha	6	23.1
Nakuru	7	26.9
North Rift	3	11.5
Mt. Kenya	3	11.5
Years of experience of business		
<5	3	11.5
6-10	4	15.4
11-15	4	15.4
16-20	10	38.5
>20	5	19.2
Number of employees		
<200	3	11.5
200-400	7	26.9
401-600	10	38.5
601-800	3	11.5
801-1000	1	3.8
>1000	2	7.7
Average cost of producing a single cut flower (KES)		
5-9	15	57.7
10-14	2	7.7
15-19	2	7.7
20-24	2	7.7
>25	1	3.8
<5	4	15.4

Note¹: N=26. Source: Research data

4.3 Marketing Strategy

Analysis of marketing strategy revolved around products, markets, and marketing strategies. Data was analysed using descriptive statistics involving frequencies and means and presented in charts and tables.

4.3.1 Products

The results of table 4.3 indicate that most flower firms produce more than one flower type. Close to 90% of the firms produce roses, followed by 12% of them growing carnations while 7.7% of them grow Hypericum. Close to 20% of these firms grow other flowers among them Gypsophila and lilies.

Table 4.3: Type of flowers grown by flower firms

	Frequency	%
Roses	23	88.5
Carnations	3	11.5
Hypericum	2	7.7
Others	5	19.2

Source: Research data

4.3.2 Markets

The research has revealed that half of the cut flower firms surveyed commonly sell their products directly to the florist and supermarkets without involving middlemen, and 19% indicating that they use flower auctions in the Netherlands to sell their products. Table 4.4 indicated that 31% of the flower firms use both direct sales and auctions to sell the products.

Table 4.4: Methods of selling flowers

	Frequency	%
Direct markets	13	50
Auctions	5	19.2
Both	8	30.8

Source: Research data

4.3.3 Products Destination

The result in table 4.5 shows that Europe and Asia make biggest markets for flower firms in Kenya. Eight in ten flower firms surveyed stated that they sell to the Netherlands. More than 30% of these flower firms sell to Japan, Russia, Germany and UK. About 27% of the flower firms export to France while 53.8% of the flowers are sold directly to other markets among them Norway, Middle East, Uganda, Australia, and China.

Table 4.5: Countries purchasing cut flowers from Kenyan exporters

	Frequency	%
Netherlands	21	80.8%
Japan	10	38.5%
UK	9	34.6%
Germany	9	34.6%
Russia	9	34.6%
France	7	26.9%
Others	14	53.8%

Source: Research data

4.3.4 Major Cut flowers clients

The result in table 4.6 indicates more than 40% of cut flowers firms in Kenya have spread their customer base between florists and auctions as their major clients. 35% of the clients are supermarkets whereas 12% of the clients being other flower firms. This findings are in

line with (Kenya flower industry, 2015), which indicated that Kenya flower firms have diversified their target markets between auction and direct sales. This strategy is to mitigate against risks and uncertainties in the market.

Table 4.6 Major flower clients

	Frequency	%
Florists	12	46.2
Supermarkets	9	34.6
Auction	11	42.3
Other firms	3	11.5

Source: Research data

4.3.5 Marketing Strategies

Digital marketing is used by 62% of the flower firms, 23% use conventional marketing strategies of exhibitions and trade shows while 15% combine both digital and conventional methods of marketing. Table 4.7 shows that most flower firms have adopted digital marketing as a means of marketing communication and product promotion. The overall rate of adoption of digital marketing is at 77% among cut flowers exporters.

Table 4.7: Marketing Strategies

	Frequency	%
Digital	16	61.5
Conventional	6	23.1
Both	4	15.4

Source: Research data

4.4 Digital Marketing Strategies

The most common digital marketing strategy used by 90% of the flower firms is e-mail. The popularity of e-mail marketing is due to its ease of use, customization and traceability (MacPherson, 2001). Digital displays and websites are used by 65% of the firms. More than 30% of flower firms confirmed that they use online marketing, social media and mobile applications. YouTube and Video displays are the least used form of digital marketing. Social media is not a popular means of digital communication due to the fact that it requires more involvement and content quality and integration with other media platforms (Pradiptarini, 2011).

Table 4.8: Digital marketing strategies

	Frequency	%
E-mails	18	90.0
Digital displays	13	65.0
Websites	13	65.0
Online advertising	8	40.0
Social media	7	35.0
Mobile applications	6	30.0
Short message texts	3	15.0
YouTube	2	10.0
Short video display	1	5.0
Others	1	5.0

Source: Research data

Of the firms surveyed 23% of the flower firms indicated that they don't use digital marketing. 47% of the flower firms have been using digital marketing for more than 5 years, and 31 % of the firms having used digital marketing for 5 or less years.

