



ISSN 2278 – 0211 (Online)

Influence of Organizational Capabilities on Electronic Commerce Strategy as Adopted by Commercial Banks in Kenya

Caleb Odhiambo Onjure

PhD Student, Jomo Kenyatta University of Science and Agriculture and Technology
College of Human Resource Development, Nakuru, Kenya

Dr. Daniel Mungai Wanyoike

PhD Lecturer, Jomo Kenyatta University of Science and Agriculture and Technology
College of Human Resource Development, Nakuru, Kenya

Joseph Mung'atu

Lecturer, Jomo Kenyatta University of Science and Agriculture and Technology
Department of Statistics and Actuarial Science, Nakuru, Kenya

Abstract:

Kenyan Commercial banks play a vital role in the economic resource. However, the ease of doing business in Kenya remains weak, and the rapid development of information and technology is shaking the foundation of banking industry. The competition is cut throat, and the commercial banks have generally adopted the use of e-commerce products and services in their delivery of services to customers. The main objective of this study was to analyze the influence of organizational capabilities on e-commerce strategy as adopted by commercial banks in Kenya. The general objective was operationalised by in-depth study of the following constructs; business process re-engineering, structural design, capacity for change, and leadership. The study employed a descriptive survey research design. Self-administered questionnaire was distributed to management, supervisors, clerical and secretariat, and support staff randomly selected from the commercial banks that are sample respondent. The target population was 36,923, and the sample size of 384. The scope of the study targets was 43 commercial banks in Kenya. The quantitative data was analyzed by the use of statistical package for social scientists (SPSS). Result from the research findings indicates that different organizational capabilities influences electronic commerce strategy adoption by commercial banks in Kenya in different directions and magnitude: Business process reengineering by 0.055, structural design by 0.177, capacity for change by 0.203, and leadership by 0.143. Banks that embrace Structural Design, capacity for change, Leadership has a higher level of Electronic Commerce strategy adoption. However, BPR has not a very strong impact on electronic commerce adoption strategy, and we cannot say that banks that embrace BPR have a higher level of Electronic Commerce strategy adoption. The recommends of the study include the introduction of advanced technologies that can be upgraded to achieve next generation capabilities and providing a basis for further productivity gains, improved evaluation of activities in the banking processes, effective management of interdepartmental communication, a single point of contact is provided for the customer, control and checks and other non-value-added work be minimized, and works should be performed where it makes more sense. The study recommends stronger management support for best fit of organization structure, just in time and total quality management, among other recommendations. Future researchers to explore the influence of organizational capabilities on electronic commerce strategy as adopted by non-commercial banks, so as to support the generalization of the findings; and also, they can focus on the influence of other organizational capabilities.

Keywords: Business Process Reengineering, Structural Design, Capacity for Change, leadership, Statutory Requirements

1. Background of the Study

The 21st century global trend in business and industry is experiencing rapid changes (Mundia, 2014). The worldwide commerce system is evolving from traditional activities to knowledge and information based economy (Ghobakhloo, Amada & Airanda, 2012). Every business competes in two worlds: a physical world that managers can see and touch and a virtual world made of information (Rayport & Sviokla, 1995). According to Otuya et al. (2014), the corporate organizations especially the

banking industry worldwide has been characterized by fundamental changes taking place in the business environment. Business activities have taken a different turn as the general consumers become more complex. Their purchase behavior is becoming more and more complex and highly unpredictable. As reported by Chartered Institute of Management Accounts (CIMA, 2010), banks target mass-affluent consumers, who want to feel special; do not want to wait in a queue like everyone else; who feel they have worked hard for their money and they expect to be treated well. People in that market seek good service above all else, so they expect to get what they pay for or they will make their feelings clear (Ramosedi, 2010).

Researchers in strategic management are particularly concerned with the development of strategies and models that can help the banks achieve superior competitive advantage. With the relatively growing competition landscape along with the customer dynamics, the business models of banks require different strategic approach. Focusing on Africa, Sub-Saharan African States (SSA's) financial sector continues to be less developed even when compared to other emerging market regions. According to KPMG, (2015), the development of the SSA banking sector is still to an extent constrained by the small size of national markets. In many cases, this prevents banks operating in their home country from realizing the benefits of economies of scale. Increased regional economic and financial integration represents an opportunity to overcome this obstacle. The region has witnessed a rapid expansion of pan-African banking groups in recent years, and as domestic markets become saturated, banks are often forced to look beyond borders for potential growth opportunities. Secondly, regulatory changes in the country where banks are domiciled could also influence ambitions to expand beyond borders (KPMG, 2015).

1.1. Banking Sector in Kenya

The level of competition in the banking sector in Kenya is cut-throat (Kato, Otuya, Owunza, & Nato, 2014). In the recent years, banking industry is flourishing more rapidly than any other industry, so the number of banks is likely to increase in this industry, and as a result the competition has increased. According to Mr. Osoro the director of Kenya Bankers Association's Centre for Research on Financial Markets and Policy, what is more revealing of the intensity of competition is the ambition of market players to be on the leader's board in terms of market share. Over the past decade there have been shifts in terms of ranking according to market share, with traditional international leaders losing ground to local competitors. Competition has had the obvious consequence of exerting downward pressure on interest rates, hence low profitability. For instance, in June 2012 the spread between average lending and deposit rates stood at 12.4 per cent; by June 2014 it had fallen below 10 per cent and now stands at about eight per cent (Osoro, 2015).

In order to ensure that market stability accompanies the competitive operating environment, banks' capital requirement is high. This partly explains why although banks' profits are high in absolute terms, their returns on assets and equity indicate that the rate of profitability is low comparable to those in comparable economies across the continent and many leading Kenyan businesses. The exhibited low concentration and fluctuating market shares observed as well as the fact that the market is characterized by a large number of banks that vary in size, ownership status and strategy point to the fact that competition in the industry can only get more intense and not the opposite. The recent introduction of the Kenya Banks Reference Rate (KBRR) and the Annual Percentage Rate (APR) is likely to further strengthen competition in the market, although the full impact will not be immediate (Osoro, 2015).

Banks should position themselves strategically so that they can be able to provide these important services to the customer and sustain a competitive advantage over the competitors who provide the same services that banks are providing to survive in the current competitive, local and global challenging environment. The strategic positioning needs creative thinking and experimentation with new business models and the ability to recognize what form of restructuring is needed, (Meyer, 2009). These banks have to position themselves strategically to remain on course as well as to achieve their vision and mission and to sustain a competitive advantage over the competitors, hence the need to modernize equipment, adopt the latest I.T, develop human resource, continuously improve management styles, create efficient and low cost innovative services and to provide services that are differentiated from the competitors other than the usual services so as to attain customer loyalty (Finneran, 2006).

1.2. Statement of the Problem

In the recent past we have witnessed a turbulent time in the banking industry in Kenya. On 14th August, 2015, Central bank of Kenya (CBK) announced it has appointed the Kenya Deposit Insurance Corporation (KDIC) as a receiver in the interest of (Dubai Bank's) depositors, creditors and members of the public. In October 2015, the Central Bank of Kenya (CBK) put another Kenyan bank-Imperial Bank, under statutory management, barely months after taking similar measures against Dubai Bank. In April 2016 Chase bank placed under receivership (the third bank to be placed under the CBK in the past YEAR). In September 2016, Ecobank selling its office tower to recoup losses accrued from banking business. This is a problem that is causing major concerns in the financial sector. Now more than ever, banking institutions have to optimize their processes, control their cost structure, and explore new operating models using all the tools at their disposal. Business Process Reengineering is critical for superior firm performance in electronic commerce (e-commerce), and plays important role in successful Customer Relationship Management implementation. However, empirical studies have seldom addressed the organizational capabilities (such as business analysis and information management, process excellence, project management) influence on e-commerce strategy as adopted by commercial banks in Kenya. Therefore, this study intends to focus on the

influence of Business Processes Reengineering on e-commerce strategy as adopted by commercial banks in Kenya of commercial banks in Kenya in response to the competitive environment.

1.3. Research Objectives

1.3.1. General Objective

To determine the Influence of organizational Capabilities on e-commerce Strategy as Adopted by Commercial Banks in Kenya

1.3.2. Specific Objective

- To determine the influence of business processes reengineering on e-commerce strategy as adopted by commercial banks in Kenya
- To establish the influence of structural design on e-commerce strategy as adopted by commercial banks in Kenya
- To ascertain the influence of capacity for change on e-commerce strategy as adopted by commercial banks in Kenya
- To determine the influence of leadership on e-commerce strategy as adopted by commercial banks in Kenya
- To model the moderating influence of statutory requirements on the relationship between organizational capabilities and e-commerce strategy as adopted by commercial banks in Kenya

1.4. Research Hypotheses

- H_0 : There is no significant influence of business processes reengineering on e-commerce strategy as adopted by commercial banks in Kenya
- H_0 : There if no significant influence of structural design on e-commerce strategy as adopted by commercial banks in Kenya
- H_0 : There is no significant influence of capacity for change on e-commerce strategy as adopted by commercial banks in Kenya
- H_0 : There is no significant influence of leadership on e-commerce strategy as adopted by commercial banks in Kenya
- H_0 : There is no moderating influence of statutory requirement on the relationship between organizational capabilities and e-commerce strategy as adopted by commercial banks in Kenya

1.5. Justification of the Study

The banking sector has shown tremendous growth with commercial banks not left behind. This line of research has theoretical value, as it aids researchers in developing and validating general applied frameworks aimed at facilitating the utilization of different organizational capabilities to attain expected e-commerce adoption hence strategic advantage. The findings of this study will act as a guide to management of commercial banks in their steps to developing sustainable competitive advantage and commitment to organization's strategy. It would also assist policy makers in developing policies which would evaluate the impact of organizational capabilities on ecommerce strategy in the banking sector hence developing policies which regulate and support the development of e-commerce strategy in banks. To the Government of Kenya this research will be important in policy formulation for orderly economic growth. The research findings will also seek to extend knowledge in the world of academics in the same area of Strategic Management; it will be useful as literature in the area of e-commerce strategy in the banking industry.

1.6. Scope of the Study

Only the commercial banks in Kenya will be considered. The research will be carried out in all commercial bank headquarters in Nairobi. The budget for this project is estimated at Ksh. 398,044.00 and is scheduled to be carried out between July, 2015 and July, 2017. The independent variables in the study will be business analysis, process excellence, and project management. The dependent variable is e commerce strategy as adopted by commercial banks in Kenya.

1.7. Limitations of the Study

The challenges encountered during the study include financial challenges given the rising cost of materials in Kenya today and transportation. Furthermore, the subject of the study is sensitive and making appointment with some respondents caused some delays. However, the researcher used the focused groups effectively for better results.

2. Literature Review

The study was guided by four theories: Resource Based View theory, Complexity Theory, Theory of Change, Theory of Planned Behavior, and Innovation Diffusion Theory.

2.1. Conceptual Framework

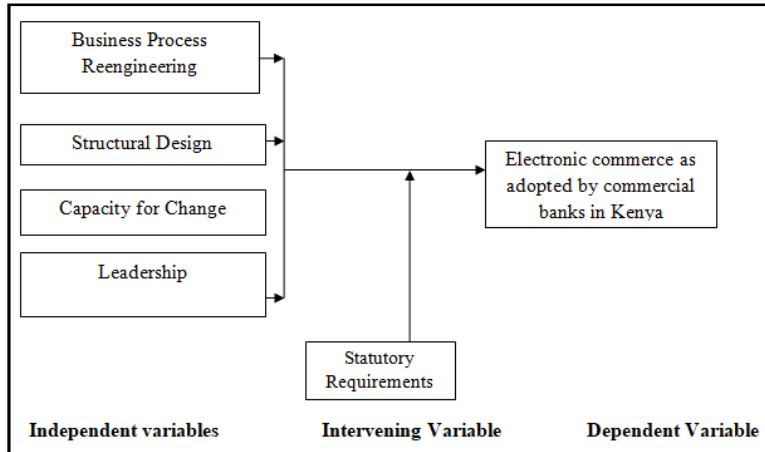


Figure 1: Conceptual Framework

3. Research Methodology

3.1. Research Design

Chandran (2004) describes research design as an understanding of conditions for the collection and analysis of data in a way that combines their relationships with the research to the economy of procedure. The research design, deal with the detailing of procedures that will be adopted to carry out the research study (Harper & Marcus, 2003). The study employed a descriptive survey research design. This is because; it permits the collection of data through questionnaires administered to a sample quickly, efficiently, and accurately (Osoo & Onen, 2007). It is an efficient method for systematically collecting data from broad spectrum of individuals and educational settings (Kothari, 2004). The study sought to describe the identified variables as they are without manipulation of variables. The major purpose of descriptive research is a description of the state of affairs, as it exists without manipulation of variables (Kombo & Tromp, 2006).

3.2. Target Population

A population is defined as a complete set of individuals, cases or objects with some common observable characteristics (Mugenda & Mugenda, 2003). Dencombe (2007) defines a population frame as “an objective list of the population from which the researcher can make his or her selection.” A population frame must thus contain an up-to-date list of all those that comprise the target population. The target population of this study was 36,923, and comprised of the employees of all commercial banks, based at their headquarters in Nairobi.

Cadre of staff	Target number
Management	9,584
Supervisory	6,464
Clerical and Secretariat	18,539
Support Staff	2,336
Total	36,923

Table 1: Target Population
Source: Bank Supervisory Annual Report by CBK (2015)

3.3. Sample Procedure and Sample Size

Sampling design refers to a research plan that indicates how cases are to be selected for observation or as respondents (Mugenda & Mugenda, 2003). Any statements made about the sample should also be true of the population (Orodho, 2003). The target population was divided into strata according to cadre of staff, thereafter sample size determined by applying (Cooper & Schindler, 2003) formula. Simple random method was used to distribute the questionnaires.

$$n = z^2pq / (d^2)$$

Where: n= desired sample size, z = standard normal deviation at the required confidence level, p= proportion in the target population estimated to have the characteristics being measured, q=1-p, d= level of statistical significance set.

At 95% level of confidence and P=0.5, the z statistics is 1.96. The sample size= $n = ((1.96)^2(.5) (.5)) / (.05)^2 = 384$. This sample size is considered representative and comprehensive in the coverage of the study objectives and economical in terms of time and money.

Cadre of staff	Target number	Sample Size
Management	9,584	100
Supervisory	6,464	67
Clerical and Secretariat	18,539	193
Support Staff	2,336	24
Total	36,923	384

Table 2: Sample Size

3.4. Data Collection Procedure

On appropriate date, the researcher administered the questionnaire to the respondents on agreement with the respondent. There was an introductory note to let the respondent to feel free to participate. Questions that were not clear to the respondent were clarified. The questionnaires were administered by the researcher. The researcher ensured that the questionnaires are received at the right time and that everything is clarified clearly to the respondents before they responded to the items in the questionnaire. The researcher also liaised with the relevant authorities to allow the study to be carried out and similarly, to conduct a pilot study to familiarize with the respondents. Similarly, the research got authority from NACOSTI, County Directors of Education, and County Commissioners for Nairobi and Nakuru counties.

A period of one month was given to the respondents to answer the questions postpaid envelopes with researchers' postal address was left so that once the questionnaire is filled they will be posted. Contact mobile number and e-mail address of the researcher was given to the respondent. Researchers such as Bagchi & Udo (2007), Herindranath et al. (2008), Tan et al (2009) and Wanyoike (2013) have used similar data collection procedures in similar studies.

3.4.1. Research Instruments

Questionnaire and interview guide were the research instruments. Questionnaires, incorporating both open-ended and closed-ended questions items were used to gather the study's data. According to Cooper and Emory (2008), the questionnaire is conveniently used because it is cheaper and quicker to administer, it is above researcher's effect and variability, and is highly convenient for the respondents as they could fill them during free times or when workloads are manageable. The instruments incorporated Likert scales to measure perception, attitude, values and behavior. According to Mugenda & Mugenda (2003), the questionnaire allows the researcher to collect information from a large sample with diverse background; the findings remain confidential, save time and since they are presented in paper format there is no opportunity for bias. The data received from questionnaires is appropriate and can easily be arranged and analyzed. Self-administered questionnaire is the only way to elicit self-reports on people's opinion, attitudes, beliefs and values (Sproul, 1998). Questionnaires were distributed to management supervisory staff, clerical and secretarial staff and support staff. Likert (1932) scale was used to determine if the respondent agreed or disagreed in a statement. They are also easy to administer because each item is followed by an alternative answer and is economical. Interview guide were administered by the researcher to access key information to be utilized in conclusion. It was administered to management.

3.4.2. Reliability of Instrument

This refers to the extent to which data collection techniques and analysis will yield similar findings by other observers. The measurement of reliability provides consistency in the measurement of variables. Internal consistency reliability is the most commonly used psychometric measure for assessing survey instrument and scales (Zhang, Waszink & Wijngaard, 2000). Cronbach alpha (α) is the basic formula for determining the reliability based on internal consistency (Kim & Cha, 2002). The standard minimum value of alpha (α) is 0.7 recommended by Nunally (1975) and Malhotra (2004). Construct used in this study was tested for internal consistency reliability where values greater than 0.7 indicated presence of a strong internal consistency in the measurement. Table 3 produced a Cronbach alpha (α) values greater than 0.7, indicating that the questionnaire is reliable as recommended by Fraenkel & Wallen (2000).

Study Variable	Number of Test	Cronbach Alpha
Business Process Reengineering	15	0.9532
Structural Design	15	0.9393
Capacity for Change	15	0.9620
Leadership	15	0.9616
Statutory Requirements	15	0.7549
Electronic Commerce Strategy as Adopted by Commercial Banks in Kenya	15	0.9647

Table 3: Reliability Test

4. Data Analysis, Interpretation, and Presentation

4.1. Response Rate

Out of 384 questionnaires that were distributed to potential respondents, 244 were duly filled and returned to the researcher. This translates to a response rate of 63.54%. Response rate refers to the number of questionnaires returned divided by the sample size and the result multiplied by one hundred (Baruch and Holtom, 2008; De Vaus, 2002). The response rate results were tabulated as presented in Table 4.

Questionnaires	Frequency	Percentage
Returned	244	63.54
Unreturned	140	36.46
Total	384	100

Table 4: Response Rate

The response rate of 63.54% was found to be sufficiently adequate for analysis and for discussions of the study findings when compared to other research results by Mturi (2014)-62%, Ngumi (2013)-62%, Wanyoike et al. (2013)-56%, Alam and Noor (2009) – 48.25%, Mutula and Brakel (2007) – 34.5%, Chiware and Dick (2008) – 58.29%. The unreturned questionnaire (36.46%) could be attributed to delay on the part of the respondent completing and hence being unable to return by on time. According to Mugenda and Mugenda (2003), for generalization purposes, a response rate of 50% is adequate, while 60% is good and a response of 75% is excellent. Hager, Wilson, Pollack and Rooney (2003) recommended 50%. Most importantly, the overall response rate of 63.54% is higher than the average response rate of 30% for survey research recommended by Saunder and Lewis (2009) and Sekara (2003).

