INFLUENCE OF E-BUSINESS STRATEGIES ON THE PERFORMANCE OF INSURANCE COMPANIES IN NAIROBI COUNTY KENYA

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D61/67730/2013

A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF MASTER OF BUSINESS ADMINISTRATION DEGREE, SCHOOL OF BUSINESS OF THE UNIVERSITY OF NAIROBI

DECEMBER, 2018

DECLARATION

I hereby declare that this research project is my own work and effort and that it has not been submitted anywhere for any award.

Signature: …… Date: ……

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

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DEDICATION

This project is dedicated to my family and my dear friend Claris Ogowo for their love, support and prayers throughout the programme.

ACKNOWLEDGEMENT

Firstly, I would like to thank the Almighty GOD for His grace and wisdom, for giving me the strength to work throughout the proposal until this project phase. My special thanks go to my supervisor Dr. Winnie Njeru for her guidance and support throughout the completion of this project. My moderator Dr. R. Musyoka also deserves mention for constructive criticism while reading this work.

I appreciate all insurance companies in Nairobi for their invaluable support in providing respondents who answered my questionnaire to the fullest. Their efforts is what has made the production of this work possible. I am also grateful for my family members for their support, prayers and also constant reminder to finish the MBA on time.

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LIST OF ABBREVIATIONS

AKI	Association of Kenya Insurers
ATU	Attitudes Towards Usage
B2B	Business to Business
B2C	Business to Customer
DOI	Diffusion of Innovation Theory
DTF	Digital Transformation Framework
EY	Ernest and Young
ICT	Information Communication Technology
IRA	Insurance Regulatory Authority, Kenya
IRA	Insurance Regulatory authority
IT	Information Technology
ITU	International Telecommunications Union
MLR	Multiple Linear Regression
MMS	Multimedia Message Service
OP	Organisational Performance
PEOU	Perceived Ease of Use
PU	Perceived Usefulness
PwC	Pricewaterhouse Coopers
ROA	Return on Asset
ROE	Return on Equity
SMS	Short Messaging Service
SPSS	Statistical Package for Social Sciences
TAM	Technology Acceptance Model
TV	Television

ABSTRACT

The objective of this study was to examine the influence of e-business strategies on performance of insurance companies in Nairobi Kenya. The independent variables for the study were; information systems, information technology platform functionalities, mobile phone technology, online delivery of services, advertisement and automated risk analysis. The dependent variable for this research was firm performance. A descriptive cross-sectional research design was applied. The population of the study was 55 insurance companies in Nairobi County. 45 Insurance companies filled and returned the questionnaire representing a response rate of 81%. Data was analysed using descriptive statistics; frequencies, percentages, means and standard deviation. Inferential statistics was also done through multiple linear regression. The multiple linear regression analysis enabled the research to determine the overall influence of the e-business strategies on firm performance. Further analysis revealed that; IT platform functionalities, mobile phone technology and advertisement had positive coefficient with insurance companies performance while information systems, online delivery of services and automated risk analysis had negative beta coefficient with performance. The analysis was carried out at 95% confidence levels and the results suggested that there existed significant relationship between the e-business strategies and performance of insurance firms in Nairobi Kenya. The study recommends insurance companies to invest in IT infrastructure and develop processes that leverage technology. The firms need to collaborate with digital services providers to enable them store and market their products and services in the digital space and employees need to be provided with adequate training on how to operate and discharge their duties using e-business platforms.

CHAPTER ONE: INTRODUCTION

1.1 Background to the Study

The internet and related developments in information technology significantly impact various industries including financial services. This has had an unprecedented impact on the way businesses operate and the way they perform (El Sawy & Pereira, 2013). E-business is a great force, radically changing the operating environment of insurance market (Abbasi, & Weigand, 2017; Delafrooz, Zendehdel & Fathipoor, 2017). Insurance companies need to be innovative and adopt e-business strategies, to stay ahead of competitors and avoid being made obsolete by ambitious and agile digital start-ups (Accenture, 2014; Ganesh, 2015). Implementing e-business strategies is not easy. Some businesses have failed to survive the increasingly harsh environment. However, this journey is essential because customers demand digital services, competitors have adopted e-business strategies and positive results are seen from the early adopters (Chaffey, 2007).

The study was anchored on two theories, Diffusion of Innovation Theory (DOI) and Technology Acceptance Model (TAM). DOI was taken as a basis of understanding performance of insurers in Kenya. Rogers, (2003) diffusion of innovation theory distinguishes various levels of adoption of innovations by organisations as innovators, early adopters, late adopters or laggards. Diffusion of Innovation (DOI) theory is a significant determinant of organisation performance in light of e-business (Frambach & Schillewaert, 2002). Additionally, this study was anchored on Technology Acceptance Model (TAM) that explained how electronic resources are utilised in organisations (Ng, Shroff & Ping, 2013). The diffusion of innovation theory (DOI) focuses on the process of adoption of an innovation and how it affects organisation performance (Kvam & Strate, 2010). TAM stipulates that a number of factors influence how and when users

will use new technology. This study assessed how implementation of technology enabled business models has impacted the performance of insurance industry in Kenya. Insurance Regulatory Authority (2017) highlighted that despite positive growth in the insurance industry in 2017, the industry in Kenya continued to face challenges including: changing and more stringent regulatory requirements; fluctuations in financial markets; low interest rates; threat of new entrants and disruptions to their brick and mortar business models brought about by e-business strategies (Njeri, 2013; EY, 2014; Ganesh, 2015). Although most companies had made significant efforts to align their organisation to the regulatory changes and other market changes, the toughest challenge impacting insurers' is implementing the right business model to attract and retain customers in the digital age and achieve high customer satisfaction (Matt et al., 2015).

1.1.1 Concept of E-Business Strategies

Holsapple and Singh (2000) described e-business as an approach to achieving business goals through use of networked, computer-based technology. This technology enables the business to exchange information and execute activities across their value chain whilst supporting decision making underlining those activities. This involves use of e-business strategies such as communicating with customers through digital applications and platforms, leveraging on technology to automate a company's operations. Grossman, McCarthy and Aronson (2014) define e-business as the ability of an organisation to transact business through telecommunications networks. This includes, sharing of business information, maintaining of business relationships, and conducting of business transactions. It is also defined as the process of moving to a digital business (Gartner, 2016).

E-business is the delivery of services to customers through use of innovative technologies like mobile based solutions, digital payments platforms, and electronic money models (Abbasi & Weigand, 2017). E-business utilises information and communication technologies and the internet to improve business processes and quality of service. It entails adopting technology based solutions to increase operations efficiencies and improve administration of sales, financial management and human resource management Wilmington (2016).

E business strategies can bring a lot of relief to insurance companies to survive the current challenges in the operating environment. By adopting business automation, they can respond on time to customer requirements, stay flexible to changes in the industry and deliver high quality service as they promised and gain the profitability they aim for (Munshi, 2017). This study assessed how insurance companies in Kenya are responding to e-business and their influence on organisation performance.

1.1.2 Organisational Performance

Performance refers to the level of achievement of company's objectives (Choi, Poon & Davis, 2008). According to Venkatraman and Ramanujan (1986), organisation performance is a complex and multi-dimensional aspect in strategic management. Armstrong (2006) said that performance is the results of work (certain tasks) considering that they are related with organisation's strategic goals. These strategic goals include, growth and customer focused goals such as market share, company growth rates, profitability and operational goals such quality of products, efficiency and other organisational goals (Short & Palmer, 2003).

Organisation performance is a strategic planning and management systems used to measure organisation performance in four perspectives; organisation internal processes,

customers, growth and financial aspect (Luyima, 2015). Perceived organizational performance measures the impact of e-business strategy adoption on an organisation's performance (Zviran & Erlich, 2003). Companies that invest in information technology expect better performance in terms of decrease in operating costs; enhanced quality of services and products, improved customer satisfaction, and higher financial performance.

The motive of any insurance service provide is to improve performance (Abbasi & Weigand, 2017) through the following areas; increasing market share, extending customers reach, creating new employment opportunities, enhancing operational efficiency, introducing new innovative products and increase in profits. In the insurance sector, Atieno (2014) reported that rise in profit and interest rate is a critical determinant of performance of insurance companies. This study utilised non-financial indicators to determine the influence of e-business strategies on the performance of insurance companies in Nairobi.

1.1.3 Insurance Industry in Kenya

AKI (2017) reported that there is a massive change in the insurance landscape in Africa. There is increased deregulation since adoption of risk based capital requirements. The market is experiencing, increased liberalisation as most of the markets are adopting risk based capital requirements. Insurance penetration has increased in Africa due to growing demand influenced by, urbanisation, higher literacy levels and growing middle class.

In Kenya, the insurance industry has grown over the past decade. IRA (2017) reported that the insurance industry experienced 13% nominal growth with gross premium income was of KES 196.64 billion reported in December 2016. According to Annual

report by IRA (2017), there are 55 insurance companies in Kenya by 2016 December with 10 composite companies, 3 reinsurers 26 general insurers and 15 life insurers. This shows that there have been an increased number of insurance companies in Kenya as Nakhama (2014) reported that they were only 46 in 2015. This means there have been new entrants while others have merged from the year 2015 to date (2016).

The Association of Kenya Insurers (AKI) is the umbrella body governing all insurance firms in Kenya. AKI, 2017 reported that insurance companies experienced challenges growing their customer base through traditional channels and therefore need to embrace e-business strategies to meet customer needs. The increasing use of smartphones and enhanced social medial platforms has changed the customer preferences as they are becoming more discerning in utilisation of digital platforms.

Insurance companies in Kenya continue to adopt e-business strategies to meet customer demands (Nakhama, 2014). The Insurers recognise the benefits of transforming their business by leveraging technology. Some insurers have started differentiate themselves in the market using innovative technology enabled solutions (Abbasi & Weigand, 2017). The Insurers leverage on e-business strategies to know their customers and enhance customer experience. Additionally, they apply e-business strategies to enhance risk management and cost effectiveness. This study sought to answer the question; what is the influence of e-business strategies on performance of insurance companies in Nairobi?

1.2 Research Problem

Information communication technologies have profoundly changed the strategic context of businesses by changing the competitor landscape and business operations thus impact the performance of businesses across industries (Grossman et al., 2014). To

ensure improved organisation performance, insurance companies have adopted e-business strategies like use of mobile technology, information communication technology platforms, information systems, online services platforms, electronic advertising and risk analysis (Schmidt, Drews & Schirmer, 2017). Insurance companies may use e-business strategy to deliver greater value to their customers and gain competitive advantage. This is achieved through actively attracting new customers and engaging the existing customers by creating awareness and providing innovative products ultimately improving both profitability and growth (Kachroo & Majumdar, 2013).