Table 4.9: Years with digital marketing

	Frequency	%
None	6	23.1
<1	1	3.8
1-5	7	26.9
6-10	7	26.9
11-15	2	7.7
>15	3	11.5

Source: Research data

4.5 Motivation to digital strategies

Most of the firms are motivated to the use of digital marketing due to efficiency and effectiveness as marketing communication and promotional tool as highlighted by 54% and 46% of the respondents respectively. Close to 30% of the flower firms adopt digital marketing due to affordable operational costs. The findings tally with Venkatesh et al (2003), Alawadhi and Morris (2008), that explained that performance expectancy, efficiency, cost of technology and social influence are the major motivators to technology adoption. This concurs with the research findings except on social influence which plays an insignificant role in influencing digital marketing adoption in the cut flower firms.

Table 4.10: Motivation to Digital Marketing strategies

	Frequency	%
Cost	7	26.9
Efficiency	14	53.8
Effectiveness	12	46.2
Peer influence	1	3.8
No motivation	6	23.1

Source: Research data

4.6 Length of Service of Respondent and Digital Strategies

The results of Table 4.11 indicate insignificant association between duration of firms' existence and the number digital strategies, $F_{2, 17}=0.505$, $p=0.612$. Flower firms that have been in existence for less than 5 years had slightly less number of digital marketing strategies ($M=2.7$, $SD=1.5$) compared to those that have been in service for more than 10 years ($M=3.8$, $SD=1.9$).

Table 4.11: Analysis of variance showing the relationship between Length of Service and the number of digital strategies

Length of service (Years)	M	SD	F	p-value
<5	2.7	1.5		
5-10	3.8	1.3	0.505	0.612
>10	3.8	1.9		

Note²: N=20; Source: Research data

4.7 Digital Strategies and Product Destination countries

Flower firms target different countries with different digital marketing strategies for the success of their businesses. Firms targeting sales to Netherlands for instance requires reliable websites, $\chi^2=6.53$, $DF=1$, $p=0.011$. Firms selling to Germany have significantly adopted e-mail use most often as shown in Table 4.7, $\chi^2=2.97$, $DF=1$, $p=0.045$. It also emerged that firms selling flowers to UK significantly interact with YouTube for marketing their products, $\chi^2=7.37$, $DF=1$, $p=0.007$.

Similarly, the results of Table 4.12 indicated that flower firms selling to Russia significantly use digital displays ($\chi^2=7.459$, DF=1, $p=0.006$), SMSs ($\chi^2=8.138$, DF=1, $p=0.004$) and social media ($\chi^2=3.453$, DF=1, $p=0.043$). Finally, firms selling to Japan, significantly interact with YouTube ($\chi^2=6.042$, DF=1, $p=0.014$) and digital displays ($\chi^2=4.833$, DF=1, $p=0.028$). The key insight from Table 4.7 was that to win markets in Europe, flower firms need to interact most with websites, social media, e-mails and YouTube. In Asian markets, flower firms prefer interaction with digital displays, SMSs, Social media and YouTube.

Table 4.12: Multiple logistic regression showing the relationship between digital strategy and destination countries

Note³: Significance level at 0.05

Digital strategy	Destination country									
	Netherlands		Germany		UK		Russia		Japan	
	χ^2	p-value	χ^2	p-value	χ^2	p-value	χ^2	p-value	χ^2	p-value
E-mails	0.243	0.622	2.975	0.045	1.722	0.189	1.458	0.227	1.033	0.309
Digital displays	1.147	0.284	0.536	0.464	2.607	0.106	7.459	0.006	4.833	0.028
SMS	0.01	0.996	1.68	0.195	0.536	0.464	8.138	0.004	0.245	0.621
YouTube	2.279	0.131	0.006	0.939	7.369	0.007	0.01	0.997	6.042	0.014
Social media	3.055	0.04	0.863	0.353	0.179	0.672	3.453	0.043	0.647	0.421
Online advert	0.737	0.391	1.649	0.199	0.179	0.672	0.653	0.419	0.031	0.86
Mobile applications	0.101	0.751	0.082	0.775	3.118	0.077	0.004	0.952	0.007	0.931
Websites	6.531	0.011	2.032	0.154	0.682	0.409	2.602	0.107	0.097	0.755

Source: Research data

4.8 Performance indicators

Both financial and non-financial indicators have been used to measure performance. Analysis of non-financial parameters involved increase in market share, customer acquisition and product demand. The financial indicators measured were, revenue growth, gross profits, sales revenue, unit price of product.

4.8.1 Financial performance indicators

All financial indicators were summarised as shown in Table 4.13. The mean size (Ha) for flower firms were found to be large in Naivasha (M=57) and small in Nairobi (M=22). Similarly, the highest annual unit sales is recorded in Naivasha (M=56,733,333) while the lowest annual sales units recorded in Mt. Kenya (M=20,800,000). The highest sales revenue (KES) are also recorded by flower firms in Naivasha (M=1,310,666,667) and recorded lowest by firms in Nairobi (M=443,857,143). The highest gross profit (KES) are recorded by flower firms in North Rift (M=752,666,667), Naivasha (M=629,550,000) and the lowest gross profit recorded by flower firms in Nairobi (M=267,857,143)