4.2. Demographic Characteristics of the Sample

The profile of respondents identifies the main information about the characteristics of those who participated in the research process depending on the relevance of the information sought. The researcher sought to find out the distribution of the respondents according to gender, age bracket, and education level. The aim was to deduce any trend from the respondent's profile that was directly linked to the variables of the study. Similarly, previous studies have noted some relationship between these demographics factors and ecommerce strategy adoption (Looi, 2004). According to Sifer, Puddy, Warren and Robert (2002), the analysis of demographic characteristics traits of the sample helps the researcher and research consumer to make conclusion regarding the representativeness of the sample, and consequently, the generalization of the collected data.

4.2.1. Gender of the Respondents

The study sought to establish gender of the respondents so as to establish on the criteria used by the management in employing employees on gender consideration. Gender is a cross-cutting issue within the development policies of most international donors and national governments. If gender impacts are not evaluated, they are unlikely to be given any attention (World Bank Publication, 2009). The results were tabulated as indicated in Table 5.

Gender	Frequency	Percentage
Male	143	58.61
Female	101	41.39
Total	244	100

Table 5: Distribution of Respondents by their Gender

The findings show that 58.61% of the respondents are male and 41.39% female employees. This implies that there is a relative effort towards achieving gender equality in the commercial banks in Kenya since the difference between male and female counterpart is growing minimal, however there is still a big gap. This was also reflected in the interviews held with selected managers in the commercial banks in Kenya. The finding is consistent with the result by Wachudi and Mboya (2009) that demonstrated that boards of commercial banks in Kenya are male-dominated- on average, out of a typical board size of 8 members, only 1 is a female director. Gakure (2001) also observed male dominance in formal and informal sector.

The study further established that few women on the board may have come about because may be women in general do not have the necessary training and experience to work in the financial sector. That board gender diversity has no significant effect on the performance of banks, and that female employees face glass ceiling (that is promotion to a certain level but not beyond) in those organizations (Williams 1992); and that women are tokens in the banking industry giving a hand to the tokenism theory. Similar study by Majid, Yusuff and Raza (2015) also found that women are under-represented in the skilled workforce of the Malaysian construction industry the findings by Ngugi (2016) further revealed that women constitute 48 per cent of Barclay's 2,762 employees, 43 per cent of Co-op's 3,948 and 42 per cent of KCB's 6,082 permanent workers. The findings by Masanja (2010) also established that there was low women participation in science, education and employment in

Africa. The Kenya Gender Analysis Report (2013) further indicated that men control access to most productive assets in Kenya.

4.2.2. Age of the Participants

The researcher found it paramount to establish the age bracket of the respondent. This is a demographic feature that affects behaviors or perception of an individual on issues in organizations. The results were tabulated as indicated in Table 6.

Age Group	Frequency	Percent
60 and above years	1	.4
50-59 years	10	4.1
40-49 years	51	20.9
30-39 years	64	26.2
Below 30 years	118	48.4
Total	244	100.0

Table 6: Distribution of Age Group

The finding established that 48.4% of the respondents are below 30 years, 26.2% of them are between 30-39 years, 20.9% of them are aged between 40-49 years, and 4.1% are 50 -59 years, and 0.4% are 60 years and above. It was observed that the majority of the respondents were aged above 30 years and above (52%). The rest fell below 30 years (48%). The smallest number of respondents was fifty years and above (4.5%), which is in agreement with Ngumi (2013) finding that many banks' workforce is mainly aged below fifty years due to the periodic employee realignments which normally witness exit of older employees through either voluntary exit or employer initiated early retirement. The findings also back Doherty and Ellis-chadwick (2003) set of analysis, which demonstrated that organizations are most likely to adopt the Internet for information provision, marketing and direct sales purposes if their typical customer (internal and external) is male, young and a member of the professional/managerial classes; and that young, professional males are typically enthusiastic and competent users of information technologies.

4.2.3. Education Level of the Respondents

The study sought to establish the education level of the respondents. The respondents were asked to state their highest academic level. The level of education is a key factor when it comes to understanding and perception of issues in an organization. According to Murphy and Myers (2004), education level determines the respondents' ability to comprehend the survey questions. The results were tabulated as indicated in Table 7.

Education Level	Frequency	Percent
Primary Certificate	1	.4
Secondary Certificate	4	1.6
College Diploma	15	6.1
University Degree	224	91.8
Total	244	100.0

Table 7: Distribution of Respondents by Highest Level of Education

The findings show that 0.4% of the respondent reached primary school as their highest level of education, 1.6% of the respondents have secondary level as their highest level of education, 6.1% of the respondents have college level as their highest level of education, 91.8% at university level. This shows that the respondents were capable and reliable to explore the underpinning issues related to the study. The role of education as a change agent is indisputable and has always been a central mechanism for transmission of skills and values for the sustenance of societies and promotion of social change (Lebaking & Phalare, 2001). Employees need technical skills to apply skills and use techniques from education, training and experience, human professional experience is necessary to work effectively with the people and conceptualize and analyze complexities (Kimemia, 1990). According to the findings by Rahman, Rafiq and Momen (2009), high level of knowledge on enterprise management, influences offering of information that answers research question in a study.

4.2.4. Respondents Area of Operation

The study found it imperative to establish understanding on the area of operation of the respondents. This data was intended for the purpose of establishing on the respondent's awareness and level of understanding over the organizational strategies. The results were tabulated as indicated in Table 8.

	Respondents	Frequency	Percent
	Support staff	20	8.2
	Clerical & Secretariat	92	37.7
	Supervisory	36	14.8
	Management	96	39.3
	Total	244	100.0

Table 8: Areas of Operation of Respondents

The findings show that management forms 38.5% of the respondent, supervisors forms 14.8%, clerical and secretariat forms 37.7%, and Support staff 8.2%. This implies that the management formed the largest majority of respondents. However, with this kind of distribution, the researcher was satisfied that all areas were covered.

4.2.5. Years of Work in the Bank

The respondents were requested to indicate on how long they have worked in the organization, since this affects employee understanding on firm operations and processes; in this case the study assumed that the longer one has worked in the organization the more he or she understands the operations and processes in the organization. Experience also contributes to individual's competence on execution of organizational duties and roles on implementation of strategies. The finding of this enquiry is presented in Table 9.

	Year Worked in Bank	Frequency	Percent
	Less than 2 years	56	23.0
	2-3 years	32	13.1
	4-5 years	33	13.5
	5-6 years	29	11.9
	Over 6 years	94	38.5
	Total	244	100.0

Table 9: Years Worked in the Bank

The result from the findings indicates that the majority of employees in this company comprising 38.5% have worked for period more than six years, followed by 23% of the respondents who have worked for less than 2 years, while those who have worked for 2-3 years constitute 13.1%, those who have worked for 4-5 years constitute 13.5%. The minority of 11.9% have worked for 5-6 years. Study by Jelangat (2014) observed that majority of bank staffs have worked for less than 5 years (43.8%); the finding attributed this to the rapid expansion of banking sector in the last decade resulting into a high number of employees engaged in the period. Ambani (2014) similarly observed that majority of staff in commercial banks are middle aged people who occupies management positions in their companies. This finding is an indication that the majority of the respondents have a reasonable experience with their organizations hence able to provide information based on their experience with the companies. Randoy et al. (2006) observed that one's experience depends on the number of years of service in the sector involved. (Afande, 2013) observed that it is assumed that the longer one worked in an organization, the more they understand the organization and hence the higher the ability to articulate issues pertaining to the organization. The respondent therefore is believed to understand the organization based on the period they have worked in the organization. Thus, implying that the more experienced a person is the more he understands the concept of corporate strategies and competitive advantage, principle, and policies of a given organization.

4.3. Descriptive Analysis

This section deals with specific information of the study with regard to specific objectives of the study. Descriptive Analysis focuses on describing and summarizing the basic feature of the data in a given study (Cooper & Schindler, 2013). The descriptive statistics are used to summarize data regarding electronic commerce strategy adoption by Commercial Banks in Kenya. The responses spread within standard deviation statistical rule of 68%, 95% and 99.7% applies in all the interpretations in the rest of the document. This means that one responses spread within standard deviation has 68% of the data spread around the mean and 95% for two standard deviations and 99.7% for three standard deviations.

4.3.1. Influence of Business Process Reengineering on Electronic Commerce Strategy Adoption by Commercial Banks in Kenya

The first objective of the study was to determine the influence of business process reengineering on electronic commerce strategy as adopted by commercial banks in Kenya. The objective was verified from respondent by use of Likert scaled statement on questionnaire.

4.3.1.1. Whether the Organization Practices Business Process Reengineering

The study sought to test whether the organizations identified with radical and new ways of carrying out her business operations, often enabled by new Information Technology capabilities to achieve critical contemporary measures of performance such as cost, service, quality, and speed. This was meant to establish whether commercial banks in Kenya practices Business Process Reengineering. The finding of this enquiry was as presented in Table 10.

	Response	Frequency	Percent
	YES	238	97.5
	NO	6	2.5
	Total	244	100.0

Table 10: Whether the Organization Identifies with Business Process Reengineering

The findings show that 97.5% of the commercial banks in Kenya have embraced Business Process Reengineering. A 2.5% of the commercial banks have not embraced BPR, and this could possibly explain why almost similar percentage (4.65%) of Licensed Commercial Banks has gone under receivership (Imperial bank and Chase bank). This finding is supported by the findings of Ramagopal, Palaniapal, Hemalatha, & Murugan (2011) that, in a volatile global world (Kenya Inclusive), organizations enhance competitive advantage through Business Process Re-engineering (BPR) by radically redesigning selected processes; and as many organizations undertake BPR, issues in implementing BPR become a major concern and how the severity of these problems relates to BPR success. Setegn (2013) observed that Business Process Reengineering has become useful weapon for any organization that is seeking for improvement in their current organizational performance and intends to achieve organizational objective. Reengineering also helps organizations to throw away their old-fashioned processes to achieve new heights of success (Jemal et al., 2011). Reengineering primary goals aimed at to reduce wastage, improve efficiency and ultimately reduce costs (Lotfollah et al., 2012).

According to the findings by Dejan (2011), the concept of BPR enables modern companies to reconsider and redesign more process of business. Nauman, (2013), observed that the results of research in 2013 showed that, however; there is little agreement between researchers and BPR users, this procedure is a global approach. Kurtus, (2000), observed that Business Process Re-engineering has a strong and longstanding approach to improve performance, useful innovation in organization and technologies of e-commerce, which is applied to redesign the processes within the organization such as supply and marketing; In fact, success in e-commerce is affected by BPR (Kheirollahi, Veysi, Majidipour & Majidipour, 2013). Achieng (2014) also observed that Kenya Commercial Bank considered reengineering its business as an important strategic tool to enable it meets its mission of moving from good to great thus enhance its performance. Osano & Okwena (2015) similarly observed that the Kenyan banking sector has found it important to take up Business Process Reengineering (BPR) in an attempt to greatly improve performance. As Linden, (1994) stated that all organizations, whether service giving or manufacturing, are struggling to meet the tough and new competitive standards of the 1900s speed, quality, efficiency and increased productivity in order to become more competitive, and flexible to meet the desired standard.

4.3.1.2. Extent BPR Factors Plays Critical Role in Banks Operations

The respondents were asked to indicate to what extent they agree that certain BPR factors plays a critical role in business information sharing, business relationships keeping, and conducting business transactions by telecommunications networks in your organization. The results were tabulated as indicated in Table 11.

BPR Factors	N	Mean	Std. Deviation
A robust platform for modeling and executing process-based applications, including business rules	244	4.37	.625
Developing a flow chart for the total business process, including its interfaces with other value chain activities	244	4.29	.704
Trying to simplify the process first, eliminating tasks and steps where possible and analyzing how to streamline the performance of what remains	244	4.34	.723
Determining which part of the process can be automated; considering introducing advanced technologies that can be upgraded to achieve the next generation capability and provide a basis for further productivity gains down the road	244	4.39	.690

BPR Factors	N	Mean	Std. Deviation
Evaluating each activity in the process to determine whether it is strategy-critical or not	244	4.24	.765
Weighing the pros and cons of outsourcing activities that are non-critical or that contribute little to organizational capabilities and core competencies	244	4.24	.743
Designs for performing activities that remain; reorganize the personnel and groups who perform these activities into the new structure	244	4.25	.702
Enabling managers to identify business issues, trends, and opportunities with reports and dashboards and react accordingly	244	4.36	.715
Providing a system for storing and securing electronic documents, images, and other files	244	4.47	.733
Removing intra- and interdepartmental communication barriers through discussion forums, dynamic workspaces, and message boards	244	4.23	.839

Table 11: Extent BPR Factors Plays Critical Role in Electronic Commerce Strategy Adoption

The results show that 68% of the responses were within one standard deviation from the mean as supported by actual standard deviations. The result shows a mean of between 4.24 and 4.47 which indicate "agreement". Providing a system for storing and securing electronic documents, images, and other files -content management (with a mean of 4.47 and responses spread within standard deviation of 0.733), has the most critical role in electronic commerce strategy adoption. It involves the administration of digital content throughout its lifecycle, from creation of permanent storage or deletion. It allows users to access system from a remote location, and must be part of every organization's strategy (Mescan, 2014). Study by Rossignoli, Mola and Zardini (2011) found that enterprise content management system optimizes information management in organization memory, perfect decision-making process, and improves company performance through competitiveness. The findings of Osano and Okwena (2015) also established that process and system management seemed to be the most influential factor in banking setting, and it is core in the success of BPR project.

The findings indicate that a robust platform for modeling and executing process-based applications, including business rules -process engine (with a mean of 4.37 and responses spread within standard deviation of 0.625) plays the second most critical role in electronic commerce strategy adoption. This implies that the commercial banks put in place software framework that enables the execution and maintenance of process workflow. This provides business interaction and communication between different data/process source spread across one or more IT applications and services. It also enables high performance flexibility, intensibility, and consistent environment for deploying EAI, Internet B2B, EDI, and business process management projects. Gunasekaran and Kobu (2002) asserted that modelling not only helps to plan reengineering, but also makes implementation of necessary changes to the organization and other related resources easier; that the processes models need to be developed employing e-commerce, e-manufacturing and e-service environments, following the operating environment of current manufacturing/services that have changed the perspective of globalization and the application of information technology.

Developing a flow chart for the total business process, including its interfaces with other value chain activities (with a mean of 4.29 and responses spread within standard deviation of 0.704), which is an approach to changing structure by the organization helps the teams involved in the process to understand how it currently works (analyzing and mapping "as is" process). Hamscher (1994) asserted that every company can be seen as a sum of processes that responds to customers' needs by creating, producing, supplying, and invoicing good and services.

Other BPR factors include trying to simplify the process first, eliminating tasks and steps where possible and analyzing how to streamline the performance of what remains (with a mean of 4.34 and responses spread within standard deviation of 0.723). Determining which part of the process can be automated, considering introducing advanced technologies that can be upgraded to achieve the next generation capability and provide a basis for further productivity gains down the road (with a mean of 4.39 and responses spread within standard deviation of 0.690); Evaluating each activity in the process to determine whether it is strategy-critical or not (with a mean of 4.24 and responses spread within standard deviation of 0.765) -strategy critical activities are candidates for benchmarking to achieve best-in industry performance status; Weighing the pros and cons of outsourcing activities that are non critical or that contribute little to organizational capabilities and core competencies (with a mean of 4.24 and responses spread within standard deviation of 0.743); Design a structure for performing activities that remain, reorganize the personnel and groups who perform these activities into the new structure

(with a mean of 4.25 and responses spread within standard deviation of 0.702); Enabling managers to identify business issues, trends, and opportunities with reports and dashboards and react accordingly -Business Analytics (with a mean of 4.36 and responses spread within standard deviation of 0.715), indicates that commercial banks in Kenya engage in iterative methodological exploration of organization data, with an emphasis on statistical analysis. This shows that these Commercial Banks are committed to data driven decision. Nderitu and Clifford (2014) in their study found that business analytics had impact on performance of commercial banks in Kenya.

Removing intra and interdepartmental communication barriers through discussion forums, dynamic workspaces, and message boards- collaboration tools (with a mean of 4.23 and responses spread within standard deviation of 0.837) implying effort to support a group of two or more individuals to accomplish a common goal or objectives they have set themselves. From the findings of Hidayanto and Setyady (2014) the use of collaboration tools has positive influence on team performance. According to the findings, the commercial banks takes into consideration, business analysis and information management as a drive to electronic commerce strategy adoption. Similarly, by trying to simplify the process first, eliminating tasks and steps where possible and analyzing how to streamline the performance of what remains; a robust platform for modeling and executing process-based applications, including business rules.

Determining which part of the process can be automated, considering introducing advanced technologies that can be upgraded to achieve the next generation capability and provide a basis for further productivity gains down the road. These are the process excellence/optimization practices by commercial banks to enable them adopt e-commerce strategy. Developing flow charts for the total business process, including its interfaces with other value chain activities; evaluating each activity in the process to determine whether it is strategy-critical or not; and enabling managers to identify business issues, trends, and opportunities with reports and dashboards and react accordingly; Removing intra- and interdepartmental communication barriers through discussion forums, dynamic workspaces, and message boards are BPR project management practices by commercial banks in Kenya. These findings indicate that commercial banks in Kenya have successfully reengineered their operations around strategically critical business processes.

From the findings, none of the means scores is approximately five (Strongly Agree). This is an indication of BPR practice is still below the excellent required standard, bearing in mind to the fact that the market is very competitive. As quoted by Juma (2017) "Financial experts have said that the Kenyan banking sector is passing through a challenging environment that has never been witnessed before. They say that the prevailing environment might be a fulfillment of the scientific evolution premise of the 'survival for the fittest' where only the strong ones will be able to endure till the end". This is in agreement with the findings by Zhou (2013), who observed that BPR is the only way to carry out e-commerce to SMEs, and it can only be used under the condition that significant rebuilding and innovation are made in organization structure, decision making mode and supply chain management.

