



**THE INFLUENCE OF ELECTRONIC COMMERCE ADOPTION ON
PERFORMANCE OF WOMEN OWNED MICRO AND SMALL ENTERPRISES IN
NAIROBI CENTRAL BUSINESS DISTRICT**

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ABSTRACT

The current study sought to examine the Influence of e-commerce adoption among women owned micro and small enterprises in Nairobi Central Business District. Specifically, the study sought to determine the influence of online marketing on performance of women owned micro and small enterprises in Nairobi Central Business District and to examine the influence of electronic procurement management on performance of women owned micro and small enterprises in Nairobi Central Business District. The study utilized a descriptive research design with the unit of analysis being women own MSE's central business district in Nairobi city. The unit of observation was the managers/business owners of the firms. The sampling frame for the study consisted of 185 micro and small enterprise firms located and operating within central business district. The research relied on both primary and secondary data. Primary data was sourced using a semi-structured questionnaire. The research relied on descriptive and inferential analysis for the quantitative data while qualitative data analyzed using content analysis. Data was analyzed and presented using descriptive statistical tools. In addition, advanced statistical technique was used using SPSS (statistical package for social sciences) model which was used in data analysis. In Conclusion most of the MSEs have adopted to e-commerce even though they have not fully implemented all the business models. In this study, benefits and challenges that influence the level of ecommerce adoption were studied. Using the questionnaires each specific challenge or benefit respondents were asked to rate the degree of benefit or lack thereof that each specific benefit or challenge respectively brought to their MSEs due to the fact that they had incorporated ecommerce in their business entities. Items selected by majority showed that the MSEs owners derived certain benefits from the adoption of ecommerce in their businesses. The study findings also showed that: - extending the customer base; Reduced Transaction, marketing and operating costs and Improving company profile and improved sales brought great benefits to the MSEs. The study recommends that the women MSEs owners should adopt online marketing, e-procurement management, e-customer relationship management and e-recruitment and selection in order to improve on profitability, sales turnover and return investment. The study was limited to the use of the adoption model using cross-section study. Due to time and resource, limitation, it is recommended that future research be undertaken using extended diffusion models in the context of women owned MSEs to enable the actual performance of the firms to be determined as a function of the influence of e-commerce adoption.

Key Words: E-commerce adoption, Online marketing, Electronic procurement management, Women owned micro and small enterprises

Background of the Study

The two most powerful forces affecting the world economy and commerce today are the increasing rate of globalization and advances in information and communication technologies (ICTs). In recent years, the exponential growth in ICTs and the resulting rapid emergence of electronic commerce (E-Commerce) have drastically been reshaping the world of business.

Much confusion, however, surrounds the definition of e-commerce; as reckoned by Ihlstrum et al (2003), the confusion stems from whether to define e-commerce as Internet based activities only or as any kind of business exchange on any type of network. On that matter, this study will adopt an all-purpose perspective with regard to e-commerce and attempt to derive the characterization of e-commerce from its two broad components; electronic and commerce.

There is no consensus on the definition of e-commerce, but Turban *et al.* (2018) have defined e-commerce as the process of buying, selling, transferring, or exchanging products, services, and/or information via computer networks including the Internet. Turban *et al.* (2018) further distinguish between Internet and non-Internet e-commerce whereby the latter includes buying and paying for services or products using, for example, the smart card through vending machines and/or transactions undertaken via networks such as local area network (LANs), using intranets or even single computerized machines.

E-commerce is the exchange of information across electronic networks, at any stage in supply chain, whether within an organization, between businesses and consumers or between the public and private sector, whether paid or unpaid. (Chaffey, 2011) McIvor and perceive e-commerce as having two main roles. First, it is the use of ICTs to strengthen a company's internal operations such as logistics, procurement, and human resource and contracts management; information and data management; and communication functions. Second, e-commerce refers to using ICTs to facilitate the flow of products between businesses and consumers (e.g., marketing, ordering, payment, delivery, and finding suppliers).

Globally e-commerce is a growing sector which has so far yielded positive results. Since early 1990's there was almost no any activity online as the Internet was a new concept. In 1999, 300 million users were online and about 75 million of them purchased goods and services via online worth \$110 billion. This increase rapidly and by 2013 the amount in online transactions had increase to \$1.25 trillion (WTO 2013), Although it may appear as a relatively recent innovation, e-commerce has been around for several decades with its first application being in the early 1970s through the Electronic Funds Transfer (EFT) that enabled electronic re-routing of funds between financial institutions.