Table 4.13: Summary of the mean financial performance indicators

	Nairobi	Naivasha	Nakuru	North Rift	Mt. Kenya
Hectares	22	57	32	35	25
Annual Sales(Units)	24,714,286	56,733,333	43,142,857	33,666,667	20,800,000
Price/Unit(KES)	19	22	18	29	29
Prod Cost/Unit	7	7	7	7	14
Sales Revenue(KES)	443,857,143	1,310,666,667	774,714,286	1,017,333,333	596,200,000
Sales Revenue/Production Unit	20,613,265	15,584,336	21,158,252	28,409,813	24,251,135
Total Prod Cost(KES)	176,000,000	681,116,667	290,285,714	264,666,667	316,666,667
Gross Profit(KES)	267,857,143	629,550,000	484,428,571	752,666,667	279,533,333
Gross Profit/Prod Unit(KES)	12,098,281	10,742,934	12,131,574	21,104,646	10,298,925
Sales units/Prod Unit/Yr.	1,154,458	763,172	1,215,750	949,354	872,322

Source: Research data

4.8.2 Non-financial performance indicators

Descriptive analysis involving means was used to summarise all the non-financial performance indicators as shown Table 4.14. Respondents were required to rate, on a Likert scale of 1-5, the extent which digital marketing affected certain non-financial performance indicators. The top 3 results of digital marketing were identified to be: More customer acquisition (M=3.9), more sales (M=3.7) and increased market share (M=3.7) as summarised in Table 4.14.

Table 4.14: Summary of the mean non- financial performance indicators associated with digital marketing

	Overall	Nairobi	Naivasha	Nakuru	North Rift	Mt. Kenya
Increased revenue	3.6	2.4	4.4	3.4	4.3	4.0
Increased market share	3.7	2.6	4.6	3.6	4.0	4.0
More customer acquisition	3.9	3.4	4.6	3.7	3.7	4.0
Increased profitability	3.2	2.4	4.0	3.0	4.3	2.3
More sales	3.7	3.2	4.6	3.3	3.7	4.3
Higher demand for products	3.4	2.8	4.2	3.1	3.7	3.7
New market acquisition	3.6	2.8	4.4	3.1	3.7	4.7
Higher prices	2.6	2.2	3.0	2.7	3.3	1.3

Source: Research data

4.8.3 Digital Marketing strategies and Non-financial performance.

Mann-Whitney U test was used to determine the impact of each digital marketing strategy on non-financial performance of cut flower firms. E-mails, digital displays, online adverts and websites had at least one significant impact on non-financial performance. E-mails have significant impact on increased revenue, increased market share, more customer acquisition, increased profitability, more sales, higher demands for products and higher prices, $p < 0.05$. Digital displays have significant impact on increasing prices ($Z = -2.026$, $p < 0.05$). Online adverts have significant impact on increased market share, new customer acquisition, higher demand for products and higher prices, $p < 0.05$. Lastly, websites have significant impact on increased revenue, increased market share, more customer acquisition, increased profitability, higher demands for products and higher prices, $p < 0.05$ as shown in Table 4.15. On the flipside, SMS, YouTube, social media and mobile

applications had no significant impact on non-financial performance of flower firms as shown in Table 4.15.

Table 4.15: Mann-Whitney U test checking on the effects of digital marketing strategies on non-financial performance indicators

Digital marketing technique		Increased revenue	Increased market share	More customer acquisition	Increased profitability	More sales	Higher demand for products	New market acquisition	Higher prices
Email	Z	-3.205	-2.489	-3.087	-3.017	-1.993	-2.525	-1.787	-2.687
	p-value	<i>0.001</i>	<i>0.013</i>	<i>0.002</i>	<i>0.003</i>	<i>0.046</i>	<i>0.012</i>	0.074	<i>0.007</i>
Digital displays	Z	-1.018	-0.739	-0.043	-1.853	-0.042	-0.176	-0.424	-2.026
	p-value	0.309	0.46	0.966	0.064	0.966	0.86	0.672	<i>0.043</i>
SMS	Z	-0.125	0.011	-0.87	-0.17	-0.742	-0.356	-0.513	-0.568
	p-value	0.901	0.997	0.384	0.865	0.458	0.722	0.608	0.57
YouTube	Z	-0.086	-1.373	-0.08	-0.626	-0.079	-0.41	-0.157	-1.177
	p-value	0.931	0.17	0.936	0.531	0.937	0.682	0.875	0.239
Social media	Z	-0.978	-1.357	-0.594	-1.006	0.001	-0.972	-0.467	-1.008
	p-value	0.328	0.175	0.552	0.314	0.998	0.331	0.64	0.313
Online advert	Z	-0.958	-2.351	-1.475	-1.877	-1.351	-2.029	-2.056	-2.049
	p-value	0.338	<i>0.019</i>	0.14	0.06	0.177	0.044	<i>0.04</i>	<i>0.04</i>
Mobile applications	Z	-0.156	-0.196	-1.504	-0.19	-1.385	-0.744	-1.716	-0.142
	p-value	0.876	0.845	0.133	0.85	0.166	0.457	0.086	0.887
Website	Z	-2.371	-2.823	-2.472	-2.222	-1.46	-2.628	-1.943	-2.711
	p-value	<i>0.018</i>	<i>0.005</i>	<i>0.013</i>	<i>0.026</i>	0.144	<i>0.009</i>	0.052	<i>0.007</i>