Richter (2015) conducted a study and established that insurance companies were falling back behind other financial institutions such as banks in the adoption of e-business strategies. This was due to conflicting priorities, inflexible organisational structures, and legacy technology. Watsfod (2011) observed that common understanding of the impact of mobile applications on operations in the insurance industry is scarce. Also, the academic contributions on the same remain partial.

Nakhama (2014) conducted a research on the adoption of social media by insurers to achieve competitive advantage for insurance firms in Kenya but failed to indicate how the companies were implementing social media strategies. Gitau and Atunga (2013) focused on risk management practices of e-business with focus being on micro-insurance services provided and did not look at insurance companies. Most research studies reviewed did not focus on effects of e-business strategies adoption on organisation performance by insurance companies in Kenya. The research sought to address the following questions; what is the influence of e-business strategies on the performance of insurance companies in Kenya?

1.5 Research Objective

The objective of the study was to assess the influence of e-business strategies on performance of insurance companies in Nairobi.

1.6 Value of the Study

This study is instrumental for future scholars and researchers who may use the findings to validate their theories. The study finding informs the developments or advancements that have been made by insurance companies towards adoption of e-business models. The researcher has gained better understanding of how e-business has changed insurance companies' performance and understands reasons why companies should adopt e-business strategies for the digital age or be rendered irrelevant in the market.

Secondly, this research will benefit insurance companies' management as they would be able to identify the opportunities to grow their business through adoption of e-business strategies. The study outlines how strategy implementation is key to the achievement of their strategic goals. It highlights the various aspects of the organisations that need to be changed or enhanced to be able to leverage fully on the opportunities in the insurance market. The study focus on how successful insurance companies have implemented strategies for e-business and the challenges insurance companies faced while implementing e-business strategy.

The study may also significantly contribute to the growing body of research in development of new policies by IRA and AKI on how to govern electronic business transformation in the industry in Kenya. Moreover, the study stimulates academic researchers to conduct further studies in this area.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter presents the review of related literature (theoretical and empirical) relating to the study variables. The chapter looks at the theories guiding the study, conceptual review of study variables, empirical research and summary of literature review and knowledge gaps.

2.2 Theoretical Foundation

This research was anchored on diffusion theory of innovation and technology acceptance model (TAM) to explain the e-business process by insurance companies and organisation performance.

2.2.1 Diffusion of Innovation Theory

Everett Rogers developed the theory of diffusion of innovations (DOI) in 1962. DOI theory centres on how organisations innovate and the impact to the organisation. Kvam & Strate, (2010) describe innovation as the improvement and creation of a new product or process.

Rogers (2003), explained that adopters of any innovation need to first need to be made aware of the innovation and its envisioned benefits before making a decision to implement and confirm or reject the envisioned benefits. (Kvam, & Strate, 2010). DOI is a process that encompasses the following stages; awareness, interest and adoption.

DOI gives perspective on the different reactions from individuals when they are presented with new technologies. Focus is on the process of adopting the new technology; awareness, interest and adoption. Awareness is created through mass communication, observation and social interactions while interest is influenced by existing attitudes of the individual, their level of education and perceived relevance of

the innovations. From the principles of DOI, implementing e-business constitutes an innovation, which can be adopted based on its relative advantage. This study looked at how insurance companies have embraced e-business strategy and how it has affected their performance.

2.2.2 Technology Acceptance Model

The Technology Acceptance Model (TAM) was developed by David, Bagozzi and Warshaw (1989) developed this model but other researchers (Nov & Ye, 2008) have made further improvements. The theory stipulates that successful adoption of a system is determined by user acceptance.

Davis et al. (1989) and Shroff and Ping (2013) explain that user acceptance is determined by measuring the users perception on the usefulness and ease of use of the new system and the user's attitudes towards the system which could be positive or negative. Perceived usefulness and perceived ease of use are cognitive factors that determine the degree to which a person believes that using a particular system would improve performance and the degree to which a person believes that a particular system is easy to use (Ajzen & Fishbein, 2000).

TAM expounds that the usefulness and ease of use for a new technology is based on the user's behavior and intentions towards the system (Nov & Ye, 2008). Researchers have conducted empirical studies predicting technology adoption in various contexts thereby robustly validating the theory (Teo, 2009; Ng, Shroff & Ping, 2013). The researcher will adopt this theory because of its relationship to the problem under investigation.

2.3 Empirical Literature and Knowledge Gaps

Abbasi and Weigand (2017) observes that in the last decade, majority of insurance services providers have made huge investments on their IT infrastructures that have

enabled them to transform to electronic business of financial services like insurance and banking. Increased expansion of 3G and 4G network, availability of smart phones and tablets has created demand for customers to demand from insurance companies' electronic products and services. This demand in the market has encouraged software companies, financial institutions and other service providers to offer better financial services with the introduction of new applications, and products to retain their clients and access un-insured population.

One of the electronic business strategies that insurance companies are using is the social media. Delafrooz, Zendehdel and Fathipoor (2017) conducted research in Pakistan that suggests that it takes up to 3 years for 50 million people to register with insurance through TV adverts but the advent of Facebook and Twitter took only nine months or one year. However, research evidence shows that the capacity of organisation to use social media has largely been ignored. Strategists who had ignored social media (Pakfar, 2010) have now started to define and determine social media as a strategy that companies need to consider in their operations. This e-business strategy is mostly applied in marketing and communication areas of organisation.

Another e-business strategy is the micro-insurance which is an insurance product that protects low-income individuals against risks with the individuals making regular premium payments proportional to the impending risk (Goshashy, 2017). Tellez (2012) on his part defined micro insurance as a product that leverages mobile technology to transform part of the insurance value chain. Penetration of mobile phones and its usage are contributing factors to the rise of micro-insurance (Economides & Jeziorski, 2015).

Goshashy (2017) conducted research in Tanzania and indicated that leveraging of mobile phones infrastructures in insurance companies have made operations across the

value chain more efficient. This has led to reduction in turnaround times for enrolling new customers, processing of claims, enhancement of premium collection, bridging geographical distance and lowering the costs. For instance, Tellez (2012) indicated that premiums can be collected through over the counter agent payments, stored value mobile money accounts and post-paid mobile accounts.

Schmidt and Drews (2016) conducted a survey of the German banking industry that identified several challenges facing banks. The banks suffered lack of integration of their IT systems and lack of training for the end users which impacted their internal operations and resulted in non-realisation of the envisioned benefits of automated processes. Davhana (2009) argued that advancements in mobile technologies have introduced new marketing channels. More businesses are using Short Messaging Service (SMS), Multimedia Message Service (MMM), Graphic WAP Banners, and Video Clips to communicate with customers, making the mobile phone the primary channel for customer engagement. There opportunity to use this medium continues to grow with increased penetration of mobile phones in the mass market. This shows the importance of e-business strategies towards market expansion by companies.

Sekulovska (2012) argues the focus of e-business is shifting from business to customers (B2C) processes to business to business (B2B) transactions. The insurance industry is suitable industry to leverage on the latest advancements as it requires both models. However, insurers have been reluctant to adopt or have been slow to implement these applications due to lack of appropriate IT infrastructure, low awareness of the benefits and risk averse attitude. This study will seek to investigate the readiness of insurance companies in Kenya to serve their customers using current e-business platforms and how customer data has enabled them improve performance.

Wiesbock et al. (2017) while using Digital Transformation Framework (DTF) sought to provide guidance on three European countries implemented digital transformation programme. The research found out that insurance companies in EU created positions of chief digital officers (dedicated digital transformation units. There were also innovations such as insurance against cyber risks, a focus on customised situation based insurance and business process improvement by leveraging IT. They observed that insurance companies had seen the benefits of digitalisation that which were more than envisioned benefits of business process improvement. Halili (2014) collected data from 22 banks across Europe to determine influence of online banking and performance. They found out that adoption of online banking negatively impacted the performance Return on Equity (ROE) and Return on Asset (ROA) of the banks.

Lu, Yueh and Lin (2016) explored insurance salespersons' usage behaviour of mobile technology and their attitude towards using mobile technology in their job. Questionnaire instrument was used to get data from 72 employees of a Taiwanese insurance company. Findings showed that smart phones were often for instant communication and e-learning. The use of mobile technology devices improved individual workflow efficiency, image and information communication. Lorenzo (2014) investigated innovations that had assisted in increasing demand for micro-insurance. A case study methodology was used to study Micro-Ensure Company in Philippines. Findings showed that innovations through e-business needed to be implemented in various aspects of micro-insurance organisations for them to be effective in increasing demand for their products and services.

Delafrooz, Zendehdel and Fathipoor (2017) assessed the effect of social medial on customer loyalty and company performance in Iran insurance industry. The researcher collected data through questionnaires and analysed data using hierarchical regression

analysis. Results showed that social media utilisation influenced customer loyalty that later improved the performance. Davhana (2009) investigated the impact of mobile advertising on the insurance industry in South Africa and found negative results. Mobile advertising seemed to have had no effect on the industry. This was largely due to the fact that insurers took mass marketing approach. Customers preferred to receive messages that were aligned to their individual requirements.

Goshashy (2017) examined how micro-insurance products were scaled using mobile money in Tanzania. Data for this research was collected through researcher's observation and semi structured interview. It was established that mobile money was instrumental in receiving payments from customers and disbursement of claims payments to customers. Additionally, mobile phones were used to collect customer information used to segment customers thus support targeted marketing of micro insurance products.

Gitau and Arunga (2013) study was to establish strategies that Kenyan insurance companies were utilising to address risks and discern creative measures to minimise them. The researchers used purposive sampling to select eight companies that offered micro-insurance products in Kenya. They found out that use of technology-lowered administration costs. They recommended that micro-insurance service providers needed to develop innovative distribution channels and adoption of technology conscious partnerships to enhance control of risks.

Atieno (2014) investigated the effect of micro-insurance on financial performance of insurance companies in Kenya. Analytical and correlation research designs were used to target 10 insurance firms underwriting micro medical and property businesses. Research found out that there were micro insurance variables influencing the financial

performance of insurance companies in Kenya were micro -insurance cost, micro-insurance premiums and micro-insurance claims. Kiragu (2016) investigated the influence of innovations (process, product and market innovation) on performance of insurance industry in the country. Data was mainly collected through questionnaires. Kiragu established that product and process innovation had significant positive relationship with organisation performance ($p<0.05$) but not market innovation ($p>0.05$).