In another survey on MSEs and developing countries, Alemayehu (2015) concludes that the ability to be reachable worldwide and the creation and effectiveness of supply chain of industries were the two main benefits of MSE adoption of e-commerce in developing countries. In Africa, 720 million people have access to phones and 167 million have Internet access. Yeboah-Amankwah (2013). With internet penetration rapidly spreading across the East African region, this represents huge potential which has hitherto been untapped.

The availability of appropriate e-commerce applications, their effective usage and ability to individually tailor solutions can create opportunities across the various sectors. A significant amount of e-commerce in the global MSEs is done through organizational as depicted by the previous studies particularly in developed countries. Some forms of e-commerce activities are accomplished through newer ICTs such as cloud computing; mobile commerce applications and social networking services (Constantinides, 2010; Scupola, 2010).

In Kenya, there are about 30 million mobile phone subscribers and Internet penetration is also currently at 49.7%, with mobile data subscriptions making up most of it. Despite most people accessing Internet via mobile phones, fixed fiber subscriptions have also grown by 86.8% from

FY 2011/2012 to FY 2012/2013 CAK (2015). Despite positive trends in both mobile and Internet penetration, growth across countries varies and, in some cases, drastically. Mobile penetration in Tanzania for example, is at 60% and internet penetration at 12%; much lower than Kenya. In Kenyan however, urban areas mobile and internet use is much higher than rural or even national numbers. CAK (2015)

Some studies have identified a number of enablers of Internet adoption by MSEs. Factors such as perceived benefits, organizational readiness, business characteristics, and external pressure should be considered in studies investigating the adoption of e-commerce at organizational level (Turban *et al.*, 2018). External pressure refers to influential factors from outside the organizational environment, such as pressure from competitors, customers, and/or governmental agencies. Business characteristics or forces include business form, size, international exposure or experience, types and levels of Internet use, and number of years of access to the Internet. In an assessment of the adoption of e-commerce by MSEs in Botswana (Olatokun & Kebonye, 2011);

Statement of the Problem

Over the past few years e-commerce has emerged as an important component of business in various developing countries this is seen by the significant benefits it has. Many large organizations have embraced these and hence maintained a competitive advantage over the Micro and Small Enterprises (Kshertri,2010). Women Own business are becoming important because they cover a 40% of the MSEs business population in developing countries because MSEs play a critical role in the economic development an estimation of worth of USD 1.3 Trillion (Turban, 2018). The different challenges Women Own business face are the business opportunities to be able to grow, financial support, business diversification and good business practices and social cultural environment and the nature of businesses that most of them engage in (Siwadi & Mhangami, 2011).

Literature on e-commerce is rapidly gaining applicability and this gives the impression that the subject is gaining attention. Studies by Walle (2016), Kasavana (2017), Weber and Roehl (2019) observe that the volume and value of web transactions are expected to continue increasing exponentially in the millennium and that the best in web participation is yet to come. Similarly. Emery (2005) stated. "Everyone agrees that e-commerce is going to be big, very big or enormous ..." Other's scholars such as Aduda and Kingoo (2012) indicated that e-technology practices fostered financial performance within MSEs. Wamuyu and Maharaj (2011) indicated that E-commerce had a positive influence on performance of small enterprises. A study by Jesse (2013) noted that currently almost a half of the Kenyan retail business use E-Commerce in transacting their trading activities.

Regardless of the recognition of the value of E-Commerce application in the Kenyan retail businesses In Kenya is the 64th largest market for eCommerce with a revenue of US\$1 billion in 2019, placing it ahead of Algeria and behind Ecuador Joshua, Agnes and Isaac (2020) out of this women business on E-Commerce platform is still low. With an increase of 66%, the Kenyan eCommerce market contributed to the worldwide growth rate of 26% in 2020. Revenues for eCommerce continue to increase. New markets are emerging, and existing markets also have the potential for further development. Global growth will continue over the next few years. This will be propelled by East and Southeast Asia, with their expanding middle class and lagging offline shopping infrastructure, hence there is need to bring on women own business on board Kauffman, R. J., (2019)

However, despite the key role technology has played in changing business practices there has been limited examination on how it affects e-commerce adoption within Micro and Small enterprises. This sector strongly contributes a lot to economic growth and is in line with the effort of realization of Kenya's Vision 2030 strategy economic development and among the

four pillars of the current government administration on industrial growth. It is clear that previous literatures on the study topic had not provided more literature on the Influence of e-commerce adoption among women owned micro and small enterprises in Nairobi Central Business District.