Note⁴: Significance at 0.05. Source: Research data

4.8.4. Digital marketing, Conventional Marketing and Financial Performance.

One way analysis of variance was used to check on the impact of digital marketing and conventional marketing strategies on financial performance of flower firms. Digital marketing showed significant average annual sales, sales revenue and gross profit, $p < 0.05$ as shown in Table 4.16. Digital marketing strategies for instance registered higher average gross profit (M=576,805,000.00, SD=229,075,162.84) than conventional marketing

strategies at 95% confidence (M=100,633,333.33, SD=61,914,833.98, $F_{1, 24}=3.332$, $p<0.05$). Table 4.16 has more information about the impact of digital and conventional marketing strategies on financial performance.

Table 4.16: One-way Analysis of Variance (ANOVA) showing the mean difference between flower firms using conventional and digital marketing strategies

Performance indicators		N	F	p-value
Annual Sales(Units)	Conventional	6	2.477	0.043
	Digital	20		
Sales Revenue(KES)	Conventional	6	2.638	0.041
	Digital	20		
Gross Profit(KES)	Conventional	6	3.332	0.038
	Digital	20		

Note⁵: Significance at 0.05; N=Sample size; M-Mean; F-Fisher's test statistic.

Source: Research data

4.8.5 Digital Marketing Strategies on financial Performance of flower firms.

To understand the individual impact of each digital marketing strategy, both descriptive analysis involving means and multivariate analysis of variance (MANOVA) were used. Significance scores in the form of p-values were recorded alongside the mean scores of the financial performance indicators. The results were summarised as shown in Table 4.17. It emerged that there was no specific digital marketing strategy that had significant impact on financial performance of the cut flower firms at 95% confidence, $p>0.05$.

However, there is no sufficient evidence at 95% confidence, to support a specific digital marketing strategy as a significant contributor of financial performance of flower firms in Kenya.

Table 4.17: Descriptive analysis and ANOVA of individual digital marketing strategy on financial performance of flower firms

		Annual Sales(Units)	Sales Revenue (KES)	Gross Profit (KES)
E-mails	M	49,360,000.00	1,153,306,666.67	675,473,333.33
	p-value	0.542	0.405	0.285
Digital displays	M	30,250,000.00	760,750,000.00	516,250,000.00
	p-value	0.989	0.832	0.58
SMS	M	93,500,000.00	1,839,000,000.00	1,228,000,000.00
	p-value	0.138	0.183	0.11
YouTube	M	28,000,000.00	392,000,000.00	168,000,000.00
	p-value	0.73	0.54	0.471
Social media	M	66,800,000.00	1,643,800,000.00	714,200,000.00
	p-value	0.23	0.15	0.342
Online advert	M	52,375,000.00	1,283,250,000.00	654,625,000.00
	p-value	0.346	0.265	0.372
Mobile applications	M	15,466,666.67	294,533,333.33	117,533,333.33
	p-value	0.237	0.142	0.062
Websites	M	54,076,923.08	1,257,384,615.38	725,269,230.77
	p-value	0.537	0.464	0.75

Note⁶: Significance at 0.05. Source: Research data

4.8.6 Digital and Conventional Marketing on Non-financial performance.

The results of Table 4.18 indicated that there was a significant contribution of digital marketing strategies to increasing new customers ($\chi^2=9.113$, $p<0.05$) and sales revenue growth per year ($\chi^2=6.653$, $p<0.05$). 83.3% of firms using marketing conventional methods acquired between 1-5 five customers per year whereas majority of digital strategies, 55% had significantly more than ten new customers per year. Similarly, 83.3% of firms using

conventional marketing methods increased sales revenue by 1-10% annually whereas 70% of digital marketing strategies increased sales growth significantly by more than 10%.

Table 4.18: Chi-square analysis showing the impact of digital and conventional marketing strategies on new customers per year and sales revenue growth per year

		Conventional	Digital
N		6	20
New customer per year	1-5	83.3%	30.0%
	6-10		15.0%
	11-15		45.0%
	>15	16.7%	10.0%
χ^2	9.113		
p-value	0.028		
Sales revenue growth per year	1-10	83.30%	30.0%
	11-20		30.0%
	21-30	16.70%	40.0%
χ^2	6.653		
p-value	0.036		

Note⁷: Significance at 0.05 Source: Research data

4.8.7 Influence of Digital Marketing strategy on financial performance

The results of Table 4.19 indicated that digital marketing strategies explain only 5.6% of the total variations in financial performance (Adjusted $R^2=0.056$). This is considered a small effect according to Cohen (1969). Other factors not considered in this study are responsible for 94.6% of the financial performance of the cut flower firms. The results indicated that individually, no digital strategy had significant influence on financial performance at 95%, $p<0.05$. it was observed that e-mails ($\beta=0.421$, $t=4.184$, $p<0.02$), YouTube($\beta=0.677$, $t=.281$, $p<0.07$) and Websites ($\beta=0.271$, $t=2.467$, $p<0.031$) had significant influence on non-financial performance at 95% confidence level.