2.4 Summary of Literature Review and Knowledge Gaps

Studies have been conducted on the influence of e-business strategy on performance of organisations; study on this topic in academic area is limited. Table 1 shows the summary of research gaps from empirical literature.

Table 2.1 Knowledge Gap

Author	Title	Research findings	Knowledge gaps
Lu, Yueh & Lin (2016)	Insurance salespersons' mobile technology usage behaviour and their attitude towards it in their job at a Taiwanese Insurance Company.	Insurance sales persons had positive attitude towards mobile technology use.	The research failed to link mobile technology use and performance of organisation.
Goshashy (2017)	Scaling micro-insurance through mobile technology in Tanzania.	Mobile money was an essential method of collecting premiums.	Research was done in one company which cannot be generalised to be the situation in other companies.
Atieno (2014)	Effect of micro-insurance on financial performance of insurance companies in Kenya.	Micro insurance factors influenced performance of insurance companies.	Used secondary data while this research will use primary data from questionnaire.
Davhana (2009)	Effectiveness of mobile advertising to consumers in the short-term insurance industry in South Africa.	Mobile advertising had a significant influence on short term insurance industry	The study was conducted in south Africa. The researchers failed to link mobile advertising with performance
Lorenzo (2014)	Innovations influencing increased demand for micro-insurance in Philippines.	E-business strategy needed to be implemented to drive performance of insurance	The research used case study research design which is qualitative while this research will be quantitative
Abbasi & Weigand (2017)	Influence of digital financial services on organisation performance in Netherlands.	Digitisation influenced organisation performance	Study was conducted in banking industry. The study relied on secondary data

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research design, population of study, data collection, and data analysis.

3.2 Research Design

The study used a descriptive cross sectional survey to assess the influence of e-business strategy on performance of insurance companies in Nairobi. According to Ogula (2009), this research design is a systematic collection and analysis of data to answer research questions and test hypothesis regarding to status of a phenomena. Cooper and Schindler (2003) describe descriptive survey as a way of profiling events, people, and group of problems, through data collection, frequencies tabulation or their interactions. This design is appropriate in provision of data that is sufficient to facilitate analysis and generating precise inferences from variables that cannot be manipulated.

Mugenda and Mugenda, (2003) suggest that it is easy to obtain high reliability through presentation of all subjects with a standardized stimulus, which facilitates elimination of observer subjectivity. Therefore, cross section survey was also used to collect sufficient data on e-business strategies and organisational performance of insurance companies operating in Nairobi County, Kenya.

3.3 Population of Study

The population of study for this research consisted of all insurance companies operating in Nairobi Kenya and which Insurance Regulatory authority (IRA) licenses. Census method was used to select all general and long-term type of insurance companies to participate in the research. According to data from IRA (2017), 55 insurance companies have been licensed to provide insurance services, 10 composite companies,

3 reinsurers 27 general insurers and 15 life insurers. This study targeted all companies operating in Nairobi County, Kenya.

3.4 Data Collection

The study utilised questionnaire to collect primary data from insurance companies based in Nairobi Kenya. The questionnaire were structured based on the theme of the study and adopted a 5 point Likert type Scale Questions showing the degree to which e-business strategy was done by insurance companies ranging from 1-Not at all to 5-To very large extent.

The questionnaire was structured into three sections, Section A contained demographic information of respondents; Section B contained questions on e-business strategies, while the last section (C) had questions on organisation performance. The respondents in this survey included strategy and transformation, marketing and information technology managers in insurance companies operating in Nairobi County, Kenya. The questionnaire was administered through electronic mail and hand delivery approaches.

3.5 Data Analysis

Data collected from the field was analysed using quantitative methods with the help of SPSS (Version 22.0) computer software. Analysis of data was made through use of descriptive (frequencies, means, standard deviations and percentages) and inferential (multiple linear regression analysis) statistics. Multiple Linear Regression was computed to determine the overall influence of independent variable on dependent variable as given in the format below: $OP = \alpha + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5X_5 + \beta_6X_6 + \acute{\varepsilon}$

Where:

OP = Organisational performance

α = Y-intercept (a constant term)

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5, \beta_6, \beta_7$ and β_8 = Slope parameters

X_1 = Information Systems

X_2 = IT Platform functionalities

X_3 = Mobile Technology

X_4 = Delivery of Service

X_5 = Advertising

X_6= Automated Risk Analysis

$\acute{\varepsilon}$ = Random (error term)

All tests were conducted at 95% confidence level with significant differences recorded at an alpha α-level of 0.05 ($p < 0.05$).

CHAPTER FOUR: FINDINGS AND DISCUSSIONS

4.1 Introduction

This chapter presents the findings of the study on the influence of e-business strategies on the performance of insurance companies operating in Nairobi County, Kenya. The data used in the analysis process was collected from insurance firms based in Nairobi through online and personal administration of research questionnaire. Findings are first presented, interpreted and thereafter the discussion is made. The analysis of data is through use of descriptive; frequencies, percentages, means and standard deviation and inferential statistics; Karl Pearson correlation and multiple linear regression. The presentation of study findings and discussions follows the themes under the study.

4.2 Response Rate

A total of 55 questionnaires were distributed to various insurance firms and out of 55 questionnaires issued, 45 were returned and duly completed. The research attained 81.8% response rate from the questionnaire distributed. The response rate was higher than 75% which is required in descriptive research as recommended by Ogula (2009).

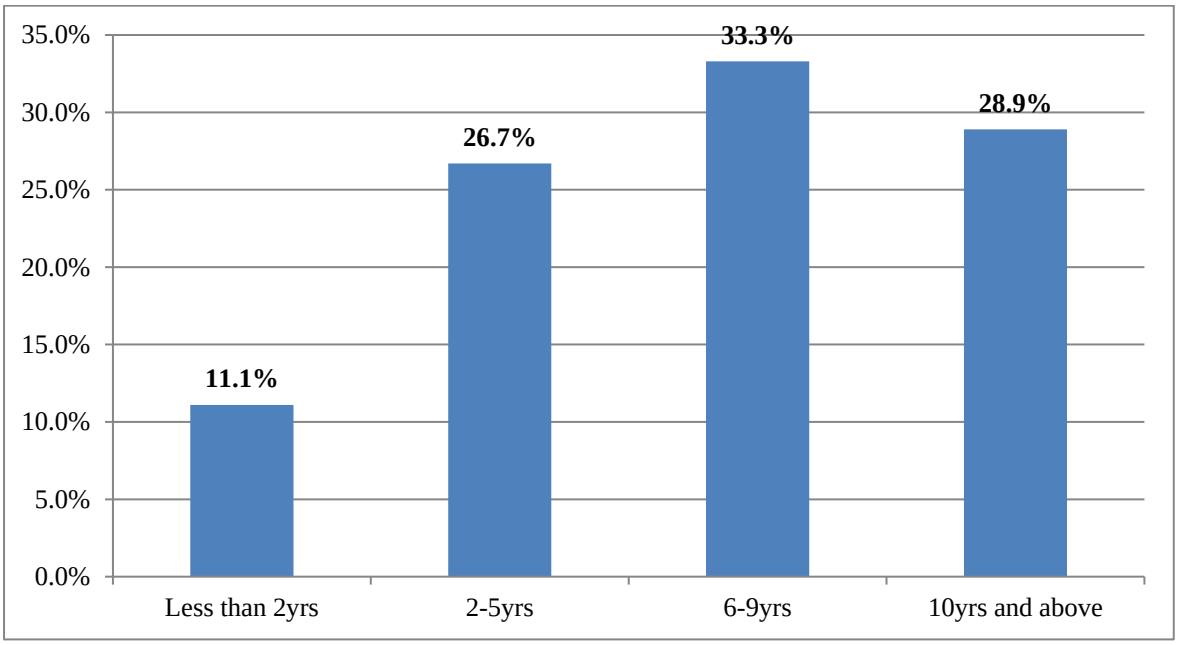
4.3 Demographic Data

This study collected general demographic information from respondents. This information is presented in this section.

4.3.1 Work Experience

The period to which respondents had worked in the insurance industry is illustrated in Figure 4.3.1.

Figure 4.3.1 Work Experience



Source: Primary data (2018)

The results in Figure 4.1 results shows that 12 (26.7%) had worked for 2 – 5 years in the insurance industry, 15 (33.3%) had worked for 6 – 9 years, 13 (28.9%) had worked for 10 years and above and 5 (11.1%) had worked for less than 2 years. The result therefore shows that most respondents had worked for a considerable number of years and therefore are in a position to understand the e-business strategies being used to improve performance of insurance companies in Kenya.

4.3.2 Functional area of respondents

This study targeted middle level managers involved in strategic and operational functions of the insurance companies. The table 4.3.2 overleaf highlights the various respondents' functional area.

Table 4.3.2 Functional area respondents

No	Functional Area	Frequency	Percentage
1	Sales	7	16%
2	Marketing	13	29%
3	Strategy and Transformation	5	11%
4	Underwriting	8	18%
5	Claims management	9	20%
7	Finance	3	7%
Total		**45**	**100%**

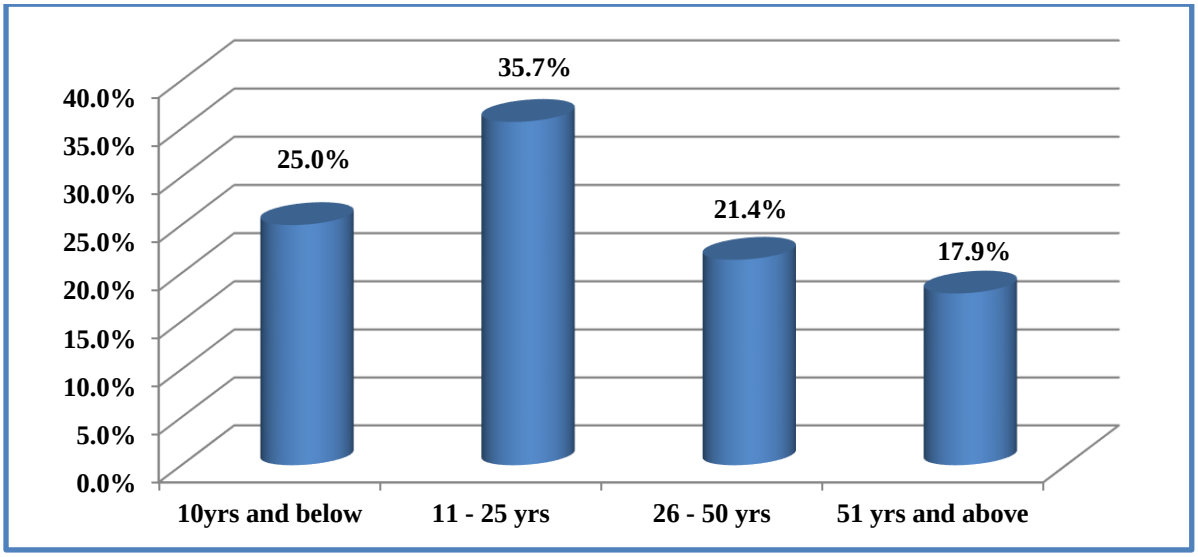
Source: Primary data (2018)

The results show that 29% of the respondents worked in marketing departments and 7% of the respondents worked in the Finance department. Therefore, the researcher achieved the research's objective. The researcher aimed to employees in Insurance firms involved in the core functions of the insurance firm.