Adjei (2013) observed that Ghana Commercial Bank (GCB) had not achieved fully the purpose of the BPR, considering the expenditure of the bank for each year which keeps increasing as against the profit made and when you compare that to its other competitors who with their smaller branch network were able to make profit much larger than GCB. The study also showed that management was committed to the process but because communication was basically one sided i.e. from top-down and lack of an efficient feedback staff were resistant new changes since they saw it rather as an imposition by management. Shemi & Procter, (2013) observed that the electronic commerce adoption by commercial banks (just as SMEs) requires understanding on the internal resources and what opportunities are available in the external environment, since different organizations have peculiar needs in relation to e-commerce; and various prevailing circumstances will interact differently with the industry and national factors which and various prevailing circumstances will interact differently with the industry and national factors. Study by Mturi (2014), established that increase of hiring of employees in the company and laying off of employees were impacted by BPR quite often; on the other hand, new organizational shared values and beliefs, new roles necessitating the acquisition of multiple skills by employees and new customer focused processes were impacted by BPR sometimes.

4.3.1.3. Extent BPR Processes Contribute to Electronic Commerce Strategy Adoption

The study sought to test how the elemental rethinking and radical redesigning of the business processes have contributed to the bellow uses of internet for purchase and sale of goods and services, including service and support after sale in your organization. The results were tabulated as indicated in Table 12.

BPR Processes	N	Mean	Std. Deviation
Business Analysis and Information Management	244	4.31	.680
Process excellence/optimization	244	4.25	.752
Project Management	244	4.20	.735

Table 12: Extent BPR Processes Contribute to Electronic Commerce Strategy Adoption

From the findings it observed that Business Analysis/information management (with a mean of 4.31 and responses spread within standard deviation of 0.680) is the greatest contributor to electronic commerce adoption. This was followed by process excellence/optimization (with a mean of 4.25 and responses spread within standard deviation of 0.752). Findings by Wang, Herve and Shen (2012) disclosed that process improvement in commercial banks is dynamic, continuous forward process. That study proposed for a process improvement model which is suitable to Chinese commercial banks and found out the difficulties and countermeasures of application of continuous process improvement to management banks. Project Management (with a mean of 4.20 and responses spread within standard deviation of 0.735) has the least contribution. The finding by Teixeira and Pereira (2015) shows that if an organization has to succeed, it is a priority to understand that value of making effective projects (right projects) and managing them efficiently (managing them right), that earning on how to invest in the right projects with the best value for money in the right time to market is synonymous to organizational regeneration towards prosperity.

The findings indicate that in order for the Commercial banks to achieve excellent electronic commerce strategy adoption, they are therefore required to do more on project management and process excellence/optimization. The organization must also improve more on Business analysis and information management. Kassahun (2012) observed that the availability of sufficient financial resources for staff training and retraining, organisational restructuring, benchmarking touring and new reward systems positively contributes to the radical transformation of the underlying structures, reward systems, performance measurement systems, and values and belief systems of a BPR-implementing organization. The knowledge and skills level of BPR personnel, values and beliefs, employee skills and performance measurement and management systems, cross-functional knowledge, change management knowledge, BPR project management knowledge, leadership knowledge, and knowledge of BPR methodology, tools and techniques, positively influence the level of change made to the enabling organisational structure.

Kangogo (2014) observed that aim of BPR is delivering more value to the customer through rethinking of existing processes, use technology to improve data dissemination and decision making, redesigning the functional organization into cross-functional teams. Namatsi (2014) similarly observed that the areas of improvement that BPR helps achieve include improvement of the turnaround timeframe on service delivery, reducing defect rates, increasing accuracy of process instructions, eliminating repetitive tasks, speeding up product development and improving human resource practices. Nangami (2014) asserted that BPR aims to achieve improvements in the contemporary measure of performance that is cost, quality, service and speed. Kawa (2013) observed that the aim of BPR is the redesigning of the work to better support organizational objectives while reducing on the cost implications.

4.3.1.4. BPR outcomes Contribution to Electronic Commerce Strategy Adoption

The study sought to understand whether BPR outcomes contribute to the Use of Internet for Purchase and sale of goods and services, including service and support after sale in your organization. The results were tabulated as indicated in Table 13.

BPR outcomes	N	Mean	Std. Deviation
Several jobs are combined into one	244	4.27	.842
Decision-making becomes part of the job of employees (employee empowerment)	244	4.21	.917
Steps in the processes are performed in natural order, and several jobs get done simultaneously	244	4.25	.888
Processes have multiple versions. This enables the economies of scale that result from mass production, yet allows customization of products and services	244	4.25	.806
Work is performed where it makes the most sense	244	4.11	.843
Controls and checks and other non-value-added work are minimized	244	4.16	.965
Reconciliation is minimized by cutting back the number of external contact points and by creating business alliances	244	4.22	.832
A single point of contact is provided to customers	244	4.11	.949
A hybrid centralized/decentralized operation is used	244	4.14	.864

Table 13: BPR outcomes Contribution to Electronic Commerce Strategy Adoption

The results show that 68% of the responses were within one standard deviation from the mean as supported by actual standard deviations. From the findings, several jobs are combined into one (with a mean of 4.27 and responses spread

within standard deviation of 0.842) and this decreases overhead and improved control also side effects, eliminates handoffs, delays, and errors made possible by case workers and teams. Second BPR characteristic observed is that decision-making becomes part of the job of employees- employee empowerment (with a mean of 4.21 and responses spread within standard deviation of 0.917). Rather than go up the hierarchy for an answer therefore assumption is no more valid and fewer delays, low overhead cost, faster customer response, and greater empowerment for workers. People the ability to do their work: the right information, the right tools, the right training, the right environment, and the authority they need. Information systems help empower people by providing information, tools and training (Zygiaris, 2000).

Study by Ukil (2016) found that satisfied employees provide better quality service; Steps in the processes are performed in natural order, and several jobs get done simultaneously (with a mean of 4.25 and responses spread within standard deviation of 0.888) ensuring job done simultaneously, shorter time for the process, and less rework as a result of simultaneous work. Processes have multiple versions. This enables the economies of scale that result from mass production, yet allows customization of products and services (with a mean of 4.25 and responses spread within standard deviation of 0.806). The multiple version of the same process is needed to meet the requirements of different markets, customers, or solutions; Work is performed where it makes the most sense (with a mean of 4.11 and responses spread within standard deviation of 0.843). Work shifts across organizational boundaries; Controls and checks and other non-value-added work are minimized (with a mean of 4.16 and responses spread within standard deviation of 0.965). This is carried out when it makes economic sense; Reconciliation is minimized by cutting back the number of external contact points and by creating business alliances (with a mean of 4.22 and responses spread within standard deviation of 0.832). This is to minimize the number of external contacts points that process has. It reduces chances of receiving inconsistent data/information that will require reconciliation; A single point of contact is provided to customers (with a mean of 4.11 and responses spread within standard deviation of 0.949) to act as a buffer between the customer and the complex process. Case manager provides the customer with all the information they need; A hybrid centralized/decentralized operation is used (with a mean of 4.14 and responses spread within standard deviation of 0.864). This is about combining the advantages of centralization and decentralization in the same process.

IT enables organization units to act as autonomous units while at the same time enjoy the economies of scale brought about by centralization. The findings by Holberg, Sjogren & Hellstron (2010) established that asymmetric markets (in terms of the proportion of high ability entrepreneurs) tend to favor centralized banking while decentralized banks seem better at lending in the wake of an economic downturn (high probability of recession). Even through a bank group where decisions are decentralized may end up with portfolio of loans which is relative poorly diversified between regions; the ability to effectively screen potential borrowers may nevertheless give a decentralized bank a lower overall risk in the lending portfolio than when decisions are decentralized. Findings by Berger (2005) raised a conclusion that a large organization might at least to a degree, be able to enjoy the best of both worlds if it sets up the internal structure that achieves the right level of decentralization.

According to this finding, several jobs are combined into one contribute most to the to the use of internet for purchase and sale of goods and services, including service and support after sale in your organization, followed by Processes have multiple versions (This enables the economies of scale that result from mass production, yet allows customization of products and services); then by Steps in the processes are performed in natural order, and several jobs get done simultaneously. According to the findings, work is performed where it makes the most sense, and a single point of contact is provided to customers provides least contribution to the use of internet for purchase and sale of goods and services, including service and support after sale. This indicates how less serious this important aspect of BPR is taken into consideration in the commercial banks. This supported by the findings by Kassahun (2012), BPR implementation problems, such as a lack of top management continued support and commitment and BPR team members' discontinuance and lack of autonomy during the BPR project, are factors that directly inhibit the depth of change possible and that indirectly and negatively influence business process performance in the commercial banks in Kenya. This has been adversely mentioned by bank staffs that were interview.

These study findings are consistent with Zygiaris (2000) that Redesign, retooling and re-orchestrating form the key components of BPR that are essential for an organization to focus on the outcome that it needs to achieve. The outcome pursued should be an ambitious outcome. These types of visionary goals require rethinking the way most organizations do business, careful redesign. They will additionally need very sophisticated supporting information systems and a transformation from a traditional organizational structure to a network type organization.

4.3.2. Influence of Structural Design on Electronic Commerce Strategy Adoption by Commercial Banks in Kenya

The second objective of the study was to determine the influence of structural design on electronic commerce strategy as adopted by commercial banks in Kenya. The objective was verified from respondent by use of Likert scaled statement on questionnaire.

4.3.2.1. Whether the Organization Identify Formalized Arrangement of Interaction between and Responsibility for Tasks, People, and Resources

The respondents were asked to indicate whether their organizations organization identifies with formalized arrangement of interaction between and responsibility for tasks, people, and resources. This was to establish whether commercial banks in Kenya practices structural design. The results were tabulated as indicated in Table 14.

Response	Frequency	Percent
Yes	242	99.2
No	2	.8
Total	244	100.0

Table 14: Whether the Organization Does Structural Design

The findings in Table 14 above, show Yes (99.2%) and No (0.8%). This implies that 99.2% of the commercial banks in Kenya have embraced Structural Design to survive. This is concurrent with the findings by Dumais (2011) who observed that organizational design and the resulting capabilities are the last sustainable sources of competitive advantage that are available to firms. Chandler (1962) argued that the strategy of an organization determines the long-term goals and objectives. In order to do this better, there is the need, in the organization, to determine the course of actions, allocate adequate resources and determine the appropriate structure that supports a given strategy. Sound structure therefore can drive leadership, collaboration, and engagement. High performers never treat organization design as an afterthought.

Pearce & Robinson, (1997) observed that in order for organisations to achieve their goals and objectives, it is necessary for them to adjust to their environment. Gekonge (2012), findings observed that the overall KCB's Organisation structure was changed in 2011 to make the organisation more efficient, effective and competitive in the Industry. The international Division was adjusted and realigned to improve the speed of decision making and as a result, raised the levels of efficiency in the Division. All these initiatives were made possible by establishing new or making adjustments in the organisation structures and thus demonstrating how KCB used Organisation Structures as a strategy to respond to competition in the ever changing and highly dynamic Kenyan Banking Industry Environment. Applegate (1994) also observed that organisational structure is a long-standing problem, especially for large corporations and hence the need for continuous improvement.

Study by Kennedy (2015) recommended that bank managers should incorporate the right strategic implementation approaches and have an organization structure that improves performance. Study by Gekonge (2012) found that the bank has successfully used organizational structure adjustments to align to market needs resulting to a competitive advantage which serve as a strategic response to completion in the industry. Similar study by Mutua (2012) found that the bank had to adopt incremental changes in the structure to match its strategies. The current Barclays bank structure is designed to improve customer service and get maximum value from customers through improved quality, shorter processes and one-stop-shop for excellent service. Study by Kola (2008), the key challenges faced in implementation and managing the change program were; regulation, technology, competition, social change, leadership, financial sustainability and client satisfaction.

4.3.2.2. Structural Design Enduring Characteristics Considered a Success Factor in Electronic Commerce Strategy Adoption

The study sought to test to what extent the enduring characteristics in structural design contributes to the achievement of electronic commerce strategy adoption in the commercial banks in Kenya. The results were tabulated as indicated in Table 15.

Structural Design Enduring Characteristics	N	Mean	Std. Deviation
Layers and span of control	244	4.21	.822
Organization culture	244	4.23	.783
Human Resource Management	244	4.32	.766
Parent-Subsidiary Relationship	244	4.15	.761
Current Organization Structure	244	4.20	.755
Information System	244	4.31	.743
Current Business Arrangement	244	4.32	.670
Organization cost efficiency	244	4.30	.694
Organization structure	244	4.23	.823
Role of center	244	4.17	.793
Shared services-off shoring and outsourcing	244	4.03	.858

Table 15: Structural Design Enduring Characteristics on the Success Factors to Electronic Commerce Strategy Adoption

The findings show layers and span of control (with a mean of 4.21 and responses spread within standard deviation of 0.822). Buchanan et al., (2003) observed unfortunate phenomenon: excessive layers and narrow spans of control, particularly among mid-level directors and managers; the result is often bureaucratic buildup, bottle-necked decision-making, and a

general lack of innovation. Employees laboring at the customer-facing end of this attenuated organization structure are hamstrung by vertical decision-making and multi-matrixed reporting relationships. Their career prospects are un-enticing and their creativity diminished. The view at the top is equally uninspiring and crowded. Organization culture (with a mean of 4.23 and responses spread within standard deviation of 0.783).

Study by Seranathna, Warren, Yeoh and Salzman (2014) established a positive correlation between adhocracy culture and e-commerce adoption. The firms with hierarchy characteristics indicated negative correlation to e-commerce adoption. Study by Sobihah (2015) also established that practice with e-commerce adoption needs to consider the organizational culture as a key element in the hotel performance; Human Resource Management (with a mean of 4.32 and responses spread within standard deviation of 0.766). Information System (with a mean of 4.31 and responses spread within standard deviation of 0.743). Study by Ngelechei and Olwenyei (2016) established that MIS enabled knowledge sharing, operational efficiency, customer relationship management, and market intelligence significantly affect achievement of competitive advantage of KCB. Current Business Arrangement (with a mean of 4.32 and responses spread within standard deviation of 0.670); Organization cost efficiency (with a mean of 4.30 and responses spread within standard deviation of 0.694); Organization structure (with a mean of 4.23 and responses spread within standard deviation of 0.823); Role of center (with a mean of 4.17 and responses spread within standard deviation of 0.793).

Parent-Subsidiary Relationship (with a mean of 4.15 and responses spread within standard deviation of 0.761), and Current Organization Structure (with a mean of 4.20 and responses spread within standard deviation of 0.755) give moderate attention as the success factor to electronic commerce strategy in commercial banks. According to IMF working paper (2016), findings reveal that parent company has a large influence on what the subsidiary can do or not do. The study established that whilst there are disadvantages of being closely related by a parent company, there are also many benefits which are associated with multinational companies; the corporate parent subsidiary relationship and choice of subsidiary strategy at Barclays Bank of Kenya Ltd has an effect on the strategy of subsidiary. However, this is inconsistent with the finding by Tallman (2011) observation that there is no inherent reason in today's world to assume that strategy leadership comes from home country. A similar Factor that is given moderate attention is role of centre. Study by (Vuylsteke, 2011) observed that Industry structure plays a powerful role in determining success or failure of e-commerce efforts. Tran and Tian (2013) found that a well designed organizational structure promotes success.

According to the findings human resource management and current business arrangement are equally the most considered a success factors in e-commerce adoption. Parent subsidiary relationship is least considered. Lee, Lee and Wu (2010) indicated that there is a direct relationship between a firm's strategy and the use of human resources. According to Gupta and Carol (1996) human resource management plays an important role in strategy implementation therefore if human resource in an organization is not managed effectively, it would potentially cause disruptions to the strategy implementation process (cited in Wei, 2006).

Al-Alawi & Al-Ali (2015) observed that factors such as the organizational context (top management support), the technology context also (perceived benefits) and the environmental context (government regulations) are positively related to e-Commerce adoption. Shared services-off shoring and outsourcing (with a mean of 4.03 and responses spread within standard deviation of 0.858) contributes least to the electronic commerce strategy adoption. The study by Mella and Pellicelli (2012) found that the tendency today is to attain global sourcing and off shoring; that is outsourcing that involves outsourcers located in countries other than that of the outsource. This tendency to outsource most of the functions and processes can take on an extreme outsourcing and lead to the formation of virtual organization, a company characterized by the pure businesses, where all the productive and economic processes have been outsourced through the formation of a suitable but flexible network. "Whereas a man builds the structure of an organization, in practice, it is this very structure that later constrains the strategic choices they make" (Hall & Sias, 1980). According to the finding, strategy, structure, and environment are closely intertwined.

4.3.2.3. The Level of Management Support for Structural Design

The study sought to test on various aspects to the design of the established pattern of relationships among the components of company that enable the paperless exchange of business information using electronic platforms like electronic data interchange, e-mail, electronic bulletin boards, fax transmissions, and electronic funds transfer. The results were tabulated as indicated in Table 16.

Management Support	N	Mean	Std. Deviation
Layers and span of control	244	4.27	.640
Organization cost efficiency	244	4.42	.600
Organization structure	244	4.38	.683
Best "fit" of organizational structure and controls for just-in-time and total quality management	244	4.27	.761

Management Support	N	Mean	Std. Deviation
Better and newer applications of organizational theories to the study of multinational enterprises	244	4.20	.852
Customer interaction total quality management	244	4.31	.710
Liberalization of market	244	4.22	.707
Decentralization of decision making	244	4.11	.949
Role of center	244	4.18	.798
Shared services-off shoring and outsourcing	244	4.07	.886

Table 16: Level of Management Support for Structural Design

The results show that 68% of the responses were within one standard deviation from the mean as supported by actual standard deviations. The findings indicates that factors that receives the highest management support are layers and span of control (with a mean of 4.27 and responses spread within standard deviation of 0.640); Organization cost efficiency (with a mean of 4.42 and responses spread within standard deviation of 0.600), Organization structure (with a mean of 4.38, and responses spread within standard deviation of 0.683), Best "fit" of organizational structure and controls for just-in-time and total quality management (with a mean of 4.27 and responses spread within standard deviation of 0.761).

The interviewed respondent mentioned that the current organization structures in commercial banks align cost factors with operational efficiency driven by technology enables cost and reporting to line managers' effectiveness. That the structure is for cost rationalization and improving of non-funded income to enhance profitability. That it ensures effective execution of functions and management of operation; mainly for efficiency and clear chain of command in the organization, support for strategic pillars of the organization by reducing levels of management hence reducing cost. Others are better and newer applications of organizational theories to the study of multinational enterprises (with a mean of 4.20 and responses spread within standard deviation of 0.852). Information System (with a mean of 4.31 and responses spread within standard deviation of 0.743) for effective and efficient control system and total quality management so as to achieve the desired organizational goal; keeping up with the time and the generation evolving of the technology, competitors, and dynamic market. Customer interaction total quality management (with a mean of 4.11 and responses spread within standard deviation of 0.707) for effective and efficient customer satisfaction and customer management; today customers are versatile due to changing economic trend (digitization)). Liberalization of market (with a mean of 4.22 and responses spread within standard deviation of 0.707) also receive high management support.