Table 4.19: Regression Coefficients: Digital Marketing strategies on financial performance

	Unstandardized Coefficients B	t	p-value	Collinearity Statistics VIF
(Constant)	0.411	0.948	0.357	
Emails	0.716	0.856	0.404	2.495
Digital displays	0.225	0.235	0.817	1.755
SMS	1.937	1.557	0.138	1.605
YouTube	1.047	0.569	0.577	1.829
Social media	1.126	1.289	0.215	1.73
Online advert	0.939	1.041	0.313	2.53
Mobile applications	1.456	1.582	0.132	1.262
Websites	0.609	0.599	0.557	3.769

Note⁸: *Dependent variable: -financial performance score; $F_{(8, 11)}=1.185, p>0.05$; Sig. at 0.05; $R^2=0.358$; Adjusted $R^2=0.056$; Durbin-Watson Statistics=1.914*

Source: Research data.

Considering the above findings, the regression equation: $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \beta_6 X_6 + \beta_7 X_7 + \beta_8 X_8 + \epsilon$ therefore becomes: $Y = 0.411 + 0.716X_1 + 0.225X_2 + 1.937X_3 + 1.047X_4 + 1.126X_5 + 0.939X_6 + 1.456X_7 + 0.609X_8$.

Taking all factors of digital marketing strategies constant at zero, flower firms performance will be 0.411. The findings also shows that with all other independent variables at naught, a unit increase in use of e-mail will lead to a 0.716 increase in the flower firm's performance; a unit increase in digital display strategy will lead to a 0.225 increase in flower firm's performance and a unit increase in SMS will lead to a 1.937 increase in flower firms performance. This deduces that mobile applications contribute most to flower firms' performance followed by SMS strategy while Digital displays contributed the least to cut flower firms' performance.

4.8.8 Relationship between Digital Marketing Strategies on non-financial performance

The results of Table 4.20 indicated that digital marketing strategies had strong significant effect on non-financial performance ($F_{(8, 11)}=6.204$, $p=0.004$, Adjusted $R^2=0.687$). This indicates that digital marketing strategies explain 68.7% of the total variation in non-financial performance of cut flower exporting firms in Kenya. It was also observed that Emails ($\beta=0.421$, $t=4.184$, $p<0.002$), YouTube ($\beta=0.677$, $t=3.281$, $p<0.007$) and Websites ($\beta=0.271$, $t=2.467$, $p<0.031$) had significant influence on non-financial performance at 95% confidence.

The findings also shows that when all other independent variables at naught, a unit change in use of e-mail will lead to a 0.421 change on the flower firms' non-financial performance; a unit rise in digital display strategy will lead to a 0.027 rise in flower firm's performance and a unit increase in SMS will lead to a .211 increase in flower firms non-financial performance. This deduces that YouTube contribute most to flower firms' non-financial performance followed by e- mail strategy while social media contributed the least to cut flower firms' non-financial performance

Table 4.20: Regression Coefficients: Digital Marketing strategies on non-financial performance.

	Unstandardized Coefficients B	t	Sig.	Collinearity Statistics VIF
(Constant)	0.527	6.938	0.001	
Emails	0.421	4.184	0.002	1.877
Digital displays	0.027	0.268	0.794	1.672
SMS	0.211	1.593	0.14	1.568
YouTube	0.677	3.281	0.007	2.011
Social media	0.01	0.11	0.915	1.63
Online advert	0.105	1.084	0.302	2.242
Mobile applications	0.022	0.228	0.824	1.214
Websites	0.271	2.467	0.031	2.728

Note⁹: *Dependent variable:-Non-financial performance score; $F_{(8, 11)}=6.204$, $p=0.004$; Sig. at 0.05; $R^2=0.819$; Adjusted $R^2=0.687$; Durbin-Watson Statistics=1.764*

Source: Research data

4.9 Discussion

Technology play significant role on performance of organizations which are operating in highly competitive environment. Technological adaptation can no longer be over looked by cut flower firms which want to outperform their competitors. To enhance their performance cut flower firms were found to be using different digital marketing strategies which include e-mail marketing, social media, digital displays, mobile applications, websites, online advertisement and short text messages. Raghunadan and Parimal (2014) noted that digital marketing provides consistent and personalized client message which is cost effective and allows firms to launch campaigns which are global and region specific thus improving on its marketing leads. The digital marketing strategies are enabling cut flower firms to expand their client base by reaching out to broader audience and fulfilling the customers' needs.