4.3.3 Period of Business Operations

The respondents were also requested to indicate the period of time their company had been in operations. The results are given in Figure 4.3.3

Figure 4.3.3 Period of Insurance Operations in Kenya



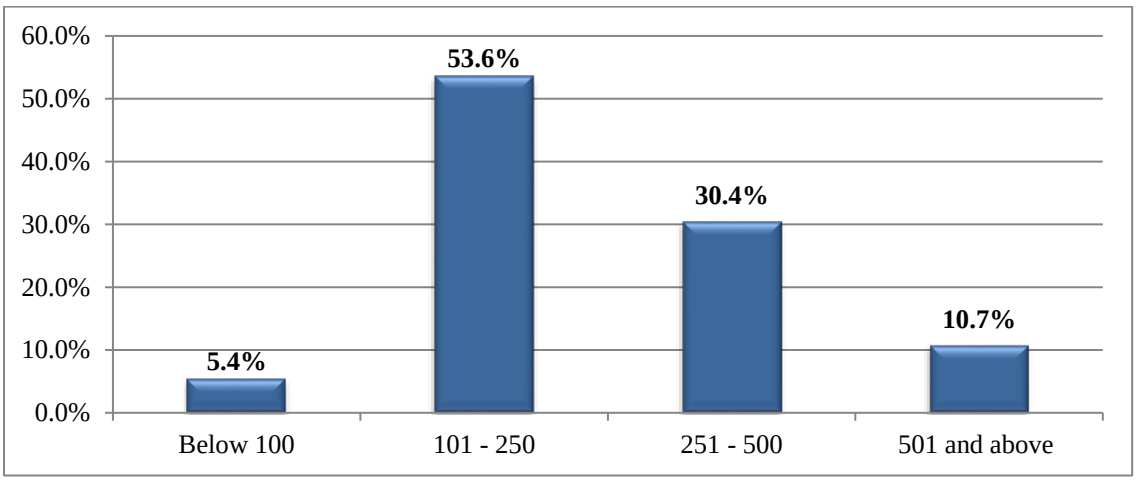
Source: Primary data (2018)

The results in Figure 4.3.3 shows that 14 (25.0%) insurers had been operating in the country for 10 years and below, 16 (35.7%) for 11 – 25 years, 10 (21.4%) for 26 – 50 years and 8 (17.9%) for 51 years and above. Based on their period of operations, this study determined how they have adopted e-business and its influence on performance.

4.3.4 Number of Employees

Information on the total number of employees employed by the insurance companies in the country was sought. The findings are given in Figure 4.3.4

Figure 4.3.4 Numbers of Employees



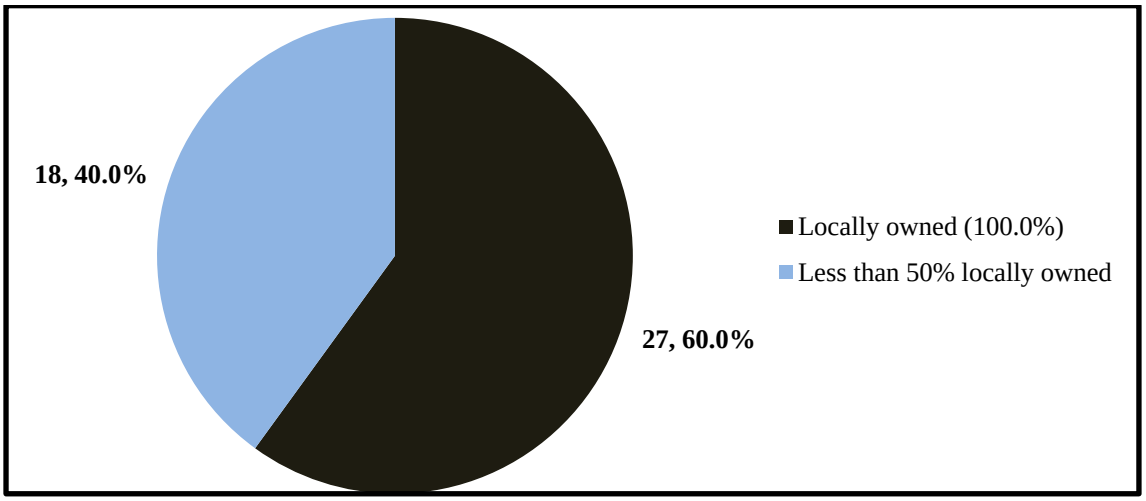
Source: Primary data (2018)

Results in Figure 4.3 shows that 2 (5.4%) of insurance companies had less than 100 employees, majority 24 (53.6%) had between 101 – 250 employees, 14 (30.4%) had 251 – 500 employees and 5 (10.7%) had more than 500 employees. It is therefore known whether the adoption of e-business strategies has affected the distribution of employees per each insurance company in the country.

4.3.5 Ownership of Insurance Companies in Kenya

The research also collected data on the distribution of ownership in the insurance industry in the country as given in Figure 4.3.5

Figure 4.3.5 Ownership of Insurance Companies in Kenya



Source: Primary data (2018)

The results in Figure 4.4 shows that most 27 (60.0%) of insurance companies in the country are locally owned while the rest 18 (40.0%), local investors own less than 50%. This shows that most insurance companies in the country are owned by Kenyans. Therefore the study will determine the extent to which they have adopted e-business strategies for the purpose of improving performance.

4.4 E-Business Strategies used in Predicting Insurance Companies Performance

This section presents the findings of the independent variables for this study. It looks at the determining respondents perceptions on the extent to which; information systems, IT platform functionalities, mobile technology, delivery of service, advertising and automated risk analysis. The scale used ranged from: 1- Not at all, 2-To a small extent, 3-To a moderate extent, 4-To a large extent and 5- To a very large extent. The results are presented in the following sub-sections;

4.4.1 Information Systems

The study sought to investigate how information systems had been adopted as an e-business strategy by insurance companies in the country. The results are presented in Table 4.4.1

Table 4.4.1 Information Systems

Statements	N	Mean	Standard Deviation
There is a group formed to facilitate knowledge-transfer between entrepreneurs, developers, designers, start-up enthusiasts and insurance industry experts in our firm	45	1.78	.670
Our call centre is well equipped with resources and personnel	45	3.09	1.535
We have set up social media command centres for digital crisis management and real time marketing initiatives	45	2.38	1.248
We have digital apps on the Google and or/ Apple app store for our insurance products	45	2.62	1.497
Customers can compare our various insurance policies online before making decision	45	2.29	1.325
Average	**45**	**2.43**	**1.255**

Source: Primary data (2018)

When asked on whether a group has been formed to facilitate knowledge transfer between various actors in the sector, majority of respondents in Table 4.1 said this has happened to a small extent (M=1.78 and SD=0.670). This therefore implies that there are no group alliances formed by insurance companies for information sharing and knowledge transfer. Secondly the respondents said that to a moderate extent (M=3.09 and SD=1.535), their company call centres is well equipped with resources and personnel. This implies not all insurance firms in the country have well equipped call centres to respond to customer and clients queries on time. This was also evident whereby to a small extent (M=2.38 and SD=1.248), they had set up social media command centres for digital crisis management and real time marketing activities. This results therefore majority of insurance companies in the country do not have social media command centre in the current information age.

Further, to a moderate extent (M=2.62 and SD=1.497), insurance firms had digital apps stored on the Google app store for their insurance products and services. This means that not all insurance companies in Kenya have developed their mobile apps to be used by their clients wherever they area. Lastly, to a small extent (M=2.29 and SD=1.325), customers may compare various insurance policies online before making their decisions. This implies that most of insurance firms' insurance products policies have not yet been uploaded on their online platforms and they happen to rely on manual and printed ones. The composite data shows that to a small extent (M=2.43 and SD=1.255), information systems have been installed to facilitate business activities by insurance firms in Kenya.

4.4.2 IT Platform Functionalities

The study also asked respond to indicate the IT platform functionalities in their individual insurance firms. The results are presented in Table 4.4.2.

Table 4.4.2 IT Platform Functionalities

IT Platforms	N	Mean	Standard deviation
Our company has set up insurance innovation laboratories	45	1.96	.952
Our clients can generate their bills and pay using online methods like PayPal among others	45	2.33	1.365
IT platform usage (clouds) eliminates paper work used for storage of clients information	45	2.44	1.159
Insurance claims processing is done using digital systems	45	2.27	1.338
Average	**45**	**2.25**	**1.203**

Source: Primary data (2018)

The findings show that most insurance companies in Kenya (M=1.96 and SD=0.952) have not yet set up insurance innovation laboratories. This means that most of the companies in the country have not factored the need to have innovative laboratories for future products innovation and development. Secondly, majority of respondent noted that to a large extent (M=2.33 and SD=1.365), their clients moderately generate their bills and pay using online platforms and (32.1%) disagreed with this opinion. The mean

values show that respondents sometimes used the digital payment platforms like PayPal and MPESA to pay their premiums and sometimes do bank payments (deposits). Thirdly, of respondents said that to a small extent (M=2.44 and SD=1.159), IT platform usage has been adopted to eliminate paper work. This shows that insurance companies have not transformed their services to paperless as a way of cutting operational costs. Fourthly, respondents said that to a low extent (M=2.27 and SD=1.338) has insurance claims been processed using digital systems. The mean values suggests that most insurance companies in the country appear not to have embraced digital platforms in settling insurance claims. Composite values shows that IT platform functionalities was operational to a small extent (M=2.25 and SD=1.203) in most insurance companies in the country. Without having infrastructure systems to support information technology use, it becomes impossible for these institutions to embrace new digitization strategies in the insurance industry.

