

Extent of Adoption of E-Business by Insurance Firms in Kenya

Dr. Francis Ofunya Afande, PhD., FCIM (UK)
Dedan Kimathi University of Technology, P.O. Box 657,10100, Nyeri Kenya

Abstract

This study sought to assess the extent of adoption of e-business by insurance companies in Kenya. A descriptive research design was used to undertake the study. The population from which the study was undertaken was all the companies licensed to undertake insurance business in Kenya, whose number stood at 43 as at June 2013. A representative sample of 26 insurance companies, representing 60% the whole population was selected at random, which is within the limits of the generally accepted statistical conditions. Primary data was collected with the aid of a semi-structured questionnaire. Content analysis was employed for data pertaining to the background of the respondents and Company while data pertaining to the objectives of the study was analyzed by employing descriptive statistics such as frequencies, mean and standard deviations. Descriptive statistics are used to describe the basic features of the data in a study. Findings of the study show that the factors influencing implementation of e-business in the insurance sector in Kenya are categorized into two - technological and managerial.

Keywords: Adoption; Business value; E-Business; Insurance companies

INTRODUCTION

Background of the Study

E-business is defined as the use of internet-based ICTs to conduct business (including sharing information, maintaining relationships and conducting transactions) within and between organizations (Poon & Swatman, 1999). At the beginning the focus of the internet services provided by insurance companies was on information-based services. Since then insurance companies have moved to create and provide also interactive services in the internet. The reasons behind this development include cutting costs, speeding up transactions and service, better accessibility and other benefits (Ahonen 2002). At the moment it is possible to buy some simple insurance services, such as travel insurance, via internet, but so far full line of insurance cover is not available (Järvinen *et al.* 2001; Ahonen, 2002). However, many insurance companies have prioritized business-to-business web-facilities that enable corporate customers to update their insurance cover, seek claim compensation and to get information via internet.

The insurance industry plays a significant role in a growing economy in terms of providing indemnification of risks faced by both individuals and companies, in addition to being an institutional investor. The insurance industry in Kenya is not an exception to this. After independence in 1963 the Government of Kenya saw the need to have some control of the insurance sector. The market was then dominated by branch offices of foreign insurance companies particularly from the United Kingdom and India. The insurance companies' act of 1960 was based on the UK legislation. In 1978 the Minister for Finance issued an order stopping the operations of branch offices and all insurance companies had to be locally incorporated. Thereafter in the early 1980's the process of drafting a law to regulate the insurance sector was started by the government with the support of UNCTAD.

According to Rajkumar (2001), e-business system contributes significantly to national productivity growth through the removal of non-value added activities in the business process. However, the adoption of e-business has been slow in Kenya. While some authors have noted the practical difficulties in getting the systems operational (Ernst & Young, 2001), there is virtually no discussion of implementation and management models of e-business in Kenya or of the financial benefits of these models for the companies, suppliers, and the customers or for those whose responsibility it is to implement and manage e-business. In fact, there appears to be little consideration of the management or organizational issues associated with e-business.

1.2 Statement of the problem

The Insurance industry players need to get in the e-business game or they are going to be shut out of a critical part of the marketplace," Jerry Jasinowski, President, National Association of Manufacturers (Wall Street Journal, 2000). The importance of e-businesses has been well documented in reports by the U.S. government as well as independent organizations (Arthur Andersen and NSBU 2000, Williams 1999, Small Business Administration 2000).

In the Kenyan context, e-commerce and e-business related studies include the following: Mbuvi (2000) surveyed the potentials for the adoption of e-commerce by tour operators in Nairobi. The findings indicate that the potentials of adoption of e-commerce by tour operators in Nairobi include cut-down in turn around times increased reduced expenses and hence increased profitability and efficient and effective handling of customer

complaints. Musembi (2001) undertook an investigation into the factors that have influenced the adoption of e-commerce in the retailing industry. The findings indicate that the influencing factors include the need to remain competitive by adopting new technologies, decision by top management and efficiency and effectiveness in service delivery. Muganda (2001) investigated the business value of e-commerce in selected firms in Kenya which were not from the insurance industry. Muganda established that the business value included increased profitability due to reduced operational costs emanating from online transactions and efficiency in service delivery among others.

Ncube (2002) undertook a study of SMEs in the craft industry in Kenya. The findings indicate that the SMEs have been slow in adopting e-business and those that had implemented e-business mostly used the internet for communication. Very few of them either hosted websites or transacted on the same. Muyoyo (2000) studied the factors influencing the adoption and implementation of e-business technologies in companies quoted at the Nairobi Stock Exchange. Muyoyo's context of e-business is more general covering various aspects of e-business. The study respondents were information systems managers who are enablers in implementing technology systems in organizations. The findings indicated that the companies quoted on the Stock Exchange had intended to reduce the turn-around times for their transactions, reduce operational costs and eventually increase their profitability.