General Objectives

The general objective of this study was to examine the Influence of e-commerce adoption among women owned micro and small enterprises in Nairobi Central Business District.

Specific Objective

The study was guided by the following specific objectives;

- i. To determine the influence of online marketing on performance of women owned micro and small enterprises in Nairobi Central Business District.
- ii. To examine the influence of electronic procurement management on performance of women owned micro and small enterprises in Nairobi Central Business District.

Theoretical Review

Diffusion of Innovations

This theory was informed by the diffusion of innovations theory developed by Everett Rogers. Diffusion of innovations seeks to explain how technology is taken up by a population. Diffusion is defined as the process by which a technology is adopted and gains acceptance by members of a certain community (Rogers, 2013). Adoption decisions are thought to depend on (i) characteristics of the technology, (ii) characteristics of the adopter and (iii) characteristics of the environment.

Rogers (2013) continued to say that the stages by which a person adopts an innovation, and whereby diffusion is accomplished, include awareness of the need for an innovation, decision to adopt (or reject) the innovation, initial use of the innovation to test it, and continued use of the innovation. Given that decisions are not collective, each member of the social system faces their own innovation-decision that follows a 5-step process (see figure 2.1). According to Rogers (2013) the first step is knowledge where; a person becomes aware of an innovation and has some idea of how it functions. The second step is persuasion, where a person forms a favorable or unfavorable attitude toward the innovation. The third step is decision, which involves a person engaging in activities that lead to a choice to adopt or reject the innovation. The fourth step is implementation; in this stage, the individual uses the innovation to a varying degree depending on the situation. During this stage, the individual determines the usefulness of the innovation and may search for further information about it. The final step is confirmation. In this stage, the individual finalizes their decision to continue using the innovation and may use the innovation to its fullest potential. The study examined characteristics of women owned micro and small enterprises that influence their decision to use e-commerce platforming reaching out to the market.

Dynamic Capabilities Theory

Teece, Pisano and Shuen (2014) define dynamic capabilities as the firm's capacity to integrate, build and reconfigure internal and external competencies to address rapidly changing environments. Dynamic capability allows the firm to respond to the demands of new customers, as well as to regulatory and other stakeholder pressures. This ability is particularly important to micro and small enterprises faced with relatively narrow and insecure customer bases. The theory has two essential aspects. The first is the heterogeneity of human capital which expands the range of possibilities that the enterprises can exploit. The second is the creation of wider conditions for knowledge exchange and organizational learning (Malik & Kotabe, 2019; Zahra, Sapienza & Davidsson, 2016) that help institutions to adapt to changing environments. The

theory has been successfully applied to developing world contexts (Malik & Kotabe, 2019), including small enterprises (Doving & Gooderham, 2018). This theory will help in understanding the operations of women owned micro and small enterprises on how influence their decision to use e-commerce platforming reaching out to the market.

Conceptual Framework

A conceptual framework is analytical tool with several variations and contexts. Below is the conceptual framework for the underlined study.