4.4.3 Mobile Technology

The study also looked at how mobile technology use as an electronic business strategy influenced performance of insurance companies in the country. The results are presented in Table 4.4.3

Table 4.4.3 Mobile Technology Use

Mobile Technology	N	Mean	Standard Deviation
We have partnered with mobile telecommunication companies in providing insurance products and services	45	1.96	.952
Insurance transactions (payment of premiums) can be done using mobile phones platform	45	4.31	.733
With mobile technology adoption our customers can get more information on details such as product charges, where him/her premium goes, how much is actually invested and how much goes into expenses or distributor commissions	45	2.51	1.502
Average	**45**	**2.93**	**1.062**

Source: Primary data (2018)

Findings from Table 4.3 shows that respondents mentioned that to a small extent (1.96 and SD=0.952), they have partnered with mobile telephony companies in provision of insurance products and services. This implies few companies have partnered with mobile phone companies to provide insurance services. The aspect of providing insurance services to customers through use of mobile phones appears not to have been embraced by most insurers in Kenya. Secondly, to a large extent (M=4.31 and SD=0.733), insurance transactions are done using mobile platforms. Thirdly, respondents mentioned that to a moderate extent (M=2.51 and SD=1.502), their clients can get more information from their mobile phones concerning insurance products charges, premiums among other information. However, this aspect of mobile telephony appears not to have embraced by majority of insurance firms in the country. Average statistics shows that to a small extent (M=2.93 and SD=1.062), mobile phone technology strategy has been adopted in insurance industry in the country. This implies that the untapped potential of using mobile telephony to conduct insurance services have not yet been embraced by most institutions in the country.

4.4.4 Online Delivery of Services

The fourth e-business strategy that the study sought to determine how it was embraced by insurance firms is presented in Table 4.4.4 below.

Table 4.4.4 Adoption of Online Delivery Services by Insurance Firms

Online services	N	Mean	Standard deviation
We have set up interaction sites to communicate with our clients (B2C) connect	45	2.33	1.066
We have e-business officers in charge of digital agenda in our firm	45	2.07	.939
There is a self-service portal for customers to enable the access their portfolio on time	45	1.49	1.160
There is dedicated team for servicing the needs of the online customers	45	2.53	1.140
Average	**45**	**2.11**	**1.076**

Source: Primary data (2018)

Results from Table 4.4.4 shows that to a small extent (M=2.33 and SD=1.066), insurance firms in the country have setup interactive communicative sites to communicate with their clients (B2C). Very few insurances firms were found to have embraced this strategy fully. Results also revealed that to a lesser extent (M=2.07 and SD=0.939), most of insurance firms have e-business members of staff who are in charge of digital activities in their organisations.

Thirdly, most insurance companies did not have self – service portal (M=1.49 and SD=1.160) to enable their customers access their portfolio at their convenience. This implies that this e-business strategy has not yet been embraced where customers with their login credentials cannot access their accounts and retrieve information they may need because their insurance firms have not yet created self-service portals. Fourthly, to a moderate extent (M=2.53 and SD=1.140), insurance companies had set up dedicated team for servicing the needs of online customers. This implies that not all insurance companies have set up online team to assist with customer queries. Composite data shows that on a small extent (M=2.11 and SD=1.076), insurance firms in the country have set up online platforms to deliver services to their customers on the digital environment. The above results shows that online delivery of services has not yet been embraced by most insurance companies in the country.

4.4.5 Advertising Strategy

Another e-business strategy that the research investigated was on whether insurance companies were using e-advertising strategy. The results are presented in Table 4.4.5

Table 4.4. 5 Advertising Strategy

Advertising	N	Mean	Standard Deviation
We use social media to market our products and services	45	3.00	1.331
Our agents use tablet enabled sales process which help the front line sales persons to sell better and engage customers	45	2.60	1.421
We have partnered with digital companies e.g. Google, Facebook, Twitter to market insurance companies products and services	45	1.73	1.031
Brand awareness is mostly done on the web	45	2.62	.716
Average	**45**	**2.92**	**1.498**

Source: Primary data (2018)

Findings from Table 4.4.5 reveal that to a moderate extent (M=3.00 and SD=1.331), insurance companies use social media to market their products and services. This shows that most insurance companies have yet to embrace digital social media applications to advertise their products. Secondly, to a moderate extent (M=2.60 and SD=1.421), their agents used tablets to market their products far away from their offices. Thirdly, to a lesser extent (M=1.73 and SD=1.031), most insurance had not partnered with digital firms to market their insurance products. This implies that opportunities that come with advertisement using digital platforms like Facebook and Twitter has not yet been adequately utilised by Kenyan insurance firms. Fourthly, to a moderate extent (M=2.62 and SD=0.716) of respondents said that brand awareness is mostly done through the web. Composite values shows that to a moderate extent (M=2.92 and SD=1.498), insurance companies are using digital media devices to advertise, market and promote their products and services.

4.4.6 Automated Risk Analysis

The researcher also asked respondents to indicate the frequency to which their insurance firm used automated risk analysis in their e-business strategy. The results are presented in Table 4.4.6

Table 4.4.6 Automated Risk Analysis

Automated risk analysis	N	Mean	Standard Deviation
Claims are addressed with less than 2 days since the firm embraced e-business strategy	45	2.04	.999
Underwriting using e-business strategies such as telematics has assisted in risk analysis	45	1.82	1.072
Adoption of e-business has led to reduction in claims expenditures	45	1.76	1.111
Average	**45**	**1.87**	**1.061**

Source: Primary data (2018)

Results from Table 4.4.6 show that half of respondents said that to a lesser extent (M=2.04 and SD=0.999), claims in their insurance companies is address with less than 2 days after embracing e-business strategy. This shows that despite the adoption of e-business strategy, claims settling take a longer period of time in most insurance firms in the country. Results also showed that to a smaller extent (M=1.82 and SD=1.072), underwriting using e-business strategies like telematics has aided in risk analysis. Thirdly, to a smaller extent (M=1.76 and SD=1.111), adoption of e-business strategy had led to reduction in claims and expenditures in their insurance firm. Average data shows that to a lesser extent (M=1.87 and SD=1.061), automated risk analysis has been embraced by insurance companies in the country.

4.5 Performance of Insurance Companies in Kenya

The dependent variable for this study was respondents view on the performance of their insurance companies. Statements relating to performance were provided to respondents who were instructed to show their level of agreement on Likert scale: Strongly Agree (5), Agree (4), Undecided (3), Disagree (2) and Strongly Disagree (1). The outcome of the analysis is given in Table 4.5.

Table 4.5 Performance of Insurance Companies in Kenya

Performance of Insurance Companies	N	Mean	Standard Deviation
Our clientele base has increased significantly due to adoption of e-business strategies	45	2.89	.611
We have improved profitability of existing clients due to adoption of e-business strategies	45	3.11	.647
We have sold more than one product to our customers due to adoption of e-business strategies	45	3.56	.841
More customers say they are satisfied with our services due to adoption of e-business strategies	45	3.33	.739
We have retained majority of our customers due to adoption of e-business strategies	45	3.16	.952
We have increased our market share due to adoption of e-business strategies	45	2.91	.793
Services and operation have been efficient due to adoption of e-business strategies	45	3.78	.670
Services and operation have been effective due to adoption of e-business strategies	45	3.89	.775
We have cut operating costs due to adoption of e-business strategy	45	3.53	.505
New products are introduced to the market faster due to adoption of e-business strategies	45	3.29	.843
Employees in my organisation are more productive since adoption of e-business strategies	45	3.20	.694
There has been improvement of knowledge management and transfer due to adoption of e-business strategies	45	3.31	.733
Average	**45**	**3.33**	**0.734**

Source: Primary data (2018)

Results (Table 4.5) shows that most respondents tended to agree (M=3.56 and SD=0.841) that they have sold more than one produce to their clients after their insurance company had adopted e-business strategies in their operations. With regard to customer satisfaction, to a moderate extent (M=3.33 and SD=0.739) said that their

clients have been satisfied with products and services offered after adoption of e-business strategies.

It also emerged that most respondents agreed (M=3.89 and SD=0.775) that services and operations in their insurance companies have been effective because of adopting e-business strategies. The respondents also agreed (M=3.53 and SD=0.505) that business operating costs which affect performance has been significantly reduced. This is because the usage of e-business procedures has cut costs associated with movement (transport and logistics) and material costs (papers among others).

Looking further, the respondents were undecided (M=3.29 and SD=0.843) that new products and services have been introduced through the e-business platform. This is because customers can get information at their convenience as a result of adoption of e-marketing and promotion strategies when introducing new insurance products. Average data shows that most respondents were undecided (M=3.33 and SD=0.734) on the performance of their insurance companies. The result therefore reflects that majority of insurance companies performance in Kenya has largely been on average.

4.6 Correlation Analysis

The research also conducted a correlation analysis to determine the direction and strength of relationship that existed between e-business strategies and performance of insurance companies in the country. Results are presented in Table 4.6

Table 4.6 Correlation Analysis

		IS	ITPF	MT	ODS	ADV	ARA	PFM
IS	Pearson Correlation	1						
	Sig. (2-tailed)							
	N	45						
ITPF	Pearson Correlation	.868**	1					
	Sig. (2-tailed)	.000						
	N	45	45					
MT	Pearson Correlation	.820**	.823**	1				
	Sig. (2-tailed)	.000	.000					
	N	45	45	45				
ODS	Pearson Correlation	.927**	.831**	.776**	1			
	Sig. (2-tailed)	.000	.000	.000				
	N	45	45	45	45			
ADV	Pearson Correlation	.911**	.902**	.813**	.942**	1		
	Sig. (2-tailed)	.000	.000	.000	.000			
	N	45	45	45	45	45		
ARA	Pearson Correlation	.657**	.904**	.851**	.644**	.749**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	.000		
	N	45	45	45	45	45	45	
PFM	Pearson Correlation	.690**	.815**	.796**	.539**	.696**	.778**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	45	45	45	45	45	45	45

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

Key: IS-Information Systems, ITPF – IT Platform Functionalities, MT-Mobile Technology, ODS-Online Delivery of Services, ADV-Advertisement, ARA-Automated Risk Analysis and PFM-Performance

Source: Primary data (2018)

Results from Table 4.6 shows that there existed significant strong positive relationships between e-business strategies in the following order; IT platform functionalities (r=0.815 and p=0.001), mobile phone technology (r=0.796 and p=0.001), automated

risk analysis (r=0.778 and p=0.001), advertisement (r=0.696 and p=0.001), information systems (r=0.690 and p=0.001) and online delivery of services (r=0.539 and p=0.001) and performance of insurance companies in Kenya. This result therefore means that increased adoption and usage of e-business strategies would lead to increase in performance of insurance companies. The results are also significant at 99% (0.01) confidence level.