Study by Thi (2009) found that foreign entry by mergers and acquisitions of domestic banks exerts significant impacts on bank performance. However, similar study by Sun, Tong and Yan (2009) found that liberalization measure has helped to improve the quality of banking share market. Zygiaris (2000) established that the globalization of the economy and the liberalization of the trade markets have formulated new conditions in the market place which are characterized by instability and intensive competition in the business environment; that competition is continuously increasing with respect to price, quality and selection, service and promptness of delivery; and that removal of barriers, international cooperation, technological innovations cause competition to intensify; that all these changes impose the need for organizational transformation, where the entire processes, organization climate and organization structure are changed.

The factors that receive moderate support of management are decentralization of decision making with a mean of 4.11 and responses spread within standard deviation of 0.949; and Role of center with a mean of 4.18 and responses spread within standard deviation of 0.798. According to the interviewed respondents, role of centre results to proper decision making and seamless information, segregation of duties, management flow and governance. It eases decision making, and proper time management, faster and effective solution. Shared services-off shoring and outsourcing with a mean of 4.07 and responses spread within standard deviation of 0.886 gets the least management support. Study by Al-Alawi & Al-Ali (2015) observed top leadership support as positively correlated to e-commerce adoption. Muhammed, Almsafir and Alnasir (2013) observed that the relationship between manager willingness and e-commerce adoption by SMEs is significant. The commercial banks need to build up more effort on management at all levels of the organization to empower structural design, as a boost to e-commerce strategy adoption.

4.3.2.4. Extents Structural Design Factors Determine Electronic Commerce Strategy Adoption Process

The study sought to test what extent the considerations for structural design determines electronic commerce adoption in the commercial banks in Kenya. The results were tabulated as indicated in Table 17.

Structural Design Factors	N	Mean	Std. Deviation
Layers and span of control	244	4.15	.810
Organization cost efficiency	244	4.35	.757
Organization structure	244	4.23	.806
Role of center	244	4.17	.796
Shared services-off shoring and outsourcing	244	4.06	.901

Table 17: Extents Structural Design Factors Determine Electronic Commerce Strategy Adoption Process

Findings shows that, Organization cost efficiency with a mean of 4.35 and responses spread within standard deviation of 0.757; and Organization structure with a mean of 4.23 and responses spread within standard deviation of 0.806 are the highest determinants of electronic commerce strategy in commercial banks in Kenya. Role of center with a mean of 4.17 and responses spread within standard deviation of 0.796; and Layers and span of control with a mean of 4.15 and responses spread within standard deviation of 0.810 give moderate determination. Shared services-off shoring and outsourcing with a mean of 4.06 and responses spread within standard deviation of 0.901 is however the least determinant of electronic commerce strategy adoption in commercial banks in Kenya.

This is consistent with the findings by McGregor & Vrazalic (2004) that SMEs need to be re-educated about the benefits of E-commerce because this type of technology is still perceived by SMEs as being unsuitable to the way they do business. The findings by Kebaya, Okibo & Nyangau (2015) established that indicated that structural changes implemented facilitated the increase in productivity and efficiencies by outsourcing non-core activities. (Gekonge, 2012) observed that Bank should continue to review her organisation structure from time to time in order to benefit fully from the ever-changing banking information technology to reach out to new markets regionally and globally and to maintain the competitive advantage thus far obtained. Oslon, Slater and Hult (2005), established that three structural dimensions that affect communication, co-ordination and decision making, which are core to strategy implementation, are formalization, centralization and specialization. The results show that 68% of the responses were within one standard deviation from the mean as supported by actual standard deviations

4.3.3. Influence of Capacity for Change on Electronic Commerce Strategy Adoption by Commercial Banks in Kenya

The third objective of the study was to ascertain the influence of capacity for change on electronic commerce strategy as adopted by commercial banks in Kenya. The objective was verified from respondent by use of Likert scaled statement on questionnaire.

4.3.3.1. Capacity for Change in the Organization

The study sought to establish whether the organization practice transition from one state to another with focus to being different from the other banks. The results were tabulated as indicated in Table 18.

Response	Frequency	Percent
YES	234	95.9
NO	10	4.1
Total	244	100.0

Table 18: Capacity for Change in the Organization

The finding Yes 95.9% and No 4.1%, indicate that majority of commercial banks in Kenya identify with transition from one state to another with focus to being different from the other banks (the overall capability of an organization to either effectively prepare for or respond to an increasingly unpredictable and volatile environmental context). The findings by Kola (2011) also established that commercial banks in Kenya have more emphasis on ICT and staff changes in driving the change industry. The rapid and continual innovation in technology is critical factor influences change management process.

4.3.3.2. Organizational ability to transition from one state to another with focus of being different

The study sought to establish the level of capacity to change in the commercial banks in Kenya. This is because the ability of organizations to manage and survive change is becoming increasingly important in an environment where competition and globalization of markets are ever intensifying (Cao & McHugh, 2005). The results were tabulated as indicated in Table 19 below.

Ability to Transition	Frequency	Percent
Very Low	3	1.2
Low	4	1.6
Uncertain	11	4.5
High	112	45.9
Very High	114	46.7
Total	244	100.0

Table 19: Organizational ability to transition from one state to another with focus of being different

The findings show: very high 46.7%, high 45.9%, uncertain 4.5%, low 1.6%, and very low 1.2%. The largest majority suggested very high and high. This indicates that the level of capacity to change in majority commercial banks (92.6%) is between high and very high. This indicates that commercial banks are aware of the need for change, partly because they need to ensure their own survival, and partly because some matters simply require improvement. This study results showed that Kenyan commercial banks are currently operating in a rapidly changing environment as compared to the previous years and the rapidly changing environment motivated banks to be more proactive in generating new ideas and improving performance. This study results showed that change in the Kenyan banks was positive and it acted as leverage for success and the change management practices used by the banks reduced the chances of resistance associated with adoption on new ideas. The results of the study also show that the rate and impact of change was not uniform across all banks and that banks could not apply the same change management practices in-order to achieve the same results. The findings of the study revealed that change influences a sense of belonging and commitment by employees to be more productive.

The findings by Anderson (2017) established that whether your organization has enough workload, capacity for change is a significant risk factor to your success. Most organizations are running at over-capacity: current operations consume the organization's capacity, and then leaders pile change on top of painfully stretched workloads without "taking anything off people's plates." According to the finding, this occurs regularly at senior and middle management levels. Capacity is an overlooked strategic issue. Executives, being rightfully demanding, are generally poor judges of their organization's true capacity to operate effectively while taking on major organizational change. Most either do not pay attention to capacity issues, or do not understand the dynamics and impacts that capacity challenges have on their people and organization. De Nederlandsche and Authority for Financial Market report (2014) established that banks with capacity to self reflection are the most capable of change.

4.3.3.3. Capacity for Change Factors Influence on Electronic Commerce Strategy Adoption

The study sought to test what extent does the following influences Internet shopping, online stock and bond transactions, the downloading and selling of "soft merchandise" and business-to-business transactions as adopted by your organization. The results were tabulated as indicated in Table 20.

Capacity for Change Factors	N	Mean	Std. Deviation
Adaptability and flexibility	244	4.45	.771
Change management capability	244	4.25	.753
Change culture	244	4.10	.917
Ability for self assessment	244	4.21	.847
Self critical and understanding the need to design task, structure, process, and systems in response to external changes	244	4.34	.833
The company consider the ability to learn from past experience	244	4.39	.738
Experiencing continuous learning	244	4.33	.759
The company engaged in building bridges between the requirements and external environment and internal capacity	244	4.30	.794

Table 20: Capacity for Change Factors Influence on Electronic Commerce Strategy Adoption

The findings show that all capacity for change factors tested influences electronic commerce strategy adoption. Adaptability and flexibility with a mean of 4.45 and responses spread within standard deviation of 0.771 enjoys highest influence on electronic commerce strategy adoption. Similar finding by Ochola (2015) demonstrate that, first employee level of IT capacity, level of education, age of firm and pervaded innovation characteristics of complexity, and relative advantage have a significant positive effect on e-commerce, second perceived innovation Compatibility, complexity, trialability, observability and security/confidentiality affect e-commerce adoption negatively and third age of owner/manager and

business focus have no significant effect on e-commerce e adoption. On the same level of influence is change management capability (with a mean of 4.25 and responses spread within standard deviation of 0.753).

A study by Kivuva (2012) established that Commercial Bank of Africa has established a department that is expected to manage and implement change in the bank. Similar study by Onyango (2008) found that the factors influencing change management practices in the banks are to a very great extent ICT, management of the board, service provision, and organisation structure and client target. The study established that banks prefer formal structured process in strategic planning and that banks reviewed their change management strategy on a quarterly basis. The study also found that key challenges faced in implementation and managing the change program were; regulation, technology, competition, social change, leadership, financial sustainability and client satisfaction. Study by Gachoka (2015) established that change management especially through embracing information Technology is a success factor.

Change culture (with a mean of 4.10 and responses spread within standard deviation of 0.917), enjoys least influence on electronic commerce strategy adoption. A study by Kebaya et al., (2015) found out that cultural change affects strategic planning of commercial banks a great extent. Cultural change affects values and capabilities, attitudes, experiences, habits and relationships, beliefs/norms, corporate mission, vision and goals, selection and implementation of strategies, strengths and weaknesses and opportunities and threats; Ability for self assessment (with a mean of 4.21 and responses spread within standard deviation of 0.847) is also having high influence of electronic commerce strategy adoption.

Njenga (2014) established that leading commercial banks perform self assessment from bottom of the organization by initiating internal assessment according to the procedures described in relation to the award guidelines; Self critical and understanding the need to design task, structure, process, and systems in response to external changes (with a mean of 4.34 and responses spread within standard deviation of 0.833); The company consider the ability to learn from past experience (with a mean of 4.39 and responses spread within standard deviation of 0.738); Experiencing continuous learning (with a mean of 4.33 and responses spread within standard deviation of 0.759). Findings by Tannenbaum (1997) on enhancing continuous learning established that each organization has a unique learning profile and relies on different sources of learning to develop individual competencies. Those organizations with stronger learning environments appeared to demonstrate greater organizational effectiveness; company engaged in building bridges between the requirements and external environment and internal capacity (with a mean of 4.30 and responses spread within standard deviation of 0.794) also highly influence electronic commerce strategy adoption.

4.3.4. Influence of Leadership on Electronic Commerce Strategy Adoption by commercial banks in Kenya

The fourth objective of the study was to determine the influence of leadership on electronic commerce strategy as adopted by commercial banks in Kenya. The objective was verified from respondent by use of Likert scaled statement on questionnaire.

4.3.4.1. Leadership at All Level of the Organization

The study sought to test whether the organization recognize the process of transforming it from what it is to what it is to what the leaders would have it become. The results were tabulated as indicated in Table 21.

	Response	Frequency	Percent
	Yes	240	98.4
	No	4	1.6
	Total	244	100.0

Table 21: Leadership at all level of the organization

The findings indicate YES-98.4% and NO-1.6% the findings indicate a large percentage of commercial banks recognizing the importance of development of leaders at all level of the organization. "Companies are successful to the extent that they have leaders at all levels of the organization. Any institution that invests in the development of leaders at all levels is going to get ahead of its competition"- Noel Tichy, Director of the Global Leadership Program at the University of Michigan Business School. Griffins (2011) identified leadership in an organization as one of the main factors influencing strategy implementation by providing a clear direction, up to date communications, motivating staff and setting up culture and values that drives organizations to better performance. Thompson and Strickland (2007) further stated that strategic leadership keeps organizations innovative and responsive by taking special plans to foster, nourish and support people who are willing to champion new ideas, new products and product applications. According to Chung (2016) leadership style has a positive impact on the application of e-commerce.

4.3.4.2. Leadership Contribution to Competitive Advantage

The study sought to establish what extent the leadership experience in organization contributor to competitive advantage over other competitors in the banking industry. The results were tabulated as indicated in Table 22.

Leadership Contributions	N	Mean	Std. Deviation
Leadership performance	244	4.55	.649
Middle management effectiveness	244	4.38	.707
Leadership alignment with strategy	244	4.49	.651

Table 22: Leadership Contribution to Competitive Advantage

The findings indicate that Leadership performance (with a mean of 4.55 and responses spread within standard deviation of 0.649) experiences in commercial banks in Kenya is the greatest contributor to competitive advantage; this is followed closely with Leadership alignment with strategy (with a mean of 4.49 and responses spread within standard deviation of 0.651). Middle management effectiveness (with a mean of 4.38 and responses spread within standard deviation of 0.707) contributes least to competitive advantage. Bass and Bass (2009) established that often, middle managers are responsible for implementing strategic decisions made by senior executives; if they don't agree, they can work against implementation. The results show that 68% of the responses were within one standard deviation from the mean as supported by actual standard deviations.

This supported by the findings by Zhu et al. (2005), that effective leadership is the main cause of competitive advantage for any kind of organization. According to some respondent, commercial banks in Kenya are increasingly finding a lack of capable leaders at executive, functional and general management levels. This trend is predicted only to get worse; McKinsey Global Institute (2012) forecasts that employers in advanced economies will have a shortage of 16 to 18 million workers in skilled positions requiring tertiary education compared to what will be available in the external labour market. To contend with this reality, Byham, Smith, & Paese (2002) outline the three options available to organisations: Intensify efforts to hire hard-to-find, increasingly expensive people from outside their organisation; Do nothing and likely experience a competitive decline, which could lead to being acquired or going out of business; or Tap into the quality people already in their organisation, thus growing and keeping their own leaders.

4.3.4.3. Leadership Support for Electronic Commerce Strategy Adoption

The study sought to establish to what extent leadership supports the use of internet for purchase and sale of goods and services, including service and support after sale in your organization. The results were tabulated as indicated in Table 23.

Leadership Support	N	Mean	Std. Deviation
Management delegate responsibilities to staff and incorporate their ideas	244	4.37	.751
Management communicate operational and changes to the staff	244	4.35	.731
Management commitment necessary to the adoption of electronic	244	4.30	.814
Management actively guide and motivate employee to adopt	244	4.29	.781
Ensuring a common understanding about organizational priorities	244	4.34	.694
Clarifying responsibilities among managers and organizational units	244	4.28	.712
Uncovering and remedying problems in coordination and communication across the organization and across boundaries inside and outside the organization	244	4.25	.701
Gaining the personal commitment to a shared vision from managers throughout the organization	244	4.26	.793
Keeping closely connected with what is going on inside and outside the organization and with its consumers	244	4.23	.838
Empowering newer managers and pushing authority lower in the organization	244	4.16	.878
Management support influence the perception of employees to usefulness of electronic commerce strategy to the business	244	4.23	.806

Table 23: Leadership Support for Electronic Commerce Strategy Adoption

The results show that 68% of the responses were within one standard deviation from the mean as supported by actual standard deviations. Findings indicate management of commercial banks in Kenya delegate responsibilities to staff and incorporate their ideas (with a mean of 4.37 and responses spread within standard deviation of 0.751). The study by Okombo, Obonyo and Oloko (2014), established that effective delegation in organizations improves employee performance and organizational performance at large. Similarly, the management communicate operational and changes to the staff (with a mean of 4.35 and responses spread within standard deviation of 0.731); Management commitment necessary to the adoption of electronic (with a mean of 4.30 and responses spread within standard deviation of 0.814).

Study by Yulk and Mahsud (2010) established that leaders need to appreciate and take advantage of opportunities to increase their self awareness of relevant traits, skills, and behaviors, and to develop necessary skills before they are needed. Leaders should also recognize their responsibility for helping subordinates develop and use the skills and behaviors required for flexible and adaptive leadership. To be flexible and adaptive in a world full of change and uncertainty is difficult and stressful and leaders need to have a high level of commitment to do what is necessary and ethical.

Similarly, management actively guide and motivate employee to adopt (with a mean of 4.29 and responses spread within standard deviation of 0.781); Ensuring a common understanding about organizational priorities (with a mean of 4.34 and responses spread within standard deviation of 0.694); Clarifying responsibilities among managers and organizational units (with a mean of 4.28 and responses spread within standard deviation of 0.712); Uncovering and remedying problems in coordination and communication across the organization and across boundaries inside and outside the organization (with a mean of 4.25 and responses spread within standard deviation of 0.701); Gaining the personal commitment to a shared vision from managers throughout the organization (with a mean of 4.26 and responses spread within standard deviation of 0.793); Keeping closely connected with what is going on inside and outside the organization and with its consumers (with a mean of 4.23 and responses spread within standard deviation of 0.838). Management support influence the perception of employees to usefulness of electronic commerce strategy to the business (with a mean of 4.23 and responses spread within standard deviation of 0.806). The findings show high attention in the commercial banks.

Findings by Kiplangat, Shisia and Asienga (2015) established that support from senior management which is part of the Human resource competencies, influences the adoption of E-Commerce to a large extent. However, empowering newer managers and pushing authority lower in the organization (with a mean of 4.16 and responses spread within standard deviation of 0.878), receives the least attention in the commercial banks. Findings by Nyandoro (2015) established that managers coached and facilitated their employees by changing leadership style.

The findings by Demircis and Erbus (2010) established that the right to share authority and to codetermine important decisions is accompanied by responsibility to exercise this power for the legitimate benefit of multiple stakeholders. Responsible decision-making requires that employees have access to managerial level knowledge and information about the enterprise, as well as to opportunities to learn new skills that will enable them to interpret and use the information. Such information may, however, involve technical, economic, or interpersonal and organizational aspects of the firm that many employees will be unprepared by their previous education, training, and work experience to understand and make use of. A democratic workplace will need to provide for the ongoing education and training of employees not only in relation to their immediate work tasks but also for their broader role in participating in the management of complex enterprises.

The findings by Sophonthummapharn (2005), established that leaders who have high shared leadership tend to have a higher level of e-commerce adoption than other two types of leadership. It would therefore seem that the leaders who are high in both task and people concern would be early adopters in e-commerce. Okwachi et al. (2013) studied Kenyan SMEs and found out that leadership practice has a direct relationship with strategy implementation. The study concluded that managerial practices greatly affect implementation of strategic plan in Kenya.

4.3.5. Moderating Influence of Statutory Regulations on Organizational capabilities and Electronic Commerce Strategy Adoption by commercial banks in Kenya

The fifth objective of the study was to model the moderating influence on statutory requirement on the relationship between organizational capabilities and electronic commerce strategy as adopted by commercial banks in Kenya. The objective was verified from respondent by use of Likert scaled statement on questionnaire.