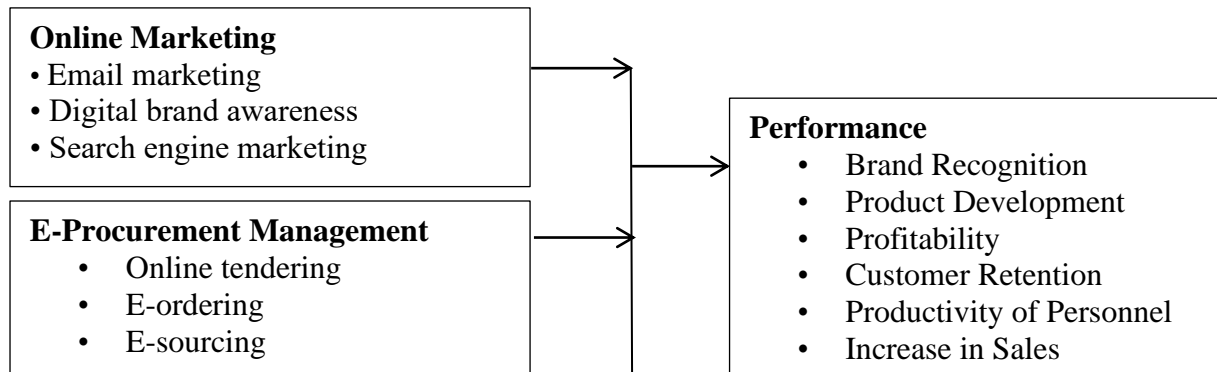


Figure 2.2 Conceptual Frame work

Dependent Variable

Online Marketing

Online Marketing has been recognized by academics and marketing professionals as a factor that plays an essential role in improving the efficiency of business economic performance in highly competitive markets, by providing the necessary information at different levels administrative Pappas (2016). The emergence of Online Marketing has made business organizations information-oriented using internet technologies, including the use of multimedia, graphics and text in different languages to create advertisements, forms and an online store. Eye-catching where the product can be viewed, promoted and sold. Turkaman (2012) observes that Online Marketing has ultimately improved the performance of organizations in terms of clientele, profitability, efficiency, effectiveness, and it is considered a competitive advantage.

E-Procurement Management

The electronic procurement system or e-procurement as it is called involves purchase and sale of products, supplies and services through the various networking systems such as electronic data interchange and internet.

One of the areas that e-procurement has promoted is development of and promotion of product life cycle. Due to faster exchanges of information and delivery of goods and services, e-procurement has promoted shorter product- development cycles by ensuring that information about new products is communicated to users immediately the product is launched (Eadie et al., 2012).

E-procurement is not only meant for procuring entities but suppliers also form an integral part of the implementation process hence their attitude, integrity, transparency, capacity and willingness to comply play a major role in the success of the implementation process. Most institutions while implementing e-procurement have forgotten the role that suppliers play leading to miss match during the implementation since suppliers are not given a major role to contribute towards the implementation process (Eadie et al., .2012).

Empirical review

Online Marketing and Performance of Women Owned MSEs

The study specifically examined how brand reputation and image; customer engagement and customer brand attitudes influence MSE performance. The findings of the research indicated that adoption of Online Marketing through social media sites has positively fostered MSE performance within Malaysia. The research was however conducted within Malaysian MSEs whereas current research only focuses on MSEs within Nairobi County.

Sheikh, Shahzad, and Ishaq (2017) conducted a study on the growth of e-marketing in business-to-business industry and its effect on the performance of businesses in Pakistan. The research relied on cross sectional data collected from 257 manufacturing companies in Pakistan. The hypothesis testing of the study established that there was statistically significant interaction between technology orientation, Online Marketing, use of e-marketing and firm performance in Pakistan. The research utilized secondary data drawn from marketing reports whereas the current study adopted a mix of primary and secondary data.

Njau and Karugu (2014) conducted a study on the Influence of E-marketing on the performance of small and medium enterprises in Kenya: Survey of small and medium enterprises in the manufacturing industry in Kenya. The study used a survey research design in collecting data from respondents and simple random sampling procedure to select a sample that represented the entire population. The findings of the research indicated that search engine marketing, email marketing, blog marketing and online advertising had a positive effect on the performance of MSEs in Kenya. The study however did not take into consideration other E-commerce elements such as e-procurement which this study considered.

Wilson and Makau (2018) conducted a study on Online Marketing use: small and medium enterprises (MSEs) Experience from Kenya. The study adopted employed a case study design to inquiry. In-depth interviews with a total of 110 informants that included small business owners, IT experts and government authorities (MSEA) were engaged in data collection. The results of the study showed that the presence of online platforms like OLX.co.ke, Cheki.co.ke and Jumia.co.ke are common to most small business owners. It was also found that majority of small businesses do not use full potential of these platforms because most have insufficient budget for IT investment, cannot accommodate IT personnel and lack access to IT constructed infrastructures. The study focused on MSEs in general whereas the current study targeted MSEs in the fashion and clothing sector in Nairobi Central Business District.

E-Procurement Management and Performance of Women Owned MSE

Albano, Antellini, and Zampino (2015) conducted an evaluation of Small Businesses' Performance in Public e-Procurement: Evidence from the Italian Government's e-Marketplace. The research relied on secondary data and focused on transactions that took place in the Italian e-marketplace during the period 2005-2010. The findings of the research indicated that the virtual market enhanced the procurement process which had a positive effect on the MSE performance. The study however relied on secondary data whereas the current research adopted a mixed research methodology.