4.7 Multiple Regression Analysis

The main objective of this study was to assess the influence of e-business strategies on performance of insurance companies in Nairobi, Kenya. Therefore to arrive at the findings, a multiple regression analysis was computed at 95% confidence level. The main assumptions of the data was that it followed a normal distribution and linear. The analysis was carried out using stepwise method in SPSS. The findings are given in the following sub-sections. At first, model summary output is presented in Table 4.7.1

Table 4.7.1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.815[a]	.664	.656	.30066
2	.852[b]	.726	.713	.27458
3	.905[c]	.820	.806	.22568
4	.954[d]	.910	.901	.16141
5	.973[e]	.946	.940	.12609
6	.978[f]	.956	.949	.11530
a. Predictors: (Constant), IT Platform Functionality				
b. Predictors: (Constant), IT Platform Functionality, Online Delivery of Services				
c. Predictors: (Constant), IT Platform Functionality, Online Delivery of Services, Mobile Technology				
d. Predictors: (Constant), IT Platform Functionality, Online Delivery of Services, Mobile Technology, Automated Risk Analysis				
e. Predictors: (Constant), IT Platform Functionality, Online Delivery of Services, Mobile Technology, Automated Risk Analysis, Information Systems				
f. Predictors: (Constant), IT Platform Functionality, Online Delivery of Services, Mobile Technology, Automated Risk Analysis, Information Systems, Advertisement				

Source: Primary data (2018)

Results from Table 4.8 shows that the correlation is positive and strong (R=0.978) which suggests that there existed a linear relationship between e-business strategies on performance of insurance companies in Nairobi. The table further shows that the adjusted R^2 is 0.956 which implies that 95.6% of change in insurance companies performance could be influenced by the six e-business strategies that were under investigation in this research. The remaining 4.4% could be explained by other factors which were not considered in this study. Table 4.7.2 presents the ANOVA goodness of fit table.

Table 4.7.2 ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7.684	1	7.684	85.007	.000[a]
	Residual	3.887	43	.090		
	Total	11.571	44			
2	Regression	8.405	2	4.202	55.739	.000[b]
	Residual	3.166	42	.075		
	Total	11.571	44			
3	Regression	9.483	3	3.161	62.060	.000[c]
	Residual	2.088	41	.051		
	Total	11.571	44			
4	Regression	10.529	4	2.632	101.036	.000[d]
	Residual	1.042	40	.026		
	Total	11.571	44			
5	Regression	10.951	5	2.190	137.765	.000[e]
	Residual	.620	39	.016		
	Total	11.571	44			
6	Regression	11.066	6	1.844	138.721	.000[f]
	Residual	.505	38	.013		
	Total	11.571	44			
a. Predictors: (Constant), IT Platform Functionality						
b. Predictors: (Constant), IT Platform Functionality, Online Delivery of Services						
c. Predictors: (Constant), IT Platform Functionality, Online Delivery of Services, Mobile Technology						
d. Predictors: (Constant), IT Platform Functionality, Online Delivery of Services, Mobile Technology, Automated Risk Analysis						
e. Predictors: (Constant), IT Platform Functionality, Online Delivery of Services, Mobile Technology, Automated Risk Analysis, Information Systems						
f. Predictors: (Constant), IT Platform Functionality, Online Delivery of Services, Mobile Technology, Automated Risk Analysis, Information Systems, Advertisement						
g. Dependent Variable: Performance						

Source: Primary data (2018)

The goodness of fit Table 4.10 shows there exists a significant regression equation, F (6, 38) = 138.721, p=0.001). This implies that there is a linear relationship between e-

business strategies and performance of insurance companies in the country. This means that at least one of the population partial regression coefficients of the predictors is not zero (0) and the population value for the multiple R square is not. The coefficients of the analysis are given in Table 4.7.3

Table 4.7.3 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.396	.112		21.357	.000
	IT Platform Functionality	.418	.045	.815	9.220	.000
2	(Constant)	2.463	.105		23.518	.000
	IT Platform Functionality	.610	.075	1.188	8.181	.000
	Online Delivery of Services	-.235	.076	-.449	-3.091	.004
3	(Constant)	2.117	.114		18.498	.000
	IT Platform Functionality	.444	.071	.864	6.236	.000
	Online Delivery of Services	-.322	.065	-.615	-4.934	.000
	Mobile Technology	.310	.067	.562	4.601	.000
4	(Constant)	1.771	.098		18.001	.000
	IT Platform Functionality	.948	.094	1.847	10.035	.000
	Online Delivery of Services	-.594	.063	-1.135	-9.367	.000
	Mobile Technology	.587	.065	1.063	9.022	.000
	Automated Risk Analysis	-.550	.087	-1.065	-6.337	.000
5	(Constant)	1.412	.104		13.621	.000
	IT Platform Functionality	1.595	.146	3.107	10.953	.000
	Online Delivery of Services	-.508	.052	-.971	-9.720	.000
	Mobile Technology	.962	.089	1.742	10.836	.000
	Automated Risk Analysis	-1.110	.128	-2.151	-8.663	.000
	Information Systems	-.552	.107	-1.121	-5.152	.000
6	(Constant)	1.380	.095		14.458	.000
	IT Platform Functionality	1.457	.141	2.838	10.317	.000
	Online Delivery of Services	-.631	.064	-1.207	-9.918	.000
	Mobile Technology	.914	.083	1.655	11.030	.000
	Automated Risk Analysis	-1.050	.119	-2.034	-8.821	.000
	Information Systems	-.507	.099	-1.031	-5.118	.000
	Advertisement	.210	.071	.391	2.939	.006
a. Dependent Variable: Performance						

Source: Primary data (2018)

Using the constant and beta (β) coefficients of information systems (X_1), IT platform functionality (X_2), mobile technology (X_3), online delivery of services (X_4),

advertisement (X_5) and automated risk analysis (X_6), an estimated prediction (regression) equation for the model is written as:

$$y = 1.380 - 0.507X_1 + 1.457X_2 + 0.914X_3 - 0.631X_4 + 0.210X_5 - 1.050X_4 + \acute{\varepsilon}$$

Out of the six e-business strategies, only three: IT platform functionality (β=1.457), mobile technology (β=0.914) and advertisement (β=0.210) were found to have positive influence on performance of insurance companies in Nairobi, Kenya. However, the other three e-business strategies; information systems (β=-0.507), online delivery of services (β=-0.631) and automated risk analysis (β=-1.050) were found to have negative influence on performance of insurance firms in Nairobi Kenya. Moreover, the statistics reveal that the e-business strategies had significant relationship ($p<0.05$) with performance of insurance firms in Nairobi.

In interpreting the coefficients, a unit change (1) in IT platform functionality, insurance companies' performance changed by 1.171 on the lower level and 1.743 on the higher level. This implies that the two variables are highly correlated. With regard to online delivery of services, a unit change in online delivery of services (as of now), performance of insurance companies reduced by 0.760 on the lower bound level and reduced similarly by 0.503 on the higher level. The reason for obtaining negative coefficients is because, the identified e-business strategies were lowly used by insurance companies in the country and therefore had minimal impact on performance. The results suggests that the e-business strategies need to be used by insurance companies if they are targeting business growth and profitability. Their sustainability is pegged on whether they are going to digitalize their product and services to their customers or not.

4.8 Discussion of Findings

This section presents the discussion of the study findings in comparison with previous literature conducted on the influence of e-business strategies on performance of insurance firms in Nairobi, Kenya. Findings on performance showed that it has been average over the few years (M=3.32) justified by low standard deviation scores. Information systems adoption as a business strategy was found to be on a lower extent (M=2.43 and SD=1.25). This implied that majority of insurance firms had not yet adopted information systems to help run their organisation activities. This explains why a negative coefficient (β=-0.507) was obtained when the data was compared with performance. Nevertheless, the study finding suggests that increased investments in information systems would increase the likelihood of improved performance by insurance companies in the country as revealed by Karl Pearson correlation statistics (r=0.690 and p=0.001).

Coefficient values for information technology platform functionality showed high levels of relations (β=1.457) which suggested that increased investment by insurance companies in IT platform capacity would lead to improvement in organisation performance. The association was also found to be significant (p=0.001) when correlation analysis was computed. Insurance companies needed to highly collaboration with other digital platforms service providers (cloud companies) to enable storage of information from their large clientele base. Further, collaboration with digital payment companies would increase their revenue flows which are different from conventional means. This is supported by Cziesla (2014) who found out that digital technologies had an influence on customer service performance.

Mobile technology services were found to be moderately utilised as e-business strategy by insurance firms in the study area. To a higher extent, most respondents agreed that nowadays they do receive insurance premiums through their mobile phones. The finding coincides with Kiragu (2016) who found out process innovation through use of mobile phones was predominant in general and life divisions of insurance industry in the country. In Tanzania, Goshashy (2017) found out that mobile phones were used to make premium payments, pay out claims and also generate data by customers of micro-insurance. However, majority of insurance firms were found not to have developed business partnership with telecommunication companies in provision of insurances products and services. Mobile technology usage had higher positive coefficient (β=0.914) with performance of insurance companies in the country. This is in agreement with Kiragu (2016) who established that process innovation influenced performance of insurance companies in Kenya.

Looking at the fourth e-business strategy, it was found out that majority of insurance companies in Nairobi had not seized the opportunity of investing in online services (M=2.10 and SD=1.07) for the purpose of improving their business performance. B2B service was found to be practiced by only 28.5% of firms that were surveyed in this research. Computed regression coefficients were found to be negative (β=-0.631) which implied that low use of this strategy negatively affected the performance of insurance companies in Nairobi. This implied that a unit change in online delivery of services lead to reduction in performance of insurance companies by 0.631. This implied that insurance companies need to focus on investing in this e-business platform for the objective of attaining improved performance in future years to come as revealed by correlation statistics outcomes.

Advertisement as an e-business strategy was found to have positive coefficient (β=0.210) with performance of insurance companies in Nairobi. This implied that a unit change in advertisement, performance increased by 0.210. The study established that majority of insurance companies had not yet capitalized on the role of social media in advertising as it was found to be averagely used (M=2.48 and SD=1.12). Even partnership with digital companies like Facebook, twitter and Google was found to be low (M=1.73 and SD=1.03). This is in agreement with Kiragu (2016) who established market innovation by insurance companies did not significantly affect the performance of insurance sector in Kenya. Even in South Africa, Davhana (2009) found out that the use of digital advertising medium had a significant impact on customers in short term insurance industry in the country.