4.3.5.1. Statutory Regulations in the Commercial Banks in Kenya

The study sought to test the extent to which specific statutory requirements have any influence on e-commerce adoption, structural design, leadership, capacity to change, and business process re-engineering in the organization. The results were tabulated as in Table 24.

Statutory Regulations	N	Mean	Std. Deviation
Banking Act	244	4.47	.644
Website usage	244	4.20	.867
Companies Act	244	4.27	.833
Central bank of Kenya Act	244	4.47	.657

Table 24: Extent Statutory Regulations Effect Organizational Capabilities in the Commercial Banks in Kenya

The findings show that banking act (with a mean of 4.47 and responses spread within standard deviation of 0.644), website usage (with a mean of 4.20 and responses spread within standard deviation of 0.867), companies act (with a mean of 4.27 and responses spread within standard deviation of 0.833), central bank of Kenya act (with a mean of 4.47 and responses spread within standard deviation of 0.657), have extensive influence on the organizational capabilities.

The results show that 68% of the responses were within one standard deviation from the mean as supported by actual standard deviations. Banking act and Central bank of Kenya act affects the organizational capabilities of commercial banks in Kenya the most. This is consistent with the Kenyan Banking Sector Report (2007) that key issues affecting the banking industry in Kenya include: changes in the regulatory framework where liberalization exists but the market still continues to be restrictive, declining interest margins due to customer pressure leading to mergers and reorganizations, increased demand for non-traditional services including the automation of a large number of services and a move towards emphasis on the customer rather than the product and introduction of non-traditional players, who now offer financial services products. However, the findings by Bhaskar, Kumar and Prasad (2014) indicated that procedures, rules, manuals, circulars by themselves cannot establish control unless somebody in an organization watches and reports on the extent of compliance of prescribed norms, rules and regulations.

4.3.5.2. Influence of Statutory Regulation on Electronic Commerce Strategy Adoption

The study sought to understand whether statutory regulations affect ecommerce adoption. The respondents were asked to indicate in their opinion, to what extent is a legal regulation considered a success factor in the banking industry for electronic commerce strategy adoption. The results are as in table 25.

Statutory Regulations	N	Mean	Std. Deviation
Banking Act	244	4.38	.757
Website Usage	244	4.18	.866
Companies Act	244	4.28	.784
Central bank of Kenya Act	244	4.47	.637

Table 25: Influence of Statutory Regulation on Ecommerce Strategy Adoption

According to the finding shows that Banking Act (with a mean of 4.47 and responses spread within standard deviation of 0.644), Website usage (with a mean of 4.20 and responses spread within standard deviation of 0.867) Companies Act (with a mean of 4.27 and responses spread within standard deviation of 0.833), and Central bank of Kenya Act (with a mean of 4.47 and responses spread within standard deviation of 0.637), are extensively considered as success factor in electronic commerce strategy adoption. The results show that 68% of the responses were within one standard deviation from the mean as supported by actual standard deviations. The findings indicate that the central bank of Kenya act is considered a success factor to ecommerce adoption by commercial banks in Kenya followed by the banking act.

The respondents indicated that statutory regulations are critical factors for consideration while dealing with electronic commerce adoption in the commercial banks in Kenya since: According to the respondents: It aids in curbing fraud and money laundry acts that might cause loss of income and capital; regulates wage and victimization of staff; It important with regard to customer privacy and disclosure of sensitive information, details and contacts, and offers protection against illegal hacking of accounts. It moderates competition, to promote ethical behavior, and to keep law and order in business performance; protects the end user/consumer from exploitation; obligates social factors such as trust between business partners involved, eliminate bad use of websites hence creating friendly business field. The regulations drive change in the wider perspective and therefore their considerations create a weighing machine which become the reference point before adoption of any new idea in the banking sector.

4.3.6. Electronic Commerce Strategy Adoption by Commercial Banks in Kenya

4.3.6.1. Level of Usage of the Electronic Devices in the Organization

The respondents were asked to indicate the extent to which they have utilized the bank to bank e-commerce service. The results were tabulated as indicated in Table 26.

Electronic Devices	N	Mean	Std. Deviation
Mobile phone	244	4.52	.814
Fixed lines	244	4.20	.995
Computers	244	4.64	.648
Internet	244	4.43	.870
Website	244	4.30	.991

Table 26: level of Usage of Electronic Devices in the Organization

The results show that 68% of the responses were within one standard deviation from the mean as supported by actual standard deviations. According to the findings, computers have the highest usage in the commercial banks, followed by mobile phone, and internet. Fixed lines are least popular. This finding is consistent with the finding by Magutu et al., (2011) that Internet banking, EFT, mobile and office banking are the most commonly used B2C e-commerce services by customers, while Tele-banking and branch banking are moderately used. Home banking is the least popular B2C ecommerce. Study by Ngumi (2013) established that banks should leverage on mobiles phones in order to grow their business and customer base. However, study by Kamau and Oluoch (2016) showed that ATM banking had the highest influence on commercial bank performance and more ATM and banking services should more availed through use of it.

4.3.6.2. Extent to Which Your Organization is Considers Key Success Factors for Electronic Commerce Adoption

The study sought to test the extent to which the commercial banks in Kenya considers the success factors for the use of internet for purchase and sale of goods and services, including service and support after sale. The results were tabulated as indicated in Table 27.

Key Success Factors	N	Mean	Std. Deviation
Choice of enabling technology	244	4.48	.663
Matching with economic opportunities	244	4.37	.783
Executing business innovation	244	4.43	.714
Understanding customer value	244	4.39	.807
Constructing alliance with competitors	244	4.37	.942

Table 27: Extent to which Organization Considers Key Success Factors for Electronic Commerce Adoption

The results show that 68% of the responses were within one standard deviation from the mean as supported by actual standard deviations. According to the findings, choice of enabling technology (with a mean of 4.48 and responses spread within standard deviation of 0.663), is highest considered key success factor to e-commerce adoption in the commercial banks. This finding is consistent with the study findings by Odawa (2016) found that self service technologies (SSTs) such as internet banking, ATMs, Smart cards, credit cards and mobile banking were important for the commercial banks as they have resulted in improved service delivery, reduced operating costs, convenience to customers and are mostly secure. SSTs adoption by banks was found to have resulted in efficiency in serving customers thus increasing market share through customer numbers and impacting revenue positively through uptake of bank products. Jia and Min (2007) established that in order to cope with E-commerce innovation successfully, commercial banks should therefore improve on choice of enabling technology, matching with economic opportunities, executing business innovation, understanding customer value, constructing alliance with competitors.

4.3.6.3. Extent the Electronic Commerce Strategy Application Tools Are Used to Your Organization Success in the Banking Industry

The respondents were asked to indicate the extent to which they have utilized the bank to bank e-commerce service. The results were tabulated as indicated in Table 28.

Electronic Commerce Strategy Application Tools	N	Mean	Std. Deviation
Electronic marketing	244	4.34	.799
EFT electronic payment bank to bank	244	4.54	.716
EFT via EDI	244	4.30	.803
Automated clearing through EFT	244	4.39	.801
Settlement of payment on a gross basis in real time	244	4.49	.745

Truncation and cheque imaging	244	4.48	.814
Settlement of Government Securities electronically	244	4.34	.852
Internet banking- direct	244	4.47	.798
Office banking	244	4.23	.918
Mobile Banking	244	4.48	.772
Branch banking	244	4.35	.835
Tele-banking	244	4.07	1.026
Home banking	244	3.93	1.169
Customer support service	244	4.39	.822
Orders and delivery	244	4.04	.985
Payment system	244	4.37	.761

Table 28: Extent the Electronic Commerce Services

The results show that 68% of the responses were within one standard deviation from the mean as supported by actual standard deviations. This finding shows that B2B commerce services key to commercial banks in Kenya include: EFT electronic payment bank to bank (with a mean of 4.34 and responses spread within standard deviation of 0.799); EFT via EDI (with a mean of 4.54 and responses spread within standard deviation of 0.716); Automated clearing through EFT (with a mean of 4.30 and responses spread within standard deviation of 0.803); Settlement of payment on a gross basis in real time (with a mean of 4.39 and responses spread within standard deviation of 0.801); Truncation and cheque imaging transmission (with a mean of 4.49 and responses spread within standard deviation of 0.745); Settlement of government securities electronically (with a mean of 4.48 and responses spread within standard deviation of 0.814).

This is consistent with the findings by Magutu et al., (2011) that EFT electronic payment from bank to bank, EFT via EDI, automated clearing through EFT and the settlement of payment on a gross basis in real time. However, the findings differ with that of Magutu et al., (2011) on the fact that truncation and cheque imaging transmission and Settlement of Government Securities electronically have gained prominence with banks. This is because of the developing nature of economy and increased investment in e-government. The findings by Ayuma and Munyoki (2012) also indicated that the main factors which influenced the adoption of e-commerce strategy in banks to a larger extent are customer support service and the payment systems.

B2C e-commerce services most common include: Customer support service (with a mean of 4.39 and responses spread within standard deviation of 0.822); electronic marketing (with a mean of 4.34 and responses spread within standard deviation of 0.799); internet banking-direct access to your account (with a mean of 4.34 and responses spread within standard deviation of 0.852); Office banking (with a mean of 4.47 and responses spread within standard deviation of 0.798); Mobile banking (with a mean of 4.48 and responses spread within standard deviation of 0.772); branch banking (with a mean of 4.35 and responses spread within standard deviation of 0.835); payment system (with a mean of 4.37 and responses spread within standard deviation of 0.761). Moderately used services are Tele-banking (with a mean of 4.07 and responses spread within standard deviation of 1.026) and orders and delivery (with a mean of 4.04 and responses spread within standard deviation of 0.985). Least used service is home banking (with a mean of 3.93 and responses spread within standard deviation of 1.169). This is consistent with the findings by Magutu et al., (2011) that internet banking, EFT, mobile and office banking are the most commonly used B2C e-commerce services by customers with a mean greater than 4, while Tele-banking and branch banking are moderately used. Home banking is the least popular B2C ecommerce.

4.3.6.4. Extent That Change in Organizational Capabilities Success Indicators Would Influence Electronic Commerce Strategy Adoption in Commercial Banks in Kenya

The studies sought to test the extent that change in organizational capabilities are viewed to affect electronic Commerce practices in the commercial banks in Kenya. The results were tabulated as indicated in Table 29.

Capability Indicators	N	Mean	Std. Deviation
Project excellence/ optimization	244	4.31	.673
Project management	244	4.27	.629
Layers and span of control	244	4.22	.695
Organization cost efficiency	244	4.41	.645
Organization structure	244	4.38	.614
Role of center	244	4.29	.714
Shared services	244	4.30	.693

Business analysis and information management	244	4.32	.730
Adoptability and flexibility	244	4.32	.699
Culture	244	4.28	.717
Leadership performance	244	4.29	.720
Leadership pipeline	244	4.30	.699
Middle management effectiveness	244	4.26	.670
Bank act	244	4.39	.667

Table 29: Extent That Change in Organizational Capability Indicators Would Influence Electronic Commerce Strategy Adoption in Your Organization

The results show that 68% of the responses were within one standard deviation from the mean as supported by actual standard deviations. From the findings, Organization cost efficiency (with a mean of 4.41 and responses spread within standard deviation of 0.645) present the highest influence on ecommerce adoption in the commercial banks in Kenya. Least influence is presented by Layers and span of control (with a mean of 4.22 and responses spread within standard deviation of 0.695). The role of centre helps CEOs of companies with bloated structures; determine the best organizational model for their firm or group of holdings. It allows for improved decision making and resource allocations by assigning with functions and decisions are the corporate headquarters' responsibility and with the generating units can best handle. BCG found that even the companies that perform better needs to pay attention to potential weaknesses in leadership pipelines without development of the required leadership and success pool, high quality leadership performance cannot be assured.

From the findings of Davenport & Short (1990), implementation of BPR is highly dependent on an effective project management as existing processes would be redesigned and new process would be created by abolishing the existing organizational functions. The importance of effective project management cannot be overlooked in the proper planning and management of BPR implementation (Zairi & Al-Mashari, 1999). Cost reduction can lead to more innovative agreements on final pricing thus achieving price leadership in the market for competitive advantage (Dung, 2015). Walker (2004) points out that in order to achieve competitive advantage, a firm must offer value to customers at a cost that produces economic performance superior to rivals.

The purpose of strategic leadership during strategy implementation is to maintain effective communication, make crucial decisions, motivate staff and build a strong team that deliver's good result. Strategic leadership has been identified in the past studies as one of the key drivers of effective strategy implementation (Bossidy & Charan, 2002; Collins, 2001). Findings by Zenger (2013) asserts that the global recession of 2008 to 2012 has led to two major outcomes which are impacting the potential success of the leadership pipeline: one being that senior executives are staying in their positions longer in order to gain more financial security; the other blocker being that organizations are experiencing a reduction in hiring due to budget constraints. Both of these outcomes have led to a lack of millennial leadership opportunities and as such, have somewhat diminished the opportunities of internal hiring that an effective pipeline brings.

4.3.6.5. Electronic Commerce Strategy Benefits

The study sought to test the reason why Commercial Banks adopts electronic commerce strategy. The results were tabulated as in Table 30.

Electronic Commerce Benefits	N	Mean	Std. Deviation
They add value to the organization	244	4.50	.605
The strategy is compatible with business processes	244	4.49	.563
The strategy is not complex	244	4.14	.892
The strategy can be tried before implementation	244	4.33	.719
The strategy is observable	244	4.30	.701

Table 30: Electronic Commerce Benefits

The results show that 68% of the responses were within one standard deviation from the mean as supported by actual standard deviations. From the findings, commercial banks in Kenya adopt electronic commerce strategy majorly because the strategy adds value to the organization (with a mean of 4.50 and responses spread within standard deviation of 0.605), followed by the fact that the strategy is compatible with business processes (with a mean of 4.49 and responses spread within standard deviation of 0.563). The least considered is that it is not complex. This is consistent with the findings by Magutu et al., (2011) that the major benefits derived from e-commerce are: quickened transaction processing, provided 24/7 availability of your services, increased customer convenience, increased customer loyalty, enabled banks to collect customer

data, increased bank turnover and profitability, and lastly reduced bank operating overheads. Other benefits include: e-commerce has provided customers with valuable information about bank business, reduced phone costs and paper work, increased productivity of bank staff and lastly reduced marketing and advertising costs.

The study respondents mentioned the following as reasons why individual commercial banks have different levels of electronic commerce strategy: getting a competitive advantage over the other banks; ensuring that technology is tailor-made according to unique products which they give to specific customer; to be relevant; adopting cost management; safeguarding customers needs; achieve a robust banking system; divers inputs on upcoming technology oriented ideas to expand and capture more market by keeping tabs with current market trend; the introduction of Cazy Banking which has enabled our customers to access and do bank transaction without necessarily visiting the banking hall; best workforce- informed staff as well as a platform that allows for the adoption of ecommerce at a high rate; and changing key target to youth.

The findings by (UNCTAD, 2002) established that adoption of electronic commerce strategy offers a great opportunity to SMEs to gain greater global access and reduced transaction costs, provides substantial benefits via improved efficiencies and raised revenues; facilitates access to potential customers and suppliers, productivity improvements, customization of products and services and information exchange and management. Chien Chao (2008) also noted that the adoption of e-commerce has led to improved customer service, increased revenue, reduction of operation cost and increased market share, all geared toward enhancing competitive position in the industry. Sophonthummapharn (2005) also established that larger firms are likely to have a higher level of e-commerce adoption.

4.4. Inferential Analysis

This focuses on evaluating the strengths and direction of relationship between variables inferring findings from the sample to the population (Bryman & Bell, 2015). In this study, the inferential analysis focuses on evaluating the relationship between the various organizational capabilities and electronic commerce strategy as adopted by commercial banks in Kenya. The multiple linear regression technique was used with the following model being tested:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon, \text{Model 1}$$

Where Y=Electronic commerce strategy adoption by commercial banks in Kenya; X₁=Business Process Reengineering; X₂=Structural design; X₃= Capacity for change; X₄= Leadership; ε = error term. Table 31 presents a summary of the model 1.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.650(a)	.422	.413	.423

Table 31: Model 1 Summary

a Predictors: (Constant), Leadership, Business Process Re-engineering, Capacity for Change, Structural Design

As the Table 31 shows, R-Square is 0.422, which indicates that the model explains the 42.2% of electronic commerce strategy adoption by the commercial banks in Kenya. According to Toole (2013), a model that yields an R Square of above 0.25 is considered to be fit in social science.

Table 32 presents the Analysis of Variances (ANOVA) of the model. The ANOVA test examines the significance of the relationship between the independent variable and the dependent variable by comparing the predicting power of the model with that of the intercept only model (Faraway, 2002).

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	31.296	4	7.824	43.676	.000(a)
	Residual	42.814	239	.179		
	Total	74.111	243			

Table 32: ANOVA for the model 1

a Predictors: (Constant), Leadership, Business Process Re-engineering, Capacity for Change, Structural Design

b Dependent Variable: E-commerce adoption

The regression model as illuminated in the ANOVA Table 32 predicts the dependent variable significantly well. The statistical significance of the regression model run is 0.000 which is much lower than the study's level of significance of 0.05. This implies that the overall regression model statistically significantly predicts the outcome variable-electronic commerce adoption by commercial banks in Kenya.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.361	.250		5.452	.000
	Business Process Re-engineering	.074	.062	.072	1.206	.229
	Structural Design	.210	.062	.222	3.367	.001
	Capacity for Change	.216	.051	.279	4.238	.000
	Leadership	.194	.055	.227	3.537	.000

Table 33: Regression Coefficients for Model 1
a Dependent Variable: E-commerce adoption

Table 33 presents the Analysis of Variances (ANOVA) of the model. The ANOVA test examines the significance of the relationship between the independent variable and the dependent variable by comparing the predicting power of the model with that of the intercept only model (Faraway, 2002). Based on Table 33, the estimated regression equation was: Electronic commerce strategy adoption by commercial banks in Kenya (Y)

$$(Y) = 1.361 + 0.074X_1 + 0.210X_2 + 0.216X_3 + 0.194X_4 + \varepsilon, \quad \text{Model 1}$$

4.4.1. Influence of Business Process Reengineering on electronic commerce strategy adoption by commercial banks in Kenya

The first objective of the study was to examine the influence of Business Process Reengineering on the electronic commerce strategy adoption by commercial banks in Kenya. As shown in Table 33 the t-statistics for Business Process Reengineering yielded a p-value of 0.229. Since this p-value is greater than 0.05, we fail to reject the null hypothesis and affirms that there is no statistically significant relationship between the Business Process Reengineering and electronic commerce strategy adoption by commercial banks in Kenya at 0.05 level of significance. Findings by Sibhato and Singh (2012) show that; the current progress of BPR in the institution is at low level. A similar finding by Attaran (2003) indicated that, in many cases Information Technology was the biggest burrier to rapid and radical change because radical change required Information System redesign. The fundamental difficulty is the fact that process is reengineered while management, infrastructure does not.