Nurizman and Singla (2017) conducted an investigation of barriers and enablers of supply chain management practices success: case of Ethiopian Textile and Garment Factories. The data for the study was collected from 45 focal factories (textile and garment), seven input supplier factories, and 12 customers firms. The findings of the study indicated that adoption of e-procurement fostered the supply chain management practices was a key predictor of positive institutional performance. The study however was not conducted locally hence the findings may not be representative of the current study scope.

Rotich and Okello (2015) conducted an analysis of use of e-procurement on performance of the procurement functions of County Governments in Kenya. This study adopted a correlational research design. The sample frame was purposively selected to constitute 120 employees working in procurement, finance and accounts and IT departments of Kericho County. The study findings showed that enterprise resource planning, e-sourcing and e-tendering were key e-procurement practices. The results revealed that e-procurement is positively related with performance of supply chain function of County Government in Kenya. The study was conducted within the county government whereas current study focused on retail firms within Nairobi County.

Achieng, Paul, and Mbura (2018) conducted a study on the influence of inventory management practices on performance of retail outlets in Nairobi City County. The study adopted a descriptive research design. Primary data was obtained using self-administered questionnaires while secondary data was obtained using data collection sheet. The results of the inferential analysis showed that Inventory processes automation had the least effect on performance of retail outlets in Nairobi County. The study focused on general retail business whereas the current study focused on fashion industry MSEs.

Arasa (2015) examined the antecedents to successful adoption of e-procurement in textile and apparel firms in Kenya. Both quantitative and qualitative methods of data analysis were used. Descriptive statistics as well as regression analysis were used to facilitate examination of the link between research variables. The findings of the study showed that technological factors and management support had a positive influence on the adoption of e-procurement. However, the study failed to examine how e-procurement influences the performance of fashion industry MSE's.

RESEARCH METHODOLOGY

Research Design

Descriptive research design was applied in this study. Joseph and David (2006) stated that descriptive research design is useful when the research objectives include determining the degree to which one variable (independent) affect the other variable (dependent). Furthermore, the design allows for the examination of a phenomena in its current natural state thus it is deemed appropriate to investigating how E-commerce application have affected the performance of women own small and medium enterprises in Nairobi central business district.

Study Population

Target population consists of all members of a real or hypothetical set of people, events or objects from which a researcher wishes to generalize the results of their research while accessible population consists of all the individuals who realistically could be included in the sample (Orodho, 2003). According to the Micro and Small Enterprises Authority (MSEA) 2020 report on MSE's there are 185 women owned, recognized and licensed micro and small firms within Nairobi Central business district

Sampling technique

The study adopted convenience of sampling of the micro and small enterprises within central business district that were willing to be considered in the research study. The sampling frame for the study will consist of the 185 micro and small enterprise firms located and operating within central business district. This group was selected due to their increasingly adoption of E-commerce in their business operations. A sample is a relatively small portion of individuals, which acts as a representative of the entire organization (Mugenda & Mugenda, 2012).

The sample size was guided by Mugenda & Mugenda (2003) who postulated that when the population of a study is more than 10,000 individuals, 384 of them are recommended for as the desired sample size given that the Z statistic is 1.96 at 95% confidence level

Data Collection Instruments

Primary data can be sourced from interaction with the objects or target population of the study. The study will rely on primary research data. Primary data was collected from a structured questionnaire.

Data Collection Procedures

This research used primary sources of data obtained from respondents by use of questionnaires. The questionnaire contained both open ended and closed ended questions and was self-administered through a drop-and-pick method. Secondary data on the parastatals was sourced from conducting desk reviews of published materials like magazines, journals, website and internet.

Pilot Testing

Pilot testing is used to test the validity, reliability and internal consistency of the data collection the researcher will undertake a pilot test for the study. A pilot study is carried out for the following reasons: to detect possible flaws in the measurement procedures that may include among others, aspects such as ambiguous instructions or inadequate time limits; to identify unclear or ambiguously formulated items; to notice non-verbal behaviour on the part of respondents (Weiman, Kruger & Mitchell, 2008). The study will conduct a pilot test with 10% of the sample population.

Data Analysis

Quantitative data was analyzed using descriptive analysis and inferential analysis techniques with the help of Statistical Packages for Social Sciences (SPSS Version 23). Descriptive analysis included percentage, frequencies, means, standard deviations on the research variables. Inferential statistics include multiple regression analysis and correlation to estimate the level of association between the research variables. The analyzation of data was presented using charts and tables as well as other infographics deemed appropriate. The collected qualitative data was analyzed using content analysis.