It is clear that there are gaps from the above studies in a Kenyan context in that, even though it is clear that insurance companies use one form or the other of an e-business solution, the state or level of implementation and use is not known. The current study is therefore more focused on filling the above research gaps and respondents will be managers in charge of financials of insurance companies in Kenya as they are direct users of the technology in e-business process and transactions.

Objectives

This study sought to assess the extent of adoption of e-business by insurance companies in Kenya

LITERATURE REVIEW

An overview of e-business

E-business allows for the extended organization to be connected. This means that all employees, customers/clients, suppliers, and other stakeholders, regardless of geographic region, are interconnected. E-business uses: Common electronic data standards with computer automation technology to electronically interconnect information systems, integrate internal and external data streams, and automate business processes between trading partners (McGee, 2000). E-business allows service providers to interact with their suppliers and customers (Follit, 2000). This improved relationship causes increased loyalty, and then results in increased profits and a competitive advantage for the firm.

E-business components

E-business technology consists of operating systems such as Windows NT, server hardware, and management platforms scheduled to arrive in the near future. This will enable IT managers to make significant changes to their system architectures (Wagner *et al.*, 1999). System or server consolidation has also emerged as an approach to solving these problems. Infrastructures will then become more important to managers as systems are re-engineered to become more flexible. Managers also look for scalability as they experience continuous pressure to expand hardware and software service levels (Wagner *et al.*, 1999; Roberts & Hersch, 2000). They look for hardware and software that can handle performance scalability as well as maintaining the flexibility required to handle a mixture of workload requirements.

Extent of implementation and use of e-business and factors that influence its implementation by firms

The Insurance Institute of Kenya in its 22nd annual conference quoted low market penetration of life business at 1% of Gross National Product noting that it was too low compared to world average of 7.5%. As such, insurance companies in Kenya were being persuaded to embrace technological developments so as to attain their objectives of profitable growth and one of the many ways was to embrace the full use of e-business. While addressing the official opening of the Insurance Institute of Kenya (IIK), 22nd annual conference on November, 16th 2007, the minister for Finance urged the insurance industry to adopt information technology in order to improve its access to clients.

In Kenya, most of the insurance companies have adopted one form or the other of e-business within the insurance chain ranging from purchase of products, payment of premiums, account servicing and claims requests and processing in addition to procurement and transacting with stake orders and intermediaries i.e. suppliers, banks, reinsurers, insurance brokers and other insurance companies. On the technological front, the Kenyan government in addition to laying down a fiber optic cable that will ultimately reduce costs of internet connectivity, has established digital villages all over the country which will maximize access by all citizens. With this development and the realization by insurance companies in Kenya that e-business is one of the fastest growing areas of application of technologies; there is no doubt that the current state of e-business implementation which is not very well established will attain high levels of advancement. The evaluation of

benefits arising from the implementation of IT is traditionally a very difficult task. This holds true for micro as well as for macro level (Kauffman & Walden, 2001; Vehovar *et al.*, 2001; Ahmad *et al.*, 2004). The measurements of the corresponding contribution at a national level are particularly complicated (OECD, 2004; Atrostic & Nguyen, 2002), although very important.

Locally empirical studies on e-business are rare. Musembi (2001) undertook an investigation into the factors that have influenced the adoption of e-commerce in the retailing industry. Respondents to the instruments of data collection were managers in charge of various retail outlets. The findings that came out of his study were: The need to remain competitive by adopting new technologies, decision/ influence by executive management and efficiency and effectiveness in service delivery to customers. Muyoyo (2000) studied the factors influencing the adoption and implementation of e-business technologies in companies quoted at the Nairobi Stock Exchange. Muyoyo's context of e-business is more general covering various aspects of e-business. The study respondents were information systems managers who are enablers in implementing technology systems in organizations. The findings indicated that the companies quoted on the Stock Exchange had intended to reduce the turn-around times for their transactions, reduce operational costs and eventually increase their profitability.

The international empirical studies on e-business implementation are also relatively rare and they rarely touch the specific issues of evaluation. One exception is the e-business Watch project, which monitors the e-business activities in the European Union (EU). Recently, with the so-called Sector Impact Studies (www.ebusiness-watch.org/ (accessed 15 July 2003)) they also focused on the effects of e-business on productivity, which is an important component of e-business evaluation. Some indirect findings are also reported in the SIBIS survey, conducted in 2002 among European enterprises (SIBIS, 2003).