With regard to the sixth e-business strategy, it was found out that there existed a negative coefficient (β=-1.05) between automated risk analysis systems and performance of insurance companies in Nairobi. This is compounded by the fact that insurance firms had not yet improved the duration of claims processing as it exceeded two days. Further, use of telematics in underwriting was found to be lowly used by most firms in the study area. This explains why a negative coefficient was obtained between the variables.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

The following chapter presents the summary of findings of the study on the influence of e-business strategies adoption on the performance of insurance firms in Nairobi, Kenya. The chapter also provides conclusions, recommendations and suggestions for future research.

5.2 Summary of Study Findings

The study looked at how e-business strategies were adopted by insurance firms in Nairobi Kenya for the purpose of improves their performance. All of the insurance firms in the area responded to the research instruments. Al of the six e-business strategies were found to be moderately or being used to a small extent as revealed with the statistics below on composite data; information systems (M=2.43), IT platform functionality (M=2.25), mobile technology use (M=2.92), online delivery of services (M=2.10), advertising (M=2.92) and lastly automated risk analysis (M=1.87).

Multiple regression analysis output showed that the correlation coefficient for the above variables was strong positive (R=0.978) which implied that there existed significant positive relationship between the e-business strategies and performance of insurance firms in Nairobi Kenya. Adjusted R^2 showed that 95.6% of change in performance of insurance firms in the study would be explained by the six e-business strategies that have been presented in the previous paragraph. The ANOVA goodness of fit model showed that all the variables would predict performance of insurance companies and therefore significant ($p<0.05$).

However, beta coefficients results computed showed that three of the e-business strategies had positive effect; IT platform functionality ($\beta=1.457$), mobile technology

use (β=0.914) and advertising (β=0.210) while the other three were found to have negative coefficients with performance of insurance companies in Nairobi. Nevertheless, the six e-business strategies statistics were found to be significant thereby implying that increases in adoption of these strategies would improve performance of insurance companies in the country.

5.3 Conclusions

This study sought to examine whether performance of insurances companies in the country was influenced by e-business strategies. According to MLR statistics, 90.3% of performance of insurance companies was determined by the e-business strategies being utilised. As the world is changing, the adoption of e-business strategies is the key factor which shapes the digital business environment. The adoption of e-business strategies by insurance companies in Kenya was found to be at moderate level.

The performance of insurance companies could be as a result of slow adoption of various e-business strategies. This is because e-business has transformed insurance business operations through changing completion and conduct of insurance business which at later stages influence performance. for the insurance companies that have adopted at least one of the six strategies under study; information systems, IT systems capability, mobile technology, delivery of online services, advertisement and automated risk analysis end up improving services and operations, cutting down operating costs and they are in a position to sell more than one product to a single customer leading to generation of profits.

Therefore insurance companies in Kenya have the opportunity of aligning their organisation strategy through incorporation of digitisation concepts that drives the industry today in developed countries. Customers are expect personalised engagement

and appear to be more satisfied when e-business strategies are used compared to conventional methods used before. New insurance product development and introduction to the market is easier through use of e-business strategies compared to the older forms of information dissemination. Some companies reported that they have improved profitability of existing clients due to adoption of e-business strategies. To employees, the use of e-business strategies improves their productivity since e-business strategy facilitates knowledge sharing and transfer across the organisation. With this in mind, the study concludes that e-business strategies are indispensable tools for insurance companies' performances in Kenya today. This is because; the benefits that e-business strategies provide for insurance companies are undeniable.

5.4 Recommendations of the Study

Based on the findings of the study, discussions and conclusion the study makes the following recommendations. At first, majority of insurance firms were found not to have developed appropriate infrastructure to enable the operations of e-business platforms, therefore future planning should consider setting information systems infrastructure. To succeed in the digital market, there is need for insurance companies in the country to partner with telephone companies in marketing their products and services. There is also need for insurance companies to expand their online platform by setting up physical and digital call centres where customers' requests and queries can be processed within the shortest time possible.

Employees working in the insurance industry need also to be re-trained on the use of digital media devices, this will enhance their capacity to operate and work on new digital platforms that the company may be planning to install in the future. Lastly, the study suggests that insurance companies improve their websites through inclusion of

customers' portal where any client can log in, make query, make payments and also enrol for new product and services without physically visiting insurance companies' offices. This will be enhanced by upgrading systems capability in terms of size and also security features to ward off potential threats associated with cybercrime.

5.5 Suggestions for Further Research

This study was conducted in insurance industry; the same research can be conducted in future in other service oriented organisations like commercial banks. Other e-business strategies that were not covered in this research also need to be investigated on their implication on performance of insurance companies.

The study also recommends that future research need to be done on specific companies that have adopted e-business strategies in comparison to those ones which have not adopted and establish whether adoption or non-adoption influences performance of insurance companies. The researcher recommends that future studies should focus on how companies measure and communicate success of newly adopted initiatives.

The study did not target insurance customers as respondents for the study. Therefore future research needs to consider getting insurance customers feedback with regard to the contribution of e-business strategies towards their satisfaction which will be an indicator of organisation performance. Similarly, another researcher should consider other partners in the insurance value chain such as brokers and determine how e-business strategies impact business relationships. A research also needs to be done to determine the factors which are hindering the full adoption and usage of e-business strategies for performance improvement among insurance firms in the country.

REFERENCES

Abbasi, T., & Weigand, H. (2017). *The Impact of Digital Financial Services on Firm's Performance: a Literature Review*. Department of Management, Tilburg School of Economics and Management, Tilburg University, Netherlands.

Accenture (2014). *Accenture Digital Innovation Survey, 2014*. Sydney: Accenture.

Armstrong, M. (2006), Performance Management (Key Strategies and Instructions).

Atieno, T. A. (2014). *An Assessment of the Effect of Micro-Insurance on the Financial Performance of Insurance Companies in Kenya*. MBA Project, University of Nairobi.

Ayofe, A.A. (2012). *Digitisation of Indigenous Knowledge for Natural Resources Management in Africa.* A Paper Presented at the 20th Anniversary Summit of the African Educational Research Network at North Carolina State University, Raleigh, USA on 19th May 2012.

Bain & Company (2015). *Global Digital Insurance Benchmarking Report 2015 – Pathways to Success in a Digital World.* Online Publication, accessed on 01/10/2017, http://www.bain.com/publications/articles/global-digital-insurance-benchmarking-report-2015.aspx.

Chaffey, D (2007). *E-business and E-commerce management: Strategy, Implementation and Practise.* Pearson Education Limited, Harlow England

Cheruiyot, J. R. (2015). *Challenges in the Uptake of Marine Cargo Insurance in Kenya*.MBA Project, University of Nairobi, Kenya.

Cziesla, T. (2014). *A Literature Review on Digital Transformation in the Financial Service Industry*. Proceedings of the 27th Bled eConference (BLED 2014), Bled, Slovenia.

Dapp, T. F. (2014). *Fintech – The digital (r) evolution in the financial sector: Algorithm-based banking with the human touch*, Deutsche Bank Research.

Davhana, S. A. (2009). *The influence of mobile Internet on advertising to consumers in the short-term insurance industry*. A Mini-Dissertation, North-West University.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science, 35*, 982-1003.

Delafrooz, N., Zendehdel, M. & Fathipoor**,** M. (2017). The Effect of Social Media on Customer Loyalty and Company Performance of Insurance Industry. *International Journal of Economics and Financial Issues, 7*(3), 254-264**.**

Economides N., & Jeziorski, P. (2015). *Mobile Money in Tanzania*. NYU Stern and Duke University.

EY (2013). Insurance in a digital world: the time is now: key findings from the EY Global Insurance Digital Survey 2013. Available at: http://www.ey.com/Publication/vwLUAssets/EY-Digitalsurvey-illustrativesummary/$FILE/EY-Finaldigital-survey-ebook.pdf

EY (2014). *Reimagining customer relationships: key findings from the EY Global Consumer Insurance Survey 2014.* Available at: http://www.ey.com/Publication/vwLUAssets/ey-2014-global-customer-insurancesurvey/$FILE/ey-globalcustomer-insurance-survey.pdf.

Ganesh, A. (2015). Insurance awareness of India. *International Journal of Applied Research, 1*(9), 100-103.

Gitau, A.N., & Atunga, A. (2013). Risk Management Practices: A Survey of Micro-Insurance Service Providers in Kenya. *International Journal of Financial Research, 4*(1), 132-150.

Goshashy, C. (2017). *Designing micro-insurance products using Mobile money in Tanzania.* Master degree in media management, Arcada University, Finland.

Grossman, M., McCarthy, R.V. & Aronson, J. E. (2014). E-Commerce adoption in the Insurance Industry. *Issues in Information Systems, 5*(2), 467 – 473.

Halili, R. (2014). *The impact of Online Banking on Bank Performance*. Master thesis, Charles University, Prague Czech Republic.

Hess, T., Matt, C., Benlian, A. & Wiesbock, F. (2016). Options for Formulating a Digital Transformation Strategy. *MIS Quarterly Executive, 15*(2), 103-119.

Holsapple, C. W. & Singh, M. (2000). "Electronic commerce: from a definitional taxonomy toward a knowledge management view," *Journal of Organizational Computing and Electronic Commerce, 10*(3), 149-170.

Insurance Regulatory Authority [IRA] (2017). *Insurance Industry Annual Report 2016*. Nairobi: Insurance Regulatory Authority.

International Telecommunication Union [ITU] (2015). *The World in 2014: ICT facts and figures.* Geneva: ITU.

Kiragu, R. W. (2016). *Influence of Innovation on performance of Insurance companies in Kenya* Masters Thesis. Strathmore University. Retrieved on 13-07-2018 from http://su-plus.strathmore.edu/handle/11071/5011.

Kvam, G. & Strate, E. P. (2010). Innovation and diffusion - Different roles in developing nature-based tourism. *The Open Social Science Journal*, 3, 30-40.

Lorenzo, R. P. (2014). *Innovations in Micro-insurance: Evidence from the Philippines*. Masters Dissertation, University of Sao Paulo.

Lu. M.H., Yueh. H.P., Lin, W. (2016) *Mobile Technology Use Among Sales People in Insurance Industry*. Accessed Oct 09 2017 from: https://www.researchgate.net/publication/304055353.

Malhotra, R. (2015). *The insurance workforce of the future: Why will so many insurers fail to achieve their digital potential?* Sydney: Accenture.