The multivariate regression model was used to find the value of α_0 and β_i which explains the relationship between the independent variables and dependent variable. The reliability of the estimate of the individual beta was tested by p-value in the ANOVA table.

Data Presentation

The information was displayed by use of tables and graphs. Tables and other graphical presentations as appropriate was used to present the data collected for ease of understanding and analysis. Qualitative data was summarized in short paragraphs (Orodha 2008).

RESEARCH FINDINGS ANALYSIS AND DISCUSSION

Descriptive Analysis

Online Marketing

To obtain information about the first independent variable Online Marketing, numerous statements were asked and the respondents required to provide feedback on a likert scale of one (1) to five (5), for 1 being strongly disagree, 2 being disagree, 3 being neither agree nor disagree, 4 being agree and 5 being strongly agree to the statements. On the statement "The firm conducts email marketing regularly" 15.1% strongly disagreed to the statement, 13.9% of the respondents disagreed to the statement, 35.5% of the respondents neither agreed nor

disagreed to the statement, 24.7% of the respondents agreed to the statement whereas 10.8% of the respondents strongly agreed to the statement, with a mean of 3.02 and standard deviation 1.195.

On the statement “The firm has initiated a digital brand awareness campaign” 13.5% strongly disagreed to the statement, 8.8% of the respondents disagreed to the statement, 10.8% of the respondents neither agreed nor disagreed to the statement, 43.8% of the respondents agreed to the statement whereas 24.1% of the respondents strongly agreed to the statement, with a mean of 3.54 and standard deviation 1.306. On the statement “The firm is posting better profit levels”, 5.2% strongly disagreed to the statement, 23.9% of the respondents disagreed to the statement, 19.1% of the respondents neither agreed nor disagreed to the statement, 20.7% of the respondents agreed to the statement whereas 31.1% of the respondents strongly agreed to the statement, with a mean of 3.49 and standard deviation 1.291. Regarding the statement “The firm has launched an online blog on the business products”, 4.8% strongly disagreed to the statement, 15.9% of the respondents disagreed to the statement, 7.6% of the respondents neither agreed nor disagreed to the statement, 47.0% of the respondents agreed to the statement whereas 24.7% of the respondents strongly agreed to the statement, with a mean of 3.71 and standard deviation 1.145.

On the statement “The firm utilizes search engine marketing initiative” 4.8% strongly disagreed to the statement, 29.9% disagreed to the statement, 5.2% of the respondents neither agreed nor disagreed to the statement, 41.8% of the respondents agreed to the statement whereas 18.3% of the respondents strongly agreed to the statement, with a mean of 3.39 and standard deviation 1.223. On the statement “The firm utilizes social media networks for Marketing.” 8.4% strongly disagreed to the statement, 2.0% disagreed to the statement, 13.9% of the respondents neither agreed nor disagreed to the statement, 55.4% of the respondents agreed to the statement whereas 20.3% of the respondents strongly agreed to the statement, with a mean of 3.77 and standard deviation 1.062.

Table 1: Online Marketing frequencies

Online Marketing	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	Std. Dev.
The firm conducts email marketing regularly.	15.1	13.9	35.5	24.7	10.8	3.02	1.195
The firm has initiated a digital brand awareness campaign.	13.5	8.8	10.8	43.8	24.1	3.54	1.306
The firm is posting better profit levels.	5.2	23.9	19.1	20.7	31.1	3.49	1.291
The firm has launched an online blog on the business products	4.8	15.9	7.6	47.0	24.7	3.71	1.145
The firm utilizes search engine marketing initiative.	4.8	29.9	5.2	41.8	18.3	3.39	1.223
The firm utilizes social media networks for Marketing.	8.4	2.0	13.9	55.4	20.3	3.77	1.062

E-Procurement Management

To obtain information about the second independent variable E-Procurement Management, numerous statements were asked and the respondents required to provide feedback on a likert scale of one (1) to five (5), for 1 being strongly disagree, 2 being disagree, 3 being neither agree nor disagree, 4 being agree and 5 being strongly agree to the statements. On the statement “The

firm has digitalized its payment options” 2.0% strongly disagreed to the statement, 2.8% of the respondents disagreed to the statement, 11.6% of the respondents neither agreed nor disagreed to the statement, 30.7% of the respondents agreed to the statement whereas 53.0% of the respondents strongly agreed to the statement, with a mean of 4.30 and standard deviation 0.922.

On the statement “The firm sources for its products from online retailers” 5.6% strongly disagreed to the statement, 7.2% of the respondents disagreed to the statement, 5.6% of the respondents neither agreed nor disagreed to the statement, 53.8% of the respondents agreed to the statement whereas 27.9% of the respondents strongly agreed to the statement, with a mean of 3.91 and standard deviation 1.058. On the statement “The firm has digitized its inventory management”, 5.6% strongly disagreed to the statement, 27.1% of the respondents disagreed to the statement, 19.1% of the respondents neither agreed nor disagreed to the statement, 27.5% of the respondents agreed to the statement whereas 20.7% of the respondents strongly agreed to the statement, with a mean of 3.31 and standard deviation 1.229.

Regarding the statement “The firm has adopted enterprise resource planning systems.”, 10.4% strongly disagreed to the statement, 2.8% of the respondents disagreed to the statement, 19.1% of the respondents neither agreed nor disagreed to the statement, 41.8% of the respondents agreed to the statement whereas 25.9% of the respondents strongly agreed to the statement, with a mean of 3.70 and standard deviation 1.188.

On the statement “The firm conducts e-auctioning of its products on social media networks” 9.6% of the respondents neither agreed nor disagreed to the statement, 41.0% of the respondents agreed to the statement whereas 49.4% of the respondents strongly agreed to the statement, with a mean of 4.40 and standard deviation 0.658.

Table 2: E-Procurement Management frequencies

E-Procurement Management	Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree	Mean	Std. Dev.
The firm has digitalized its payment options.	2.0	2.8	11.6	30.7	53.0	4.30	0.922
The firm sources for its products from online retailers.	5.6	7.2	5.6	53.8	27.9	3.91	1.058
The firm has digitized its inventory management.	5.6	27.1	19.1	27.5	20.7	3.31	1.229
The firm has adopted enterprise resource planning systems.	10.4	2.8	19.1	41.8	25.9	3.70	1.188
The firm conducts e-auctioning of its products on social media networks.	-	-	9.6	41.0	49.4	4.40	0.658

Correlation Analysis

Pearson R correlation was utilized in the measurement of the strength and the direction of variables linear relationship. The study considered the association to be: small if $\pm 0.1 < r < \pm 0.29$; medium if $\pm 0.3 < r < \pm 0.49$; and strong if $r > \pm 0.5$. As illustrated in Table 4.15 below.

Table 3: Pearson Correlation Analysis

		Performance of Women Owned MSEs	Online Marketing	E-Procurement Management
Performance of Women Owned MSEs	Pearson Correlation	1		
	Sig. (2-tailed)			
Online Marketing	Pearson Correlation	.909**	1	
	Sig. (2-tailed)	.000		
E-Procurement Management	Pearson Correlation	.774**	.178	1
	Sig. (2-tailed)	.000	.839	
	Sig. (2-tailed)	.000	.896	.831

From the findings presented in Table 3, the findings show that Online Marketing has positive significant relationship with organization performance ($\beta=0.909$, $p=0.000$); E-Procurement Management are observed to maintain a relationship that was positive, strong, and significant to Performance of Women Owned MSEs ($r=0.774$, $p=0.000$); The results show that all the variables (Online Marketing and E-Procurement Management,) had significant relationship with Performance of Women Owned MSEs .

Correlation analysis was conducted to test on the strength and extent of association between the study variables. Correlation is a statistical measure that shows the relationship between two or more variables. It is concerned with finding whether relationships exist, degree of the correlation, direction of relationship within the variables and whether the relationship is strong or Weak (Gogtay, 2016).

Regression Analysis

Model Summary

The amount of dependent variable variation attributed to the behaviour of the independent variables is determined by computing a model summary. This study measured variation in deposit taking microfinance institutions' Performance of Women Owned MSEs as a result of changes in Online Marketing and E-Procurement Management.

According to the results presented in Table 4.15, the value of R square is 0.877. This shows that 87.7% difference in performance can be credited to these changes in Online Marketing and E-Procurement Management. The remaining 12.3% suggests other factors exist that are helpful in explaining variation in Performance of Women Owned MSEs excluded in this study. The results also suggest the independent variables (Online Marketing and E-Procurement Management).

Table 4: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.936 ^a	.877	.868	.08967

a. Predictors: (Constant), E-recruitment & Selection and E-Procurement Management,

Analysis of Variance

Variance analysis shows the developed model's significance. In this research, the model significance was tested at significance level of five percent.