The lack of proper quantitative methods to justify the IT contribution was partially compensated with the increase in alternative measures. Typically these are expressed as the benefits of competitive advantages, innovativeness, indirect gains, and in particular, with some perceptual and attitude measurements (Beheshti, 2004). Within this context, the satisfaction measures have become especially popular. According to the research carried out by International Data Corporation (2000) in more than 650 companies, which accomplished the projects of introducing e-business, only 33 per cent of companies used any of the existing return on investment (ROI) analysis, 16 per cent of surveyed companies did not know if the analysis had been carried out, and 51 per cent of companies did not use any of the traditional ROI analysis. In the companies that carried out ROI analysis, the results met expectations in more than 50 per cent (Cummings, 2001). The specific assessment of e-business was also systematically conducted in Slovenia (RIS, 1999, 2002; Vehovar & Jovan, 2003) in the continuous national research on e-commerce RIS 1996-2002, where, in 1998, a third (32 per cent) of enterprises could not have properly estimated the amount of their profit made on the internet. This percentage further increased during the last years. The recent survey on e-business was conducted in December 2002/January 2003 among 1,282 Slovenian companies. One result, relevant to our research, is the following, namely, that the majority of firms believe that e-business should lower costs by more than 10 per cent to justify its implementation (RIS, 2002).

The above-mentioned research shows many attempts on how to evaluate investments in e-business, despite various associated difficulties that go along with it. The question on whether and why companies introduce a formal evaluation of e-business projects has not been properly explained in the research. Marr & Neely's (2001) study of performance measurement practices in e-businesses remains a rare example of empirical research. Their study paints a picture of e-businesses measuring many different dimensions of performance. Yet, they report near universal dissatisfaction with existing measurement systems. This leads the authors to "question the appropriateness of existing performance measurement systems in today's digital economy" (Marr & Neely, 2001). Whilst many e-business researchers have argued that new kinds of performance measurement are needed for e-businesses (Tonchia, 2002), it is far from clear how, or even if, existing models of performance measurement need to be modified to make them suitable for the internet environment. Nor is there any consensus amongst practitioners as to which measures are effective for measuring e-business performance (Hinton & Barnes, 2005a).

Recently, many researchers have studied e-commerce or e-business implementation success. For instance, Bradford & Florin (2003) integrated innovation and information systems (IS) theories to develop and test a model of ERP implementation success. The analytical results revealed that top management support, training, perceived complexity of ERP and competitive pressure significantly influence the ERP implementation success. Stylianou *et al.* (2003) examined the effect of various environmental, organizational and personal factors on management attitudes to e-commerce. Ranganathan *et al.* (2004) investigated the assimilation of web technology systems into internal supply-chain functions and their external diffusion into inter-organizational supply-chain networks, and explored the relevant environmental determinants. These findings indicate that the internal assimilation and external diffusion of web technologies both significantly affect the benefits of Supply chain management.

A more recently survey by Zhu (2002) adapted the technology-organization-environment framework to investigate six factors (technology readiness, firm size, global scope, financial resources, competition intensity

and regulatory environment) affecting value creation of e-business. Although these studies have provided significant insights into the relationship between various factors and the benefit of e-business, exactly how factors related to organizational learning and knowledge management affect the impact of e-business on firm performance has received little empirical attention. E-business enables firms to conduct electronic transactions with any business partners along the value chain, and creates opportunities for companies to establish interactive relationships with business partners (such as suppliers, logistics providers, wholesalers, distributors, service providers and end customers), improve operating efficiency, and extend their reach, all at a very low cost (Ash & Burn, 2003). E-business implementation success refers to the impact of e-business application on firm performance in term of downstream markets, internal operations and upstream procurement (Zhu, 2002).

METHODOLOGY

Research Design

To undertake the study, a descriptive research design was used. This kind of study involved a rigorous research planning and execution and often involves answering research questions. It involved an extensive well-focused literature review and identification of the existing knowledge gap. The method was preferred as it permits gathering of data from the respondents in natural settings. In this case, it was possible for the researcher to administer the data collection tools to the respondents in their workstations, which was relatively easy, with high likelihood of increasing the response rate (Wolman & Kruger 2001).

Population of Study

The population from which the study was undertaken was all the companies licensed to undertake insurance business in Kenya, whose number stood at 43 as at June 2013. The researcher was guided by the latest list of registered insurance companies from the Association of Kenya Insurers. In addition, all the 43 insurance companies were studied at their head offices located in Nairobi. The respondent from each of the companies was the manager in charge of finance or in the absence of such a manager any other manager who represents finance matters of the Company, Appendix I (Association of Kenya Insurers, December 2012).

Sampling design

It would have been desirable to use a census of the whole population of the insurance companies in Kenya, but owing to such limitations as the time to be covered to each insurance company and the costs that would be involved in covering them among other reasons, a representative sample of 26 insurance companies, representing 60% the whole population was selected at random, which is within the limits of the generally accepted statistical conditions. A two - stage stratified random sampling technique was employed to select the insurance companies. The insurance companies are classified according to their businesses as follows: - General Insurance Companies; Life Insurance Companies; and Composite Insurance Companies. Out of the various