4.4.2. Influence of Structural Design on electronic commerce strategy adoption by commercial banks in Kenya

The second objective of the study was to examine the influence of structural design on electronic commerce strategy adoption by commercial banks in Kenya. As shown in Table 33 the t-statistics for structural design yielded a p-value of 0.001. Since this p-value is less than 0.05, we reject the null hypothesis and affirm that there is statistically significant relationship between the quality of structural design and electronic commerce strategy adoption by commercial banks in Kenya at 0.05 level of significance. Periasamy et al., (2002) found that the appropriateness of the matrix structure for e-commerce has been recognized and companies are starting on this route.

Tran and Tian (2013) established that a well designed organizational structure promotes success, and that businesses require structure to grow and be profitable. Designing an organization structure helps top management identify talent that needs to be added to the company. This is also consistent with the findings by Gekonge (2012) that KCB is now a fairly organic organisation running under a Divisional Structure compared to ten years ago when it was largely bureaucratic with too much government influence. The bank has therefore successfully used Organisation Structure adjustments to align to market needs resulting to a competitive advantage which serves as a strategic response to competition in the industry. Olson, Slater and Hult (2005) found that overall firm performance is strongly influenced by how well a firm's business strategy is matched to its organizational structure and the behavioral norms of its employees.

4.4.3. Influence of Capacity for Change on Electronic Commerce Strategy Adoption by Commercial Banks in Kenya

The third objective of the study was to examine the influence of capacity for change on electronic commerce strategy adoption by commercial banks in Kenya. As shown in Table 33 the t-statistics for capacity for change yielded a p-value of 0.000. Since this p-value is less than 0.05, we reject the null hypothesis and affirm that there is statistically significant relationship between the capacity for change and electronic commerce strategy adoption by commercial banks in Kenya at 0.05 level of significance. This is consistent with the findings by Florescu & Dumitru (2007) that Changes management is a condition for the success or failure of the e-commerce. Study by Kebaya, Okibo & Nyangau (2015) found out that cultural change affects strategic planning of commercial banks a great extent; That cultural change affects values and capabilities, attitudes, experiences, habits and relationships, beliefs/norms, corporate mission, vision and goals, selection and implementation of strategies, strengths and weaknesses and opportunities and threats. Study by Skvarciany & Iljins (2015) found that change management plays a key role in trust building in Commercial banks that ensures competitiveness.

4.4.4. Influence of Leadership on Electronic Commerce Strategy Adoption by Commercial Banks in Kenya

The fourth objective of the study was to examine the influence leadership on electronic commerce strategy adoption by commercial banks in Kenya. As shown in Table 33 the t-statistics for project team effort yielded a p-value of 0.000. Since this p-value is less than 0.05, we reject the null hypothesis and affirm that there is statistically significant relationship between the leadership and electronic commerce strategy adoption by commercial banks in Kenya at 0.05 level of significance. Olson, Slater, and Hult (2005) found that Leadership style has a positive impact on the application of ecommerce. This consistent with the findings by Kenneth, Rebecca & Ayodo (2012) that management support and leadership is crucial in adoption of electronic commerce.

Teo & Tan's (2003) also argued that the adoption of electronic commerce results in changes in the organizations whose aim is to ensure participation and support. Similarly, Kim & Reene (1992) and Koontz (1984) also described leadership as the ability to influence others. Study by Al-Alawi & Al-Ali (2015) found that the top management support as the most significant factors influencing e-Commerce adoption in Kuwait in SMEs. According to Rashid and Al-quirim (2001), there is need to combine management and leadership in the implementation of electronic commerce. Igbaria et al (1997) found that the support of management positively affected the perceived ease of use and the perceived usefulness of information technology within the small businesses. Others (Yap and Thong 1997; Zinatelli et al. 1996) identified the involvement of owner/managers is one of the key factors leading to successful implementation of IT in small businesses.

4.4.5. Moderating Influence of Statutory Requirement on the Relationship between Organizational Capabilities, and Electronic Commerce Strategy Adoption by Commercial Banks in Kenya

To establish the moderating influence of statutory requirement in the relationship between project Business Process Reengineering, Statutory Requirement, Capacity for Change, leadership, and electronic commerce strategy adoption by commercial banks in Kenya, we run a linear regression for model 2 and do the comparison with what we had in Table 31, 32, 33.

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \epsilon, \text{ Model 2}$$

Where Y=Electronic commerce strategy adoption by commercial banks in Kenya; X₁=Business Process Reengineering; X₂=Structural design; X₃= Capacity for change; X₄= Leadership; X₅= Statutory Regulations; ε = Error term. Table 34 presents a summary of the model 2.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
2	.685(a)	.463	.452	.409

Table 34: Model 2 Summary

a Predictors: (Constant), Leadership, Business Process Re-engineering, Capacity for Change, Structural Design

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	34.318	5	6.864	41.050	.000(a)
	Residual	39.793	238	.167		
	Total	74.111	243			

Table 35: ANOVA for the Model 2

a Predictors: (Constant), Statutory Requirements, Business Process Re-engineering, Capacity for Change, Leadership, Structural Design

b Dependent Variable: E-commerce adoption

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.034	.253		4.086	.000
	Business Process Re-engineering	.055	.060	.053	.920	.359
	Structural Design	.177	.061	.187	2.906	.004
	Capacity for Change	.203	.049	.262	4.118	.000
	Leadership	.143	.054	.167	2.634	.009
	Statutory Requirements	.191	.045	.228	4.251	.000

Table 36: Regression Coefficients of the Model 2, a Dependent Variable: E-commerce adoption

The fifth objective of the study was to examine the moderating influence of statutory requirements on organizational capabilities and electronic commerce strategy adoption by the commercial banks in Kenya. As shown in Table 34 the t-statutory requirements yielded a p-value of 0.000. Since this p-value is less than 0.05, we reject the null hypothesis and affirm that there is moderating influence of statutory requirement on the relationship between organizational capabilities and electronic commerce strategy as adopted by commercial banks in Kenya at 0.05 level of significance. The changes observed with reference to Tables 31,32,33 for model 1, and Tables 34,35,36 for model 2 include: changes in values of R squared (from 0.422 to 0.463) which is a show of positive improvement in predictability of e-commerce strategy adoption by the independent variables. Other changes are witnessed in constants (from 1.361 to 1.034), coefficients, t-values, and p-values, among other changes. The introduction of statutory requirement has resulted to change in level of significance of leadership (from 0.000 to 0.009), and structural design (from 0.001 to 0.004). This showing that statutory requirements in the commercial banks negatively influence leadership and structural design to some extent. The findings indicate that it further increases the level of insignificance of Business Process Reengineering (from 0.229 to 0.359). There is a clear indication that statutory requirement has a significant moderating influence on the relationship between the Business Process Reengineering, Structural Design, Capacity for Change, Leadership and electronic commerce strategy adoption by the commercial banks in Kenya. This is supported by the findings by (Karambu, 2017) that legal and regulatory environment have a significant moderating effect on the growth of MSEs in Kenya. Simonson *et al.* (2009), established that sound credit policy would help improve prudential oversight of asset quality, establish a set of minimum standards, and to apply a common language and methodology (assessment of risk, pricing, documentation, securities, authorization, and ethics), for measurement and reporting of non-performing assets, loan classification and provisioning.

4.4.6. Estimated Regression Equation

Based on Table 36, the estimated regression equation was: Electronic commerce strategy adoption by commercial banks in Kenya.

$$(Y) = 1.034 + 0.055X_1 + 0.177X_2 + 0.203X_3 + 0.143X_4 + 0.191X_5 + \varepsilon$$

The equation shows that capacity for change has the most significant influence on electronic commerce strategy adoption by commercial banks in Kenya. The beta coefficient of 0.203 implies that, holding other factors constant, increasing quality of capacity for change by 1 unit would increase Electronic commerce strategy adoption by commercial banks in Kenya by 0.203 units. Business Process Reengineering has the least influence on Electronic commerce strategy adoption by commercial banks in Kenya with beta coefficient (0.055) suggests that improving Business Process Reengineering by 1 unit would increase the level of Electronic commerce strategy adoption by commercial banks in Kenya by 0.055 units.

5. Summary of Findings

The study employed descriptive survey design where a sample of 385 respondents was drawn from a population of 36,923 using simple random sampling. A total of 385 questionnaires were distributed to the respondents, 244 were dully filled and returned to the researcher, translating to a response rate of 63.38%. The collected data was analyzed using both descriptive and multiple linear regression technique.

5.1. Electronic Commerce Adoption by Commercial Banks in Kenya

The study established that commercial banks in Kenya have embraced use of mobile banking, computers, internet, website, and least importantly fixed lines. They are focused on choice of enabling technology, matching with economic opportunities, executing business innovation, understanding customer value, and constructing alliances with competitors. Electronic marketing, EFT electronic payment bank to bank, EFT via EDI, automated clearing through EFT, settlement of payment on gross basis in real time, truncation and cheque imaging transmission, settlement of government securities electronically, internet banking, mobile banking, branch banking, customer support service, payment system, order and delivery are the most common electronic commerce application tools they used. The findings establish that the commercial banks in Kenya adopt to electronic commerce because it adds value to the organization, the strategy is compatible with business processes, the strategy can be tested before implementation, the strategy is observable, and least importantly because it not complex.

5.2. Influence of Business Process Reengineering on Electronic Commerce Strategy Adoption by Commercial Banks in Kenya

The findings indicate that there is a positive but not significant relationship between the Business Process Reengineering and electronic commerce strategy adoption by commercial banks in Kenya. This indicates that BPR has not a very strong impact on electronic commerce adoption strategy, and we cannot say that banks that embrace BPR have a higher level of Electronic Commerce strategy adoption. Since BPR has its root in the RBV theory, that holds that firms can gain competitive advantage only if they hold better resources than their competitors, it is arguable that the commercial banks either have similar BPR approaches to electronic commerce strategy adoption or the practices are at the same level (they imitate each other).

The descriptive analysis also shows that that 97.5% of the commercial banks in Kenya have embraced Business Process Reengineering, meaning they are organized based on processes. 2.5% of the commercial banks have not and this

indicates that they are not using informational technology to breakdown functional barriers and creating work systems based on business processes, product or output rather than on functions or inputs. According to the findings, commercial banks provide system for storing and securing electronic documents, images, and other files; they weighing the pros and cons of outsourcing activities that are non-critical or that contribute least to organizational capabilities and core competencies. Similarly, the commercial banks are engaged in simplifying the process first, eliminating tasks and steps where possible and analyzing how to streamline the performance of what remains; they have a robust platform for modeling and executing process-based applications, including business rules. The commercial banks determine which part of the process can be automated, and considers introducing advanced technologies that can be upgraded to achieve the next generation capability and provide a basis for further productivity gains down the road. This implies that the banks are engage in customer service oriented processes aimed to eliminate customer complaint though not to the market expectations.

From the findings, the commercial banks takes into consideration BPR project management practices by developing flow charts for the total business process, including its interfaces with other value chain activities; evaluating each activity in the process to determine whether it is strategy-critical or not; and enabling managers to identify business issues, trends, and opportunities with reports and dashboards and react accordingly; They remove intra- and interdepartmental communication barriers through discussion forums, dynamic workspaces, and message boards.

According to this finding, commercial banks in Kenya combines several jobs into one and non-value adding works are minimized; steps in the processes that have multiple versions are performed in natural order, several jobs get done simultaneously, and creation of business alliances to minimize. According to the findings, work is performed where it makes the most sense, and a single point of contact is provided to customers. The findings further indicate that business analysis has contributed most to the use of electronic commerce strategy followed by information management and by project management. The findings show that change in business analysis and information management, project excellence/optimization, and project management would influence electronic commerce strategy adoption.

5.3. Influence of Structural Design on Electronic Commerce Strategy Adoption by Commercial Banks in Kenya

According to the findings, 99.2% of the commercial banks in Kenya identifies with formalized arrangement of interaction between and responsibility for tasks, people, and resource. As far as structural design is concerned; they are engaging in Strategic Human Resource Management and Current Business Arrangement, layers and span of control, current organization structure, information system, and role of centre, parent subsidiary relationship. According to the findings, organization management supports organization cost efficiency, better and newer applications of organizational theories to the study of multinational enterprises, best fit of organizational structure and controls for just in time and total quality management, organization structure, role of centre, layer and span of control, linearization of market, shared services, customer interaction total quality management. Decentralization of decision making is least supported by management. According to the findings, organization cost efficiency determines electronic commerce strategy adoption process most, followed by organization structure. Others include: layers and span of control, and role of centre. Shared service (off showing and outsourcing) least determine electronic commerce strategy adoption. All these factors have an average mean below 5 (very extensive consideration). According to the findings there is statistically significant relationship between the quality of structural design and electronic commerce strategy adoption by commercial banks in Kenya at 0.05 level of significance. This indicates that Structural Design has an impact on electronic commerce adoption strategy adoption, and we can say that banks that embrace structural design have a higher level of Electronic Commerce strategy adoption.

From the findings, commercial banks in Kenya have adopted their current structure for effective and efficient customer satisfaction, and customer management, changing economic trend (digitalization), supporting strategic pillars of the organization by reducing levels of management hence reducing cost, effective execution of functions and efficient management of operations, transformation to adopt to market and environmental challenges, effective workflow, ensure organization perform its task and goals, efficiency and cost cutting, facilitate execution and efficiency for proper decision making and seamless information, to be aligned to the fast moving current business trend mostly dependent on advanced technology yet cost effective, easier decision making and proper time management, for easier management, effective and efficient control system and total quality management, keep up with the time and the generation evolving of the technology and also competitors, suit the market and keep up with other banks, maintain positive growth of new product, make services efficient and robust. Further findings have established that change in layers and span of control, organization cost efficiency, organization structure, role of centre would influence electronic commerce strategy adoption.

5.4. Influence of Capacity for Change on Electronic Commerce Strategy Adoption by Commercial Banks in Kenya

According to the findings, 95.9% of the commercial banks in Kenya identifies with transition from one state to another with focus to being different from the other banks. The level of capacity to change in the commercial banks is high, but not very high. The commercial banks have embraced adaptability and flexibility, change management capability, change culture, ability for self assessment, self critical and understanding the need to design task, structure, process, and systems in response to external changes, ability to learn from past experience, and building of bridges between the requirement and external environment capacity. According to the findings there is statistically significant relationship between the capacity for change and electronic commerce strategy adoption by commercial banks in Kenya at 0.05 level of significance. This indicates that

capacity for change has an impact on electronic commerce adoption strategy adoption, and we can say that banks that embrace capacity for change have a higher level of Electronic Commerce strategy adoption. Further findings have established that adaptability and flexibility and culture would influence electronic commerce strategy adoption.

The findings also indicate that commercial banks in Kenya have embraced capacity for change to achieve key transformation and improved service delivery on internet banking and mobile banking, bringing wider range of clients leading to more service (profit and nonprofit income), facilitating effectiveness in operation, enhanced accuracy and effective/quality output, and fraudulent prevention. The organization is picking fast on change by creating new platforms that provide a bridge to counteract emerging market trends that might reduce income. Due to digitalization of the market and increased use of technology, customer convenience, to save time and hence it is most important to migrate them to electronic commerce at their comfort, some banks have their operations 80% digitalized hence operating in a paperless banking network, The comprise of young emerging talents who are innovative, adaptive to change and highly flexible; introduction of financial technology (FinTech) which will enhance e-commerce, to stay ahead of competition and meet customer demands, flexibility in change due to rising need in electronic ways of doing business; Increase customer base, niche as well as an improvement on process and procedures; Enable robust systems for transactions within the bank; System adopted should be adequate in handling transactions; Make trading easier locally and internationally.

5.5. Influence of Leadership on Electronic Commerce Strategy Adoption by commercial banks in Kenya

The findings indicate 98.4% of commercial banks recognizing the importance of development of leaders at all level of the organization. According to the findings, commercial bank competes each other through leadership performance, strategic leadership, and middle level management effectiveness. They achieve electronic commerce adoption through delegating responsibilities to staff and incorporating their ideas, communicating operations or changes to staff, commitment and guide to adopt, and ensuring common understanding about organization priorities. The management support influences the perception of employee to usefulness of electronic commerce to the business, The empowerment of newer managers and pushing authority lower in the organization, gaining personal commitment to a shared vision from manager throughout the organization, uncovering and remedying problems in coordination and communication across the organization and cross boundaries inside and outside the organization, and clarifying responsibilities among managers and organization units. According to the findings, there is statistically significant relationship between the leadership and electronic commerce strategy adoption by commercial banks in Kenya at 0.05 level of significance. This indicates that leadership has an impact on electronic commerce adoption strategy adoption, and we can say that banks that embrace leadership have a higher level of Electronic Commerce strategy adoption. Further findings have established that change in leadership performance and pipeline, and management effective would influence electronic commerce strategy adoption.

5.6. Moderating Influence of Statutory Regulations on Organizational capabilities and Electronic Commerce Strategy Adoption by commercial banks in Kenya

The findings indicate that statutory requirement has a moderating influence on the relationship between the Business Process Reengineering, Structural Design, Capacity for Change, Leadership (organizational capabilities), and electronic commerce strategy adoption by the commercial banks in Kenya. The commercial banks in Kenya recognize that statutory regulations aids in curbing fraud and money laundry acts that might cause loss of income and capital regulate wage and victimization of staff, ensure customer privacy and disclosure of sensitive information, details and contacts. Moderate competition, promote ethical behavior, and to keep law and order in business performance; Protect the end user/consumer from exploitation; Obligate social factors such as trust between business partners involved; eliminate bad use of websites hence creating friendly business field; Statutory regulations guides the business on the form of engagement with its customers as well as mode. The regulations drive change in the wider perspective and therefore their considerations create a weighing machine which become the reference point before adoption of any new idea in the banking sector; Minimize conflict of interests between the organization and other third parties and has also helped to curb regulatory arbitrage; To have a standardized expected outcome from all organizations; Provide controls and checks especially in operations.