The research established that the usage of digital marketing strategies has assisted flower firms improve on their financial performance, grow their market share, increase uptake of their products, acquire new markets and attract higher prices. This is consistent with Herath et al (2010), which found out that firms adapt to technology in order to gain higher profits, optimize their processes.

From the study, most cut flower exporting firms use digital marketing due to its efficiency, effectiveness and affordability for marketing communication. The most common digital marketing strategy among cut flower firms in Kenya is e-mail. The popularity of this strategy can be attributed to its ease of use customised and client direct messages and tractability (MacPherson, 2011). On the other hand use of social media require more involvement and integration with other media platform making them not to be preferred over other strategies like websites and digital displays(Pradiptarini,2011).

From the study, firms using conventional marketing methods seem to be performing poorly than their counter parts using digital marketing. This can be attributed to the fact that digital marketing strategies are efficient, target specific and reaches wider customer base. From the study it's evident that cut flower firms only adapt to marketing strategies that add value to their operations and improve on their performance through customers' attraction and retention, expand market reach, through targeted communication.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusions drawn from the findings and recommendations. The conclusions and recommendations drawn were focused on addressing the purpose of this study which were to establish the extent of digital marketing adoption by cut flowers exporting firms and to establish the influence of digital marketing strategies on performance of cut flower exporting firms in Kenya.

5.2 Summary of findings

The key objectives of the study were to establish the extent to which digital marketing has been adopted by cut flowers exporting firms in Kenya and to determine the influence of digital marketing on the financial and non-financial performance of cut flowers exporting firms in Kenya. It emerged that more than 70% of flower firms have adopted digital marketing strategies with 62% relying on pure digital marketing and 15% incorporating both digital and conventional marketing strategies. E-mails, websites and digital displays remain the most used digital strategies by firms that have already adopted digital strategy. This study revealed that digital marketing has significant impact on both financial and non-financial performance indicators and significantly improved firms' performance compared to conventional marketing methods. No specific digital marketing strategy had significant impact over the other on financial performance. However, e-mails, websites and online adverts had significant impact on non-financial performance.

The study also revealed that close to half of the flower firms have used digital marketing for more than five years. However, there is no association between the length of existence of flower firms and the number of digital marketing strategies adopted at 95% confidence.

It was also clear from the study that flower firms adopt different digital strategies depending on the flower destinations. Those selling to Netherlands for instance have good performance when they use websites and social media; Germany market is mainly targeted by use of e-mails and UK market prefers use of YouTube; and digital displays. SMS, social media and YouTube are preferred to the Eastern Asian markets of Russia and Japan.

5.3 Conclusion

Use of technology contributes significantly to business performance. For cut flower firms to remain competitive and maintain their position in the market, they should use digital marketing strategies. From the study it's revealed that there is a strong correlation between digital marketing and performance of flower firms. Since technology has become vital part of businesses, firms should choose the digital marketing strategies in a way that is imperative to their goals and expectations.

Customer dynamics keep on changing hence good knowledge of this changes and devising appropriate marketing communication strategy will differentiate successful firms and unsuccessful ones. Consequently, as the pace of changes in customer preferences accelerates, organizations' survival progressively depends on devising new marketing strategies depending on the resources and capability of their manpower.

The study has determined that keeping clients engaged with digital marketing aids the cut flowers exporting firms enhance their presence at much lower costs, while increasing their revenue, customer base, market share and eventually their profits.

5.4 Limitation of the study

Floriculture firms are privately owned and do not publish their financial results publicly. Information relating to financial position is always treated with sensitivity. This may have caused difficulties in convincing the respondents of the importance of giving honest answers to the asked questions as demonstrated through reluctance of four firms in filling the questionnaire. To this end the researcher relied solely on information provided by the respondents and which cannot be independently verified. Triangulation method was used to determine the financial performance levels of some of the firms where respondents were not willing to explicitly reveal their performance as relates to various financial parameters.

There are other factors that may affect the performance of business organization which need to be research on separately as this study is only limited to finding out the effect of digital marketing and its effectiveness on performance of cut flower firms. The respondents to the study are from cut flowers firms which put limitations on the applicability of the results to other firms in other sectors.

Sampling frame was limited to firms that are member of Kenya flower council meaning that there are many categories of cut flower firms that were not covered by this study. Given that not all of the firms in the floriculture sector did participate in the study, there is

limitation to the extent to which these findings could be generalized across all the cut flower firms in Kenya.

5.5 Recommendations

The study makes proposal touching on firms' policy and practice and on areas of additional research. The study established that digital marketing contributes to performance of cut flower firms. It is recommended that cut flower firms that have not been using digital marketing should to a large extent adopt digital marketing to be competitive and enhance organizational performance.

Similarly the study recommends that firms should only put their resources on those digital strategies that have greater impact on business performance. . In order for digital marketing strategies to be effective, all the stakeholders have an obligation to support the adoption and implementation of digital marketing processes as no department within an organization is independent.

The study suggests that further research to be done on why specific countries are more receptive to specific digital marketing strategies and what can be done to improve on digital strategies at the firm level. The study also suggests that same study be done focusing on other agricultural sectors in Kenya in order to give factual position that reflects on overall impact of digital marketing in the agricultural sector.