Matt, C., Hess, T. & Benlian, A. (2015). Digital Transformation Strategies. *Business and Information Systems Engineering, 57*(5), 339-343.

Munshi, M. (2017). Simplifying Insurance Automation. *Infosys*, available at https://www.infosys.com/industries/insurance/white-papers/Documents/simplifying-insurance-automation.pdf

Nakhama, P.M. (2014). *Social Media as a Strategy in Enhancing Competitive Advantage of Firms in the Insurance Industry in Kenya.* MBA Project, University of Nairobi, Kenya.

Ng, E. M. W., Shroff, R. H. & Ping, C.L. (2013). Applying a Modified Technology Acceptance Model to Qualitatively Analyse the Factors Affecting E-Portfolio Implementation for Student Teachers' in Field Experience Placements. *Issues in Informing Science and Information Technology, 10,* 355-364.

Njeri, B.G. (2013). *Strategies Adopted By Kenyan Insurance Companies to Alleviate Low Insurance Penetration.* MBA Project, University of Nairobi, Kenya.

Otto & Company Strategy Consultants Gmbh (2016). *Insurance Companies: Staying Competitive in the Digital Age What needs to be done to become a Digital Insurer?* Otto & Company Strategy Consultants.

Pohjola, M. (2014). *Digitisation and Productivity in the Financial Sector.* Aalto University School of Business.

Richter, D. (2015). *Characterizing Approaches for the Implementation of Digital Business Strategies*. Master's Thesis.

Sekulovska, M. (2012). Internet Business Models for E-Insurance and Conditions in Republic of Macedonia. *Procedia - Social and Behavioral Sciences, 44,* 163 – 168.

Schmidt, J., Drews, P., & Schirmer, I. (2017). *Digitisation of the Banking Industry: A Multiple Stakeholder Analysis on Strategic Alignment*. Paper Presented at Twenty-third Americas Conference on Information Systems, Boston, 2017.

Schmidt, J., & Drews, P. (2016). *End-users' perspective on digitisation: A study on work order processing in the German banking industry*. Paper presented at Twenty-second Americas Conference on Information Systems, San Diego, 2016.

Tellez, C. (2012). *Emerging practices in mobile micro insurance*. London: GSMA.

Thirupathi, T. (2014). A Study on the Awareness Level of LIC Policy Holders in Salem District. *Asia Pacific Journal of Research, 1* (13), 80-89.

Watzdorf, S. (2011). *Mobile Customer Relationship Management Impact on the Insurance Industry*. D.Phil Dissertation, ETH Zurich and the University of California, Berkeley.

Wiesbock, F., Li, L., Matt C., Hess, T. & Richter A. (2017). *How Management in the German Insurance Industry Can Handle Digital Transformation.* Management Report 1/2017. Munich School of Management.

Wilmington D.E (2016). E-business**.** *Available at: https://managementmania.com/en/e-business*

APPENDIX I: QUESTIONNAIRE

Introduction

This questionnaire sets out to assess the influence of e-business strategies on performance of insurance companies in Nairobi.

Section A: Demographic Data

1. How long have you worked in the insurance industry?

Less than 2yrs [ ] 2-5yrs [ ] 6-9yrs [ ] 10yrs and above [ ]

2. How long has your organisation been in operations?

Less than 10yrs [ ] 11-25yrs [ ] 26-50yrs [ ] 51yrs and above [ ]

5. How many employees does your company have?

Less than 100[ ] 101- 250 [ ] 251-500[ ] 501 and above [ ]

6. What is the ownership structure of your company?

100% locally owned [ ] Less than 50% locally owned [ ] 100 foreign owned

Section B: E-Business Strategies used by Insurance Companies in Kenya

7. Please indicate with a tick the extent to which your firm has adopted the following E-business strategies using the scale below.

1- Not at all, 2-To a small extent, 3-To a moderate extent, 4-To a large extent and 5- To a very large extent.

E-business strategies	**1**	**2**	**3**	**4**	**5**
Information Systems					
(i) There is a group formed to facilitate knowledge-transfer between entrepreneurs, developers, designers, start-up enthusiasts and insurance industry experts in our firm					
(ii) Our call centre is well equipped with resources and personnel					
(iii) We have set up social media command centres for digital crisis management and real time marketing initiatives					
(iv) We have digital apps on the Google and or/ Apple app store for our insurance products					
(v) Customers can compare our various insurance policies online before making decision					
IT Platform functionalities					
(i) Our company has set up insurance innovation laboratories					
(ii) Our clients can generate their bills and pay using online methods like PayPal among others					
(iii) IT platform usage (clouds) eliminates paper work used					

E-business strategies	**1**	**2**	**3**	**4**	**5**
for storage of clients information					
(iv) Insurance claims processing is done using digital systems					
Mobile Technology					
(i) We have partnered with mobile telecommunication companies in providing insurance products and services					
(ii) Insurance transactions (payment of premiums) can be done using mobile phones platform					
(iii) With mobile technology adoption our customers can get more information on details such as product charges, where him/her premium goes, how much is actually invested and how much goes into expenses or distributor commissions					
Online Delivery of Service					
(i) We have set up interaction sites to communicate with our clients (B2C) connect					
(ii) We have e-business officers in charge of digital agenda in our firm					
(iii) There is a self-service portal for customers to enable the access their portfolio on time					
(iv) There is dedicated team for servicing the needs of the online customers					
Advertising					
(i) We use social media to market our products and services					

E-business strategies	**1**	**2**	**3**	**4**	**5**
(ii) Our agents use tablet enabled sales process which help the front line sales persons to sell better and engage customers					
(iii We have partnered with digital companies e.g. Google, Facebook, Twitter to market insurance companies products and services					
(iv) Brand awareness is mostly done on the web					
Automated Risk Analysis					
(i) Claims are addressed with less than 2 days since the firm embraced e-business strategy					
(ii) Underwriting using e-business strategies such as telematics has assisted in risk analysis					
(iii) Adoption of e-business has led to reduction in claims expenditures					

Section C: Organisation Performance

8. Please indicate with a tick the extent to which you agree with the performance areas listed using the scale provided below.

1- Strongly Disagree, 2- Disagree, 3-Uncertain, 4-Agree and 5- Strongly Agree

Performance Areas	**1**	**2**	**3**	**4**	**5**
Growth strategy					
(i) Our clientele base has increased significantly due to adoption of e-business strategies					
(ii) We have improved profitability of existing clients due to adoption of e-business strategies					
(iii) We have sold more than one product to our customers due to adoption of e-business strategies.					
Customer Management					
(iv) More customers say they are satisfied with our services due to adoption of e-business strategies.					
(v) We have retained majority of our customers due to adoption of e-business strategies.					
(vi) We have increased our market share due to adoption of e-business strategies.					
Internal Operations					
(vii) Services and operation have been efficient					
(viii) Services and operation have been efficient effective					
(ix) We have cut operating costs due to adoption of e-business strategy.					

Performance Areas	**1**	**2**	**3**	**4**	**5**
Learning and growth					
x) New products are introduced to the market faster due to adoption of e-business strategies.					
xi) Employees in my organisation are more productive since adoption of e-business strategies.					
xii) There has been improvement of knowledge management and transfer due to adoption of e-business strategies					

The End

Thank You

APPENDIX II: INSURANCE FIRMS LISTED (AKI 2017)

No	Name	Type of company
1	AAR Insurance Company Ltd	General Insurance
2	Allianz Insurance Co of Kenya Ltd	General Insurance
3	Africa Merchant Assurance Ltd	General Insurance
4	AIG Kenya Insurance Company Ltd	General Insurance
5	APA Insurance Company Ltd	General Insurance
6	APA life Assurance Ltd	Life Insurance
7	Barclays Life Assurance Kenya Ltd	Life Insurance
8	Britam Life Assurance Kenya Ltd	Life Insurance
9	Britam General Insurance Kenya Ltd	General Insurance
10	Cannon Assurance	Composite
11	Capex Life Assurance Company Ltd	Life Insurance
12	CIC General Insurance Company Ltd	General Insurance
13	CIC Life Assurance Company	Life Insurance
14	Corporate Insurance Company Ltd	Composite
15	Directline Assurance Company Ltd	General Insurance
16	Fidelity Shield Insurance Company Ltd	General Insurance
17	First Assurance Company Ltd	Composite
18	GA Insurance Company Ltd	General Insurance
19	Geminia Insurance Company Ltd	Composite
20	Heritage Insurance Company Ltd	General Insurance
21	ICEA Lion General Insurance Co Ltd	General Insurance
22	ICEA Lion Life Assurance Co Ltd	Life Insurance

No	Name	Type of company
23	Intra Africa Assurance Company Ltd	General Insurance
24	Invesco Assurance Company Ltd	General Insurance
25	Jubilee Insurance Company	Composite
26	Kenindia Assurance Company Ltd	Composite
27	Kenya Orient Insurance company Ltd	General Insurance
28	Kenya Orient Life Assurance	Life Insurance
29	Kenya Alliance Insurance Company Ltd	Composite
30	Liberty Life Assurance Ltd	Life Insurance
31	Madison Insurance Company Ltd	Life Insurance
32	Madison General Insurance Kenya Ltd	General Insurance
33	Mayfair Insurance Company Ltd	General Insurance
34	Metropolitan Cannon Life Assurance Company Ltd	Life Insurance
35	Monarch Insurance Company Ltd	Composite
36	Occidental Insurance Company Ltd	General Insurance
37	Phoenix of E.A Assurance Company Ltd	General Insurance
38	Pioneer General Insurance Company	General Insurance
39	Pioneer Life Assurance Company Ltd	Life Insurance
40	Pacis Insurance Company Ltd	General Insurance
41	Prudential Assurance Company Ltd	Life Insurance
42	Resolution Insurance Company	General Insurance
43	Saham Assurance Company Ltd	Composite
44	Sanlam General Insurance Company Ltd	General Insurance
45	Sanlam Life Insurance Ltd	Life Insurance

No	Name	Type of company
46	Takaful Insurance of Africa Ltd	Composite
47	Tausi Assurance Company Ltd	General Insurance
48	Trident Insurance Company Ltd	General Insurance
49	UAP Old Mutual Life Assurance Company Ltd	Life Insurance
50	UAP Insurance Company	General Insurance
51	UAP Life Assurance Company Ltd	Life Insurance
52	Xplico Insurance Company Ltd	General Insurance
53	Continental Reinsurance	Reinsurance
54	East Africa Reinsurance	Reinsurance
55	Kenya Reinsurance Corporation	Reinsurance

Source: IRA and AKI Insurance industry annual report, 2017