6. Conclusion

Based on the findings of the study, the researcher has drawn several conclusions which are presented in this section following the order of the objectives of the study

6.1. Influence of Business Process Reengineering on Electronic Commerce Strategy Adoption by commercial banks in Kenya

The research finding has led to the conclusion that BPR has not a very strong impact on electronic commerce adoption strategy, and we cannot say that banks that embrace BPR have a higher level of Electronic Commerce strategy adoption. This is brought about by limited determination of which part to automate, which results to poor consideration of advanced technology that results to poor generation of capabilities and productivity gains down the road; poor evaluation of activity on the process, resulting to poor determination of whether the activities are strategy critical or not; intra and interdepartmental barriers perceived to be contributed by rare opportunities of interdepartmental communication. There limited single point contact provided to customers, and limited cure to work performed where it makes more sense. The study also concludes that

there is more need for weighing of pros and cons of outsourcing activities that contributes little to the organizational capabilities and core competencies.

6.2. Influence of Structural Design on electronic commerce strategy Adoption by commercial banks in Kenya

The research finding has led to the conclusion that banks that embrace structural design have a higher level of Electronic Commerce strategy adoption. The study also concludes that there is limited management support on best fit of organization structure, just in time and total quality management. Shared services-off showing and outsourcing, role of centre, decentralization of decision making, liberalization of market, and better and newer applications of organization theories to the study of multinational enterprises also get limited management support. Layers and span of control, organization structure role of centre, and shared services need more improvement on in the commercial banks in Kenya.

6.3. Influence of Capacity for Change on Electronic Commerce Strategy Adoption by commercial banks in Kenya

The research finding has led to the conclusion that banks that embrace capacity for change have a higher level of Electronic Commerce strategy adoption. Majority of commercial banks in Kenya have the capacity to change. There is limited change management capability which is an indication of insufficient climate that welcomes, utilizes and exploits uncertainty. There is also need for improved change culture, and ability for self assessment which is a requirement for making the organization to grow in an environmentally sensitive fashion.

6.4. Influence of Leadership on Electronic Commerce Strategy Adoption by commercial banks in Kenya

The research finding has led to the conclusion that commercial banks in Kenya that embraces leadership have a higher level of Electronic Commerce strategy adoption. The findings also conclude that there is need for improved performance by middle level management –charged with the responsibility for implementing strategic decisions made by executive. If middle managers disagree with the strategic initiative, they frequently work against its implementation. There is also need for proper leadership alignment with strategy. A leadership strategy makes explicit how many leaders we need, of what kind, where, with what skills, and behaving in what fashion individually and collectively to achieve the total success we seek. There is limited influence on the perception of employees to usefulness of electronic commerce to the business; there is poor empowering newer managers and pushing authority lower in the organization. Keeping closely connected with what is going on inside and outside the organization and with customers also requires adjustment.

6.5. Moderating Influence of Business Process Reengineering on Electronic Commerce Strategy Adoption by commercial banks in Kenya

The findings have led to the conclusion that statutory requirement has a moderating influence on the relationship between organizational capabilities and electronic commerce strategy adoption by the commercial banks in Kenya.

7. Recommendations

Based on the findings, of the study has drawn several recommendations which are presented in this section following the order of the objectives of the study

- The study recommends for introduction of advanced technologies that can be upgraded to achieve next generation capabilities and providing a basis for further productivity gains. The study also recommends for improved evaluation of activities in the banking processes, and proper weighing of pros and cons of outsourcing activities that are non-critical to the organization. The study further recommends for effective management of interdepartmental communication, a single point of contact is provided for the customer, control and checks and other non-value-added work be minimized, and works should be performed where it makes more sense.
- The study recommends stronger management support for best fit of organization structure, just in time and total quality management. The management should consider strongly shared services-off showing and outsourcing, role of centre, decentralization of decision making, liberalization of market, and better and newer applications of organization theories to the study of multinational enterprises. Layers and span of control, organization structure, role of centre, and shared services also need more improvement in the commercial banks in Kenya effort to achieve electronic e-commerce strategy adoption.
- The study recommends increased change management capability which will create a climate that welcomes, utilizes and exploits uncertainty. The study also recommends improved change culture to create more of shared purpose, supported by a common understanding and language about organizational change. Finally, the study recommends for improved ability for self assessment which is a requirement for making the organization to grow in an environmentally sensitive fashion.
- The study recommends that the commercial banks in Kenya should improve performance by middle level management. The bank should ensure proper leadership alignment with strategy. There is limited influence on the perception of employees to usefulness of electronic commerce to the business; empowering newer managers and pushing authority lower in the organization. Keeping closely connected with what is going on inside and outside the organization and with customers also requires adjustment. Empower newer managers and push authority lower in

the organization the more. They should also keep closely connected with what is going on inside and outside the organization and with its customers.

- The study recommends critical look into statutory requirement in order to ensure proper functioning of the Kenyan financial system and execution of organizational strategies.

8. Suggestions for Further Studies

The current study was limited to commercial banks in Kenya in Kenya. Further studies should consider exploring other non-commercial banks so as to support the generalization of the findings. Future studies can also focus on the influence of other organizational capabilities.

9. References

- i. Aartsengel, A. V., & Kurtoglu, S. (2013). *Guide to Automocis Improvement Transformation: Concept, Process*. Londo: Springer.
- ii. Achieng, N. D. (2014) *Business Process Reengineering Practices and Performance of Kenya Commercial Bank*. Unpublished MBA Thesis. University of Nairobi.
- iii. Adjei, K.S (2013) *Business Process Reengineering (BPR) In the Financial Services Sector: A Case Study of Ghana Commercial Bank (GCB) Limited*. *European Journal of Business and Management*, 5(29)
- iv. Afande, O. F. (2013). Effects of strategic management practices on performance of financial institutions in Kenya: A case of Kenya Post Office Savings Bank, *International Journal of Business Management and Administration*, 2(6) 122-141.
- v. Aghaunor, L. F. (2006). *Factors affecting e-commerce adoption in Nigerian Banks*. Jonkoping University.
- vi. Ajzen, L. (1991). *The theory of planned behavior, organizational behavior and human decision process*. New York: Springer-Verlag.
- vii. Akio, T. (2005). *Critical Assessment of the Resource-Based View of Strategic Management:the source of heterogeinity of the firm* . *journal of international relation*, 3, 125-150
- viii. Alam, S., & Noor, M. K. M. (2009). *ICT adoption in small and medium enterprises: an empirical evidence of service sector in Malaysia*. *International Journal of Business and Management*, 4(2), 112-125.
- ix. Al-Bakri, A. A., & Katsioloudes, M. I. (2015). *Factors affecting e-commerce as adopted by Jordanian SMEs*. *management research Review* , 38, 726-749.
- x. Ambira, C.M. & Kemoni, H., 2011, 'Records management and risk management at Kenya Commercial Bank Limited, Nairobi', *SA Journal of Information Management* 13(1).
- xi. Amenakis, A., Harris, S. G., & Field, H. S. (1999). *Making change permanent: A model for institutionalizing change interventions*. *Research in Organizational Change and Development*, 12, 97-128.
- xii. Ansoff, I. H. (1987). *Corporate Strategy*. Penguin: Harmondsworth- Middlesex.
- xiii. Ansoff, I. H. (1991). *Strategic management ina historical perspective: International review of strategic management*. New York: McGraw Hill.
- xiv. Ansoff, I. H., & Sullivan, P. A. (1993). "Optimizing profitability in turbulent environment; A formula for strategic success": *Long range planning* (Vol. 26). London: Wilconsin press.
- xv. Aosa, E. (1998). *An empirical investigation of aspects of strategy formulation and implementation within large private manufacturing companies in Kenya*. Glasgow, United Kingdom: Strathclyde University.
- xvi. Appelbaum, E., Bailey, T., Berg, P. & Kalleberg, A. (2000): *Manufacturing Advantage: Why approach*. *Entrepreneurship: Theory and Practice*, July.
- xvii. Argyris, C., & Schön, D. A. (1974): *Theory In Practice: Increasing Professional Effectiveness*. London: Amazon.com.
- xviii. Armor, D. A., & Taylor, S. E. (2003): *The Effects of Mindset on Behavior: Self-Regulation of behavior*. London: Yale University.
- xix. Arslan, A., & Staub, S. (2013). "Theory X and Theory Y Type Leadership Behavior and its Impact on Organizational Performance: Small Business Owners in the Şishane Lighting and Chandelier District." *Procedia - Social and Behavioral Sciences*, 102-111.
- xx. Ashmos, D. P., Duchon, D., McDaniel, R. R., & Huonker, J. W. (2002). *What a mess! Participation as a simple managerial rule to 'complexity' organizations*. *Journal of Management Studies*, 39, 189-206.
- xxi. Avolio, B. J., & Gardner, W. L. (2005). *Authentic leadership development: Getting to the root of positive forms of leadership*. *Leadership Quarterly*, 16, 315-338.
- xxii. Avolio, B. J., Yammarino, F. J., & Bass, B. M. (1991). *Identifying common methods variance with data collected from a single source: An unresolved sticky issue*. *Journal of Management*, 17(3), 571-587.
- xxiii. Avolio, B.J., Zhu, W., Koh, W., & Bhatia, P. (2004). *Transformational leadership and organizational commitment: Mediating role of psychological empowerment and moderating role of structural distance*. *Journal of Organizational Behavior*, 25, 951-968.
- xxiv. Ayanso, A., & Thongpapnl, L. K. (2010). *Technology enabled Retail srvice and online sales performance*. *journal of computer information system* ,50 (1)

- xxv. Ayuma, & Agiabugwa., & Mary. (2012). e-commerce strategy and performance of commercial banks in Kenya. Paper for presentation during the third African International Business and Management (AIBUMA) Conference to be held from 12th to 13th July 2012 at the KICC, Nairobi, Kenya
- xxvi. Badara, A. M., Jhari. H. B. T., & Year, T. F. (2014). Leadership succession, integration, quality and adaptive performance in Nigerian Commercial Banks. *Journal of Management Development*, 2 (11).
- xxvii. Bagchi, K. (2007). Empirical Testing Factors that Drive ICT Adoption in Africa and OECD set of nations. *Issues in information system*, 45-52.
- xxviii. Bain, J. (1956). *Barriers to new competition*. Cambridge: Harvard University Press.
- xxix. Ball, McCulloch, Geringer, & Minor. (2004). *International Business: The challenge to global competition*. London: McGraw Hill.
- xxx. Barney, B. J. (1997). *Gaining and sustaining competitive advantage reading*. Massachusetts: Addison- Wesley Publishing Company.
- xxxi. Barney, B. J., & Hestley, S. W. (2006). *Strategic Management: Text and Cases (3rd ed.)*. New Delhi: TAT McGraw Hill.
- xxxii. Barney, J. (1991). Firm resource and competitive advantage. *Journal of management*, 17 (1), 99-120
- xxxiii. Barney, J. A., & Hesterly, W. S. (2008). *Strategic Management: Text and Cases (3rd ed.)*. New Delhi: Dorling Kindersley private limited.
- xxxiv. Barney, J. B. (2001). Resource-based view a useful perspective for strategic amangement reasearch. *academy of management review*, 26(1), 41-56.
- xxxv. Barney, J. B. (2007). *Gaining and Sustaining Competitice Advantage (3rd ed.)*. New Jersey: Pearson Prentice Hall.
- xxxvi. Barney, J. B., & Hestlerly, W. S. (2012). *Strategic Management and Competitive Advantage: Concepts (4th ed.)*. New York: Pearson.
- xxxvii. Baruch Y, & Holtom, B. C. (2008). Survey response rate levels and trends in organizational research. *Human Relation*, 61(8), 1139-1160.
- xxxviii. Bass, B. M. (1985). *Leadership and Performance Beyond Expectations*. Free Press, New York.
- xxxix. Bass, B. M. (1990). From transactional to transformational leadership: Learning to share the vision. *Organizational Dynamics*, 18(3), 19-6.
- xl. Bass, B. M. (2011). *The Bass Handbook of Leadership: Theory, research & Managerial Applications*. Free Press, New York.
- xli. Becker, B. E. & Huselid, M. A. (2006): *Strategic Human Resources Management: Where Do go from here?. Journal of Management*, 32(6).
- xlii. Becker, B. E. (2006). *Strategic Human Resource Management. where do we go from now? journal of management*, 32, 898.
- xliii. Beer, M., Eisenstat, R., & Spector, B. (1990). Why change programs don't produce change. *Harvard Business Review*, 68, 158-166.
- xliv. Benkhoff, B. (1997). Disentangling organizational commitment: the dangers of the OCQ for research and policy, *Personnel Review*, 26(1/2), 114-31.
- xlv. Bensberg, M. (2000). Infrastructure and organisational development: a regional approach to health promotion. *Australian Journal of Primary Health – Interchange 2000*;6:67-75.
- xlvi. Berger, A.N., Miller, N.H., Petersen, M.A., Rajan, R.G., Stein, J.C., (2005) Does function follow organizational form? Evidence From The Lending Practices of Large and Small Banks. *Journal of Financial Economics* 76, 237–269.
- xlvii. Besanko, D., Dranove, D., Shanley, M., & Schaefer, S. (2007). *Economic Strategy (3rd ed.)*. New Delhi: John Wiley and Sons.
- xlviii. Bob, D. B., & Ron, M. (2010). *Strategy: process, content, context*. Mexico: Southwestern CENGAGE Learning.
- xlix. Boil, K. B., Schultz, P. L. (2007). "Storytelling, time, and evolution: The role of strategic leadership in complex adaptive systems". *leadership quarterly*, 18(4), 114-428
- I. Bossidy, L., & Charan, R. (2002): *Execution: The discipline of getting things done*. New York: Crown Business.
 - ii. Bowen, D. E. & Inkpen, A. C. (2009): Exploring the Role of 'Global Mindset' in leading change in international context. *Journal of Applied Behavioral Science*, 45(2), 239-260
 - iii. Boxall, P. & Purcell, J. (2003): *Strategy and human resource management*. Hampshire: Palgrave Macmillan.
 - liii. Brandstatter, V. (2002). Effects of deliberate and implementation mindset on persistence in goal-directed behavior. *Personality and Social psychology bulletin*, 28, 1366-1378.
 - liv. Braun, P. (2004). *Regional Tourism Networks: The nexus between ICT diffusion and change in Australia*. University of Ballarat: Centre for Regional Innovation and Copetitiveness.
 - lv. Broadway (2015). e-commerce agility. *Business intelligence for digital*. 7
 - lvi. Brown, J. S., & Duguid, P. (1991) *Organizational learning and communities of practice: Bulletin*, 28(10), 1366-1378.
 - lvii. Bryman, A., & Bell, E. (2015). *Business research methods*. Oxford University Press, USA.
 - lviii. Burgelman, R. A., Christensen, C. M., & Wheelwright, S. C. (2009). *Strategic Management of Technology and Innovation (5th ed.)*. London: McGraw Hill.

- lix. Bussett, W. F. (2014). Assessing targeted macroprudential financial regulations: A case of the 2006 commercial real estate guidance for banks. study. Washington DC: Division of monetary affairs, federal reserve board.
- lx. Butt, J. (1998). Evaluating organizational change strategies Health: Promotion in Western Sydney. Nutrition and Dietetics Wollongong: University of Wollongong.
- lxi. Caldeira, M. M., & Ward, J. M. (2003). Using Resource-based Theory to Interpret the Successful Adoption and Use of Information Systems and Technology in Manufacturing Small and Medium-sized Enterprises. *European Journal of Information Systems* 12, 127-141.
- lxii. Capon, C. (2008). *Understanding Strategic Management*. London: Prentice Hall.
- lxiii. Carmines, E. G., & Zeller, R. A. (1979). Reliability and validity assessment. Sage University Paper Series in Quantitative Applications in the Social Sciences, Number 07-017. Beverly Hills: Sage Publications.
- lxiv. Cartwright, W. R. (1993). Multiple linked Diamonds: New Zealand experience. *Management International Review* , 33 (2), 55-70.
- lxv. Central Bank of Kenya, (CBK) (2015). Bank Supervision report. Kenyan banking Sector for the period ended December 2015. Retrieved from <https://www.centralbank.go.ke>
- lxvi. Chaharbaghi, K., & Lynch, R. (1999). Towards a dynamic resource based strategy. *Management Decision* , 37 (1), 45-50.
- lxvii. Chan, E. S. P. (1999). *Electronic Commerce: A component Model*. 3rd annual collector conference on electronic commerce .
- lxviii. Chandran. (2004). *Research Methodology*. London: Worlds Scientific Ltd.
- lxix. Charles, S., & Pervaiz, K. A. (2000). From product innovation to solution innovation: a new paradigm for competitive advantage in Europe. *Journal of innovation management* , 3 (2).
- lxx. Chatterjee, S. R. (2005). Weaving the Threads of a Global Mindset in Work Organizations: Management Roles and Responsibilities. *Journal of human values*, 11(1), 37-47
- lxxi. Chege, S. (2014). *Factors Affecting The Success Of Information Technology Projects Within The Kenyan Banking Industry: Commercial Bank Of Africa*. Nairobi: Kenyatta University.
- lxxii. Chepkinyang, F. (2008). Analysis of strategic response of commercial banks towards attaining competitive advantage in Kenya. Nakuru: Unpublished Kenyatta University MBA project.
- lxxiii. Chiware, E.R. & Dick, A.L. (2008). The use of ICT in Namibia SME sector to access business information service: the electronic library, 26(2), 145-157.
- lxxiv. Chuttur, M. Y. (2009). "Overview of the Technology Acceptance Model: Origins, Developments and Future Directions," Indiana University. Working Papers on Information Systems, 9(37).
- lxxv. CIMA. (2010). CIMA Sector Report. Global Banking sector: current issues. London: World congress of Accountants.
- lxxvi. Cimhanzi, J. (2009). The impact of marketing/HRM interactions on marketing strategy implementation. *European journal of marketing* , 38-78.
- lxxvii. Clampitt, P. G., & Williams, M. L. (2005). Conceptualizing and measuring how employees and organizations manage uncertainty. *Communication Research Reports*, 22, 315-324.
- lxxviii. Clampitt, P. G., Williams, M. L., & DeKoch, R. J. (2002). Embracing uncertainty: The executive's challenge. *Journal of Change Management*, 2, 212-228.
- lxxix. Cole, G. (2004). *Management Theory and Practice* (6 ed.). London: Book Power.
- lxxx. Conner, & Kathleen, R. (2008). A historical comparison of Resource Based Theory and five schools of thought within industrial organization economics: Do we have a new theory of the firm? *Journal of management* , 17 (1), 121-154.
- lxxxi. Conner, M. (2006): Learn, Unlearn and Relearn. Fast Company, February 27. context. Response Books, Sage Publications, New Delhi.
- lxxxii. Cooper, D. R., & Emory, C. W. (2008). *Business Research Methods* (5th ed.). USA: Richard D. Irwin.
- lxxxiii. Cooper, D. R., & Schindler, P. S. (2003). *Business research methods* (8th ed.). New Delhi: TATA McGraw Hill Publisher.
- lxxxiv. Cooper, D. R., & Schindler, P. S. (2013). *Business Research Methods* (12th edition) New York: McGraw Hill.
- lxxxv. Correspondence, D. N. (2015, September 11th). Daily Nation .
- lxxxvi. Crano. (2002). *Principles and Methods of Social Research*. New Jersey: Lawrence Erlbaum Associates.
- lxxxvii. Cytonn Investment. (2015). *Cytonn Q1 Banking Sector Report-Abridge Version for Kenya Banking Sector*. Cytonn Investments.
- lxxxviii. Dakir, K. (2005). *Knowledge Management in Theory and Practise*. Oxford: Elsevier.
- lxxxix. Dattatreya, M., Kamath, R., Sharma, R., & Williams, S. (2009): *Indian Human Resource and talent mindset*. Mumbai: SHRM
- xc. David, F. (2009). *Strategic Management: Concept and Cases* (12th ed.). New Delhi: PHI Learning Private Limited.
- xc. Day, G. S., & Nedungadi, P. (1994). Managerial representations of Competitive Advantage. *Journal of marketing* , 58, 31-44.
- xcii. Day, G. S., & Wensley, R. (1988). Assessing advantage of framework for diagnosing competitive advantage superiority. *Journal of Marketing* , 52, 1-20.