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APPENDICES

Appendix I: Letter of Introduction


UNIVERSITY OF NAIROBI
SCHOOL OF BUSINESS
MBA PROGRAMME

Telephone: 020-2059162
Telegram: "Varsity", Nairobi
Telex: 22095 Varsity

P.O. Box 30197
Nairobi, Kenya

DATE 22/08/2016

TO WHOM IT MAY CONCERN

The bearer of this letter Kennedy Onyango

Registration No. DBI/60392/2013

is a bona fide continuing student in the Master of Business Administration (MBA) degree program in this University.

He/she is required to submit as part of his/her coursework assessment a research project report on a management problem. We would like the students to do their projects on real problems affecting firms in Kenya. We would, therefore, appreciate your assistance to enable him/her collect data in your organization.

The results of the report will be used solely for academic purposes and a copy of the same will be availed to the interviewed organizations on request.

Thank you.


PATRICK NYABUTO
SENIOR ADMINISTRATIVE ASSISTANT
SCHOOL OF BUSINESS



Appendix II: Questionnaire

The Influence of Digital Marketing strategies on the performance of cut flowers exporting firms in Kenya

Kindly tick the appropriate response.

A. background information

1. Position of Respondent(s):
2. Length of continuous service with the flower firm? (Tick as appropriate)
 - a) Less than five years
 - b) 5-10 years
 - c) Over 10 years
3. Name of flower firm.....Size (hectares).....
4. Location of firm (kindly specify by ticking as appropriate)
 - a) Nairobi and Metropolitan
 - b) Naivasha
 - c) Nakuru
 - d) North Rift
 - e) Mt. Kenya
5. How long has your firm/ organization been in the cut flowers exporting business?
(Tick as appropriate)
 - (a).1-5 years
 - (b).6-10 years
 - (c).6-10 years
 - (d).16-20 years
 - (e).Over 20 years
6. How many employees are there in your firm? Tick as appropriate
 - a) Less than 200
 - b) 200 – 400
 - c) 401-600
 - d) 601-800
 - e) 801-1000
 - f) >1000

7. What is your average cost of producing a unit of cut flower? (Fill in KES).....

B. Marketing Strategy

1. Which of the following products do you deal with? What proportions is each of these flowers?

<u>Flowers Grown</u>	<u>Units sold per year (stems)</u>
a) Roses
b) Carnations
c) Hypericum
d) Others (Specify.....)

2. Which outlets does your firm use to sell flowers? Tick as appropriate.

- a) Direct markets
- b) Auction (Netherlands)

3. If direct selling, to which countries? Tick as appropriate:

- UK
- Netherlands
- Germany
- France
- Russia
- Japan
- Others (specify).....

4. Who are your major clients? (List below)

- a)
- b)

5. What methods do you use to market your flowers (Mention)

- a)

- b)
- c)
- d)

6. Does your firm use digital technologies to market your products? Tick as appropriate.

- a) Yes ()
- b) No ()

7. Which of the following digital marketing strategy do you use to prospect for new customers and create product awareness? Tick as appropriate

- a) E-mails ()
- b) Digital displays ()
- c) Short message texts ()
- d) You tube ()
- e) Short video display ()
- f) Social media ()
- g) Online advertising ()
- h) Mobile applications ()
- i) Websites ()
- j) Others (specify)

8. How many years have you been using digital marketing as a strategy (tick as appropriate)

- a) 1-5yrs ()
- b) 6 – 10yrs ()
- c) 11- 15yrs ()
- d) Over 15yrs ()

9. What motivates you to use the digital marketing strategies mentioned earlier?

- a) Cost
- b) Efficiency
- c) Effectiveness
- d) Influence from peers
- e) Others (specify).....

10. To what extent is your firm using the following digital marketing platforms? Use: 1- Not at all, 2-Small extent, 3-Moderate extent, 4-Great extent. 5- A very great extent. 6. Not applicable (tick as appropriate)

	1	2	3	4	5
a) E-mails	()	()	()	()	()
b) Digital displays	()	()	()	()	()
c) Short message texts	()	()	()	()	()
d) You tube	()	()	()	()	()
e) Short video display	()	()	()	()	()
f) Social media	()	()	()	()	()
g) Online advertising	()	()	()	()	()
h) Mobile applications	()	()	()	()	()
i) Websites	()	()	()	()	()
j) Others (specify)	()	()	()	()	()

C. PERFORMANCE INDICATORS

1. To what extent has digital marketing affected the following performance indicators in your firm? 1= Not at all. 2= Some extent.3=Moderate extent.4=Great extent. 5= Very great extent

Performance indicator	1	2	3	4	5
a) Increased Revenue	()	()	()	()	()
b) Increased Market Share	()	()	()	()	()
c) More Customer Acquisition	()	()	()	()	()
d) Increased Profitability	()	()	()	()	()
e) More Sales	()	()	()	()	()
f) Higher Demand For Products	()	()	()	()	()
g) New Market Acquisition	()	()	()	()	()
h) Higher Prices	()	()	()	()	()