From the findings in Table 4.20, the significance of 0.000 which is below the chosen significance level of 0.05. Meaning can be considered significant. These results prove that the

F-calculated value (16.344) was above the F-critical value ($F_{4,85}=2.550$); this insinuates that the variables, Online Marketing and E-Procurement Management can be used to predict Performance of Women Owned MSEs in Kenya.

Table 5: ANOVA

Model	Sum of Squares	Df	Mean Square	F	Sig.
1 Regression	1.233	4	.308	92.716	.000 ^b
Residual	.173	85	.003		
Total	1.406	89			

a. Dependent Variable: Performance of Women Owned MSEs

b. Predictors: (Constant), E-recruitment & Selection and E-Procurement Management,

Regression Coefficients of the Study Variables

This regression equation model was used to fit the regression coefficient.

$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \varepsilon$. Where, Y= Performance of Women Owned MSEs in Kenya, β_0 = constant (coefficient of intercept), X_1 = Online Marketing; X_2 = E-Procurement Management; ε = error term.

Secondly the results depict strategic leadership practices significantly impacting Performance of Women Owned MSEs ($\beta=0.347$, $p=0.001$). The outcome also suggested that management of cash has a desirable impact on Performance of Women Owned MSEs These results insinuate that Online Marketing s significantly influence Performance of Women Owned MSEs in Kenya in a good way. Meaning, a unit rise in strategic leadership practices leads to a rise in Performance of Women Owned MSEs, by 0.347 units.

Table 6: Coefficients

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
1 (Constant)	1.347	0.258		5.221 .000
Online Marketing	0.347	0.103	0.439	3.369 .001
E-Procurement Management	0.196	0.077	0.226	2.545 .041

a. Dependent Variable: Performance of Women Owned MSEs

From the findings presented in table 6, the following regression equation was fitted;

Multiple regressions

$$Y = 1.347 + 0.347 X_1 + 0.196 X_2 \dots\dots\dots v$$

Observing the equations, it can be noted that when all the other variables (Online Marketing and E-Procurement Management) remain at constant zero, a constant value of 1.347 was held by the Performance of Women Owned MSEs.

Online marketing, the study found that Online marketing has an influence on Performance of Women Owned MSEs ($\beta=0.347$, $p=0.001$). As a result, a unit rise in Online marketing lead to a 0.347 unit rise in the Performance of Women Owned MSEs. The study's findings support Maki's (2012) finding that there is a positive significant relationship between Performance of Women Owned MSEs and Online marketing.

E-Procurement Management has great effect on Performance of Women Owned MSEs ($\beta=0.196$, $p=0.041$). The outcomes went ahead to suggest that E-Procurement Management have positive influence on financial well being. These results show that E-Procurement Management positively and significantly influence financial wellbeing. Meaning, a unit rise in

E-Procurement Management will leads to a rise in Performance of Women Owned MSEs by 0.196 units.

Conclusion

Most of the MSEs have adopted to e-commerce even though they have not fully implemented all the business models. In this study, benefits and challenges that influence the level of ecommerce adoption were studied. Using the questionnaires each specific challenge or benefit respondents were asked to rate the degree of benefit or lack thereof that each specific benefit or challenge respectively brought to their MSEs due to the fact that they had incorporated ecommerce in their business entities. Items selected by majority showed that the MSEs owners derived certain benefits from the adoption of ecommerce in their businesses. Additionally, they encountered challenges that discouraged their adoption of ecommerce in their businesses.

The study concludes online marketing had a positive influence on Brand recognition and profitability of women owned MSEs.

The study concludes E-procurement management had a positive influence on profitability and product development of women owned MSEs. This is because time, transaction and travel costs were greatly reduced

Recommendations

The study recommends that the MSEs should embrace online as a way of enhancing customer awareness of its products and services. This in turn will increase profitability an sales turn over

The study recommends that E-procurement should be adopted. Through adoption of E-procurement Women owned MSEs will increase efficiency thus saving time and money. With E-procurement, the entrepreneur can be able to source, order and pay for goods from different suppliers around the world and have them delivered without necessarily traveling around the world. The study recommends that E customer relationship management is one of the best modes of customer retention.

Areas for Further Research

This study sought to assess e-commerce adoption among women owned MSEs in Nairobi. The study was limited to the use of the adoption model using longitudinal data. Due to this, limitation, it is recommended that future research be undertaken using extended diffusion models in the context of women owned MSEs to enable the actual performance of the firms to be determined as a function of the Influence of e-commerce adoption

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