- xciii. Dewhurst, M., Harris, J., & Heywood, S. (2011). Understanding your globalization penalty, dimensionality, and measurement. *Management Science*, 35(8), 942-962.
- xciv. Doherty, N.F., & Ellis-Chadwick, F. (2003). "The relationship between retailers' targeting and e-commerce strategies: an empirical analysis", *Internet Research*, 13(3) 170-182.
- xcv. Dosi, G. (1988). Source, Procedures and Microeconomic effects of innovation. *Journal of Economic Literature*, xxvi.
- xcvi. Draft, R. L. (2015). *Organizational Theory and Design*. Mexico: Cengage Learning.
- xcvii. Drucker, P. (1992). The New Society of Organizations. *Harvard Business Review*, Vol. 70, 5.
- xcviii. Drucker, P. (2004). *The Practice of Management*. New Delhi: Sunil Sachdev.
- xcix. Drucker, P. (2006). *The Practice of Management*. New Delhi: Harper Collins Publisher, Inc.
- c. Duncombe, R., & Heeks, R. (2007). Information and communication technologies and small enterprise in Africa. Lesson from Botswana. Retrieved from <http://www.sed.manchester.ac.uk/idpm/research/is/ictsme/full/section2.doc>.
- ci. Dunham, R. B., Grube, J. A., Gardner, D. G., Cummings, L. L., & Pierce, J. L. (1989). The inventory of change in organizational culture. Unpublished manuscript.
- cii. Dwyer, G. (2002). Quality management initiatives and people management strategies. *International Journal of Quality and Reliability Management*, 19 (5).
- ciii. Emma, E. S., Tim, B., & David, J. L. (2007). Ameta-analysis of the effects of TQM on competitive advantage. *International Journal of Quality & Reliability Management*, 24 (5), 442-471.
- civ. Endreas, E. (2004). *management competence: Resource-based management and plant performance*. Berlin Heidelberg GmbH: Springer-verlag.
- cv. Engsbo, S. H. (2001). A framework of adoption of e-commerce in networks of SMEs. Paper presented at the IRIS, UIVIK.
- cvi. Epstein, & Marc, J. (2005), *Implementing Successful E-Commerce Initiatives*. *Strategic Finance*, 86 (9), 22.
- cvii. Erwee, R. (2007): "International management and leadership: developing a global mindset." In: Hough & Neuland (eds.), *Global business – environments and strategies, Southern Africa*, Cape: Oxford University Press.
- cviii. Faraway, J. (2002). *Practical Regression and Anova using R*. Retrieved on Wednesday 17th August, 2011@ www.r-project.org.
- cix. Feeny, W. L. (2000). IS capabilities for exploiting information technology: Lessons at Dupont. *ISM Journal*, 39, 9-21.
- cx. Feng, L. (2001). The internet and the intergrated banking model. *British Journal of Management*, 12 (4).
- cxii. Field, A. (2005). *Research Methods II: Factor Analysis on SPSS*. Upper Saddle River, NJ: Pearson Education.
- cxiii. Fishbein, M. A. (2010). *Belief, attitude, intention, and behavior: Introduction to theory and research*. Reading, MA: Addison-Wesley.
- cxiv. Foss, N., & Knudsen, T. (2003). Resource based tangle: Towards a suitable explanation of competitive advantage. *management and decision economics*, 24, 291-307.
- cxv. Frahm, J., & Brown, K. (2007). First steps: Linking change communication to change receptivity. *Journal of Organizational Change*, 20, 370-387.
- cxvi. Fraser, J. F. N. (2000). The strategic challenge of electronic commerce. *An international journal of supply chain management*, 5, 7-14.
- cxvii. Gakure, R. W. & Kingongo, G. (2005). The Relationship Between Education and 119 Business Performance of Women Owned Small Enterprises in Kenya. *Proceedings of 2005 scientific, technological and industrial conference 27th–28th October*. Nairobi: Publisher JKUAT.
- cxviii. Gakure, R., Keraro, V., Okari, H., & Kiambati, K. (2012). Emerging Trends Shaping Contemporary Business Strategy. *Prime Journal of Business Administration and Management*, 2(9), 673-679.
- cxix. Gakure, Roseyln (2003). "Factors Affecting Women Entrepreneurs' Growth Prospects in Kenya." Prepared for the International Labour Organization (ILO), Geneva, November.
- cx. Gallo, A.: *Making Your Strategy Work on the Frontline*. *Harvard Business Review*, June 24, 2010. [http://blogs.hbr.org/hmu/2010/06/making-your-strategy-work-on-t.html#\(accessed December 23, 2010\)](http://blogs.hbr.org/hmu/2010/06/making-your-strategy-work-on-t.html#(accessed%20December%2023,%202010)).
- cxi. Gardner, T., & Wright, P. (2002). The HR – firm performance relationship: Is it only in the mind of the beholder? *Center for Advanced Human Resource Studies Working paper*. Cornell University: Ithaca, NY.
- cxii. Garside, P. (1998). Organizational context for quality: lessons from the fields of organizational development and change management. *Quality in Health Care*. 8-15.
- cxiii. Gemino, A. M. (2006). Executive Decisions about website adoption in small and medium size enterprises. *Journal of IT Management*, 26-36.
- cxiv. Ghobakhloo, M., Arias-Aranda, D. & Benitez-Amado, J. (2011a). Information technology implementation success within SMEs in developing countries: An interactive model, *POMS 22nd Annual Conference: Operations management: The enabling link Reno, Nevada, U.S.A.*
- cxv. Ghobakhloo, M., Arias-Aranda, D. & Benitez-Amado, J. (2011b). Adoption of e-commerce applications in SMEs, *Industrial Management & Data Systems*, 111 (8)1238 – 1269.
- cxvi. Glew, D. J., O'Leary-Kelly, A. M., Griffin, R. W., & Van Fleet, D. D. (1995). Participation in organizations: A preview of the issues and proposed framework for future analysis. *Journal of Management*, 21, 395-421.

- cxxvi. Gopalsamy, N. (2009). Information Technology and E-Government. London: New Age International.
- cxxvii. Goya, K. (2006). Impact of Globalization. London: McGraw Hill.
- cxxviii. Graetz, F. (2000). Strategic change leadership. *Management Decision*, 38, 550-562.
- cxxix. Grant, D. (2016) "Business Analysis Techniques In Business Reengineering", *Business Process Management Journal*, 22 (1), 75-88
- cxxx. Grant, M. (1996). Prospering in dynamically competitive environments: Organizational capability as knowledge integration. *organization science*, 375-387.
- cxxxi. Grant, R. (2001). The resource based theory of competitive advantage: implications for strategic formulation. *carlifonia management review*.
- cxxxii. Grant, R. M. (2010). *Contemporary Strategy Analysis* (7th ed.). West Sussex: A John Wesley & Sons Limited Publications.
- cxxxiii. Grover, V. R. P. (2000). Playing the e-commerce game *Business and economic review*. Columbia.
- cxxxiv. Gujarati, D. N. (2003). *Basic Econometrics*. United States Military Academy, New York: West Point.
- cxxxv. Gunasekaran, A & Kobu, B (2002) Modelling and analysis of business process reengineering. *International Journal of Production Research*, 40(11), 2521-2546
- cxxxvi. Gupta, S.P. (2005). *Statistical Methods*. (34th Edition). New Delhi: Sultan Chand & Sons Publishers
- cxxxvii. Guth, W. D., & MacMillian, I. C. (1986). Strategy Implementation versus Middle Management Self-Interest. *Strategic Management Journal*. Vol. 7, 313-327.
- cxxxviii. Haberberg, A., & Rieple, A. (2008). *Strategic Management: Theory and Application*. New York: Oxford University Press.
- cxxxix. Hager, M.A, Wilson, S, Pollak, T.H., Rooney, P.M (2003). Response Rate for male survey of non-profit organization: review and empirical test. *Non-profit and voluntary sector quarterly*, 32(2), 252-267.
- cxli. Hair, J. F. (1998). *Multivariate Data Analysis* (5th ed.). Upper Saddle River, NJ: Pearson Education.
- cxlii. Hamel, G., & Prahalad, C. K. (1996). *Competing for the future*. New York: Havard Business School Press, MA.
- cxliii. Hamlin Bob, Jane Keep & Ash Ken. 2001. *Organizational Change and Development – A Reflective Guide for Managers, Trainers and Developers*. London: Prentice Hall.
- cxliiii. Hamscher, W. (1994). AI in business process reengineering. *AI Magazine*. Winter 1994, 15(4).
- cxliv. Harding, N. (2003). *The social contribution of management: Text and Identification*. New York: Routledge.
- cxlv. Hargeus, Trinkaus, & Eiber (2013) Excellence in Operations: Helping Banks Regain Customer Trust, 5(3), Retrieved from ww.eg.com/performance
- cxlvi. Hargrave, T. J., & DeVen, A. H. (2006). A collective action model of institutional innovation' *Academy of Management Review*, 31(4), 864-888.
- cxlvii. Harindranath, G. R. (2008). ICT in Small Firms: Factors affecting the doption and use of ICT in Southeast England SMEs. *Proceedings of the 2008 European Conference of Information Systems (ECIS)*. Galway, Ireland: ECIS.
- cxlviii. Harindranath, G. R. (2008). ICT in Small Firms: Factors affecting the doption and use of ICT in Southeast England SMEs. *Proceedings of the 2008 European Conference of Information Systems (ECIS)*. Galway, Ireland: ECIS.
- cxlix. Harper, L. M. (2003). *Reseach Methodology: step by step guide for beginners*. London: Sage Publishers.
- cl. Harvey, M. G., & Novicevic, M. M. (2001). The impact of hypercompetitive "time scapes" on the development of a global mindset. *Management Decision*, 39(5/6).
- cli. Heslin, P. A. (2008). Manager's implicit asumption about personnel. *Current direction in psychological science*. 17, 217-223.
- clii. Hidayanto, A. N. (2014) Impact of Collaborative Tools Utilization on Group Performance in University Students, *The Turkish Online Journal of Educational Technology*,13(2)
- cliii. Hill, J. (2008). *Theory of Strategic Mngement with Cases* (10th ed.). Mexico: Southwestern CENGAGE Learning.
- cliv. Hoffman, D. L. (1999). Building consumer trust online. *Communications of the ACM*, 42, 80-85.
- clv. Holmberg, U., Sjögren, T., & Hellström, H. (2010) Comparing Centralized and Decentralized Banking: A Study of the Risk-Return Profiles of Banks Comparing Centralized and Decentralized Banking, Umeå University
- clvi. Hoopes, D. G., Madsen, T. L., & Walker, G. (2003). Guest editor's introduction to the special issue: Why is there a Resource Based View? Towards atheory of competitive heterogeinity. *Strategic Management Journal*, 24, 889-902.
- clvii. Hough & Neuland (2009), Global business environments and strategies. *Academy of Management Review*, Vol. 31(4), 864-888.
- clviii. Howard, C. (2013). *Strategic Adoption of Technological Innovation*. New York: IGI Global.
- clix. Howell, J. M., & Hall-Merenda, K. E. (1999). The ties that bind: The impact of leader-member exchange, transformational and transactional leadership, and distance on predicting follower performance. *Journal of Applied Psychology*, 84: 680-689.
- clx. Hunger, J. D. (2013). *Essential of Strategic Mngement*. New York: Pearson Education.
- clxi. Huq, Z., & Martins, T. N. (2006) The Recovery of BPR implementation through an ERP approach: A hospital case. *Business process management journal*, 12(5), 576-587.
- clxii. Huselid, M. A. (1995). The impact of human resource management practices on turnover, productiity and corporate financial performance. *Academy of management journal*, 38, 635-672.

- clxiii. Jeannet, J. P. (2000). *Managing with a global mindset*. McGraw Hill: London
- clxiv. Jeffrey, S. H. (2003). *Strategic management or resources and relationship concepts*. London: Leyh Publishing LLC.
- clxv. Jian, G. (2007). Unpacking unintended consequences in planned organizational change. *Management Communication Quarterly*, 21, 5-28.
- clxvi. Johnsinlk. (2004). execute your strategy without killing it. *Havard management update* , 9, 3-5.
- clxvii. Johnson, G., Scholes, K., & Wittington, R. (2009). *Exploring Corporate Strategy: Text and Cases* (7th ed.). New Delhi, India: Dorling Kindersley Private Limited.
- clxviii. Johnson, L. K. (2004): Execute your strategy - Without killing it. *Harvard Management Journal of World Business*, Vol. 4, Issue: 1, 9-18
- clxix. K. C. B. (2015). *Central Bank Supervisory Annual Report*. Nairobi: Central Bank of Kenya.
- clxx. Kalakota V, W. A. (1997). *electronic commerce: a management guide*. Addison-wesley professional, 1997.
- clxxi. Kangogo, J. (2014) Process Element of TQM and Operational Performance of Airlines in Kenya. *Journals in Business & Management*, 2(3), 65–70.
- clxxii. Kanter, R. M., Stein, B. A., & Jick, T. D. (1992). *The challenge of organizational change*. New York: The Free Press.
- clxxiii. Kaplan, R. S. (2005/2009). *The office of strategic management* . *Havard Business Review*.83
- clxxiv. Karemu, C. (1993). *The state of strategic management practices in the retailing sector: the case of super market in Nairobi*. Nairobi: University of Nairobi.
- clxxv. Kare-silver, M. (1998). *E-shock-The electronic shopping Revolution: Strategic for retailers and manufacturers*. New York: Macmillan Press Ltd.
- clxxvi. Karim, A. J. (2011).The Significance of Management Information Systems for Enhancing Strategic and Tactical Planning. *Journal of Information Systems and Technology Management* 8(2)
- clxxvii. Kasinga, S. (2000). *Strategic Practices of stockbrockers in Kenya*. Nairobi: University of Nairobi.
- clxxviii. Kasiva, M. V. (2012). *The impact of risk based audit of financial performance in commercial banks in Kenya*. Unpublished Thesis, University of Nairobi.
- clxxix. Kathuku, J. K., Ngugi, N. P., & Muturi, W.M. (2017). Influence of Commercial Banks' Capacity Building Lending Strategy On Growth Of SMES In Kenya. *Journal of Business and Strategic Management*. 2(1), 20 – 34.
- clxxx. Kato, G. K., Otuya, W. I., Owunza, J. D., & Wato, J. A. (2014). Mobile banking and performance of commercial banks in Kenya. *International journal of current research* , 10670-10674.
- clxxxi. Katsiolouides, M. I. (2009). *Strategic Management: Global cultural perspective for profit and non-profit organizations*. Noida: ButterWorth-Heinemann.
- clxxxii. Kawa, F. (2013) *Automation and Operational Performance in Hydro Electric Power Generation Sector*. *International Multidisciplinary Journal*, 2(3), 25–30.
- clxxxiii. Kay. (1994). *Foundation of corporate success*. Oxford: Oxfrud University.
- clxxxiv. Kazmi, A. (2008). *Strategic Management and business policy* (3rd ed.). New Delhi: Tata McGraw Hill Education Private Limited.
- clxxxv. Keegan, W. J. (1989). *Global Market Management*. New York: Prentice Hall International.
- clxxxvi. Keneth W, R. M. (2012). Factors affecting adoption of e-commerce in small medium enterprises in Kenya: Survey of travel and tour firms in Kenya. *International journal of business, Humanities and Technology* , 2.
- clxxxvii. Kerlinger, F. N. (2005). *Foundation of Behavioral Research*. Carlifornia, USA: Heart College Publishers.
- clxxxviii. Kheirollahi1, F., Veysi1 F.S., Majidipour, A., & Majidipour, P. (2014). A Study of Using BPR and TQM in E-commerce. *European journal of natural and social science*, 2(3)
- clxxxix. Kibiru, C. (1999). *Study of competitive adavntages through differentiation of market*. Nairobi: University of Nairobi.
- cx. Kim, D. J. (2014). Astudy of multilevel and dynamic nature of trust in e-commerce from a cross-stage perspective. *international journal of electronic commerce* , 19, 11-64.
- cxci. Kim, W. C. (2006). Strategy, value innovation and the knowledge economy. *Sloam management review* , 40 (3), 14-54.
- cxcii. Kim, W. G., & Cha, Y. (2002). Antecedents and consequences of relationship quality in hotel industry. *Hospitality Management*, 21, 321-338.
- cxci. Kimani, M. (2012). Trade burriers, high transport costs keep investors away from EA region. *East African* , 6.
- cxci. Kinuthia, T. W. (2014). The magnitude of barriers facing e-commerce business in Kenya. *jornal of internet and information system* , 4.
- cxci. Kirkpatrick, S. A., & Locke, E. A. (1996). Direct and indirect effects of three core charismatic leadership components on performance and attitudes. *Journal of Applied Psychology*, 81: 36-51.
- cxci. KMPG. (2015, February). *Governance of Central Banks: Taking financial oversight to the next level*. KPMG International Report .
- cxci. KNBS. (2012). *Economic Review for year 2012*. Nairobi: Kenya National Bureau of Statistics.
- cxci. Knights, D., & McCabe. (2003). *Organization and Innovation: Guru Schemes and American Dreams*. London: Open University Press.
- cxci. Kombo, D.K. and Tromp, D. L. A. (2006). *Proposal and Thesis writing: An introduction*. Nairobi: Pauline's Publications Africa