2. How many new customers do you acquire in a year? (Tick as applies to your firm)

- a) 1-5 ()
- b) 6-10 ()
- c) 11-15 ()

d) Over 15 ()

3. By what percentage do your sales Revenue grow every year?

a) 1-10% ()

b) 11-20% ()

c) 21-30% ()

d) Over 30% ()

4. What's your sales revenue per production unit (ha) per year?KES.

5. On average how much does a unit of your product (single stem) fetch in a year.....KES

6. On a scale of 1-5 to what extend do you agree with the following statements as concern digital marketing? Use 1-Strongly disagree, 2-Disagree, 3-Moderate extent, 4-Agree and 5-Strongly agree.

	1	2	3	4	5
a) Faster response to customer inquiries	()	()	()	()	()
b) Increased sales revenue	()	()	()	()	()
c) Leads to new customers acquisition	()	()	()	()	()
d) There is increased customers prospecting	()	()	()	()	()

7. Overall, how satisfied are you with digital marketing platforms? Tick as appropriate

Very satisfied ()

Somewhat satisfied ()

Neither satisfied nor dissatisfied ()

8. How likely are you to recommend digital marketing to others? (Tick as appropriate)

Extremely likely ()

Very likely ()

Not so likely ()

Not at all likely ()

Conclusion: Thank you for taking your time to respond to this survey

Appendix III: Cut flowers Exporting Firms in Kenya

1. Africalla Lilies Ltd	30. Hamwe Ltd-Naivasha
2. Afriscan Kenya Ltd	31. Hamwe Ltd –Molo
3. Agriflora Kenya Ltd	32. Harvest Ltd
4. Annak Ltd	33. Highland Plants Ltd
5. Aquila Dev. Co. Ltd	34. Ibis Farm
6. Baraka Roses Ltd	35. Imani Flowers Ltd
7. Batian Flowers Limited	36. Isinya Flowers
8. Beautyline Kenya Limited.	37. Kariki Ltd
9. Benev Flora	38. Kenya Cuttings Ltd
10. Bilashaka Flowers Ltd	39. Kimman Roses Ltd
11. Black Petals	40. Kingfisher Farm
12. Blooming Dale Roses	41. Kisima Farm Ltd
13. Bondet Ltd	42. Kongoni River Farm –Star Flowers
14. Bullgate Company	43. Kongoni River Farm- Liki River
15. Chain Creek (K) Ltd	44. Kongoni River Farm Ltd- Longonot
16. Charm Flowers Ltd	45. Kongoni River- Timau Flowers
17. Desire Flora Ltd	46. Kongoni River- Gorge farm
18. Equator Flowers Ltd	47. Lathyflora Ltd
19. Expression Flora	48. Lauren International Flowers Ltd
20. Fairy Flowers Kenya Ltd	49. Lemotit Farm
21. Fides Kenya Ltd	50. Live Wire Ltd
22. Finlay Flowers Ltd	51. Lolomarik Limited
23. Flamingo Farm	52. Maasai Flowers Ltd
24. Flora Ola Limited	53. Maaskant Flowers Ltd
25. Florafresh Kenya Ltd	54. Magana Flowers Ltd
26. Florensis (K) Ltd	
27. Gatoka Ltd	
28. Grandiflora	
29. Groove Ltd	

Cut flowers Exporting Firms in Kenya (continued)

55. Maji Mazuri Flowers Ltd	76. Primarosa Zuri Ltd
56. Maridadi Flowers Ltd	77. Prime F;Ora Limited
57. Maua Agritec Ltd	78. Rainforests Farmland Kenya Ltd
58. Molo River Roses Ltd	79. Redlands Roses Ltd
59. Mosi Ltd	80. Rimi Flora Ltd
60. Mt. Elgon Flowers Ltd	81. Riverdale Blooms Ltd
61. Mult Grow Investment	82. Simbi Roses
62. Mweiga Blooms Ltd	83. Siraji Farm
63. Nathe Enterprises	84. Subati Flowers Ltd
64. Nini Ltd	85. Suera Flowers Ltd
65. Ol Njorowa Ltd	86. Tambuzi Ltd
66. Oserian Development Company	87. Terrasol Ltd
67. P.J. Dave Flowers Ltd	88. Timaflo Limited
68. P.J. Dave Flowers Ltd-Timau	89. Uhuru Flowers Ltd
69. P.J.Flowers Ltd	90. Utee Estate Limited
70. Panacol International Ltd	91. Valentine Growers Co Ltd
71. Penta Flowers Ltd	92. Waridi Limited
72. Petra Flora Company	93. Wild Fire Ltd
73. Plantation Plants K Ltd	94. Winchester Farm Ltd
74. Pollen Limited	95. Windsor Flowers
75. Primarosa Flowers	96. Zena Roses Ltd

Source: Kenya flower council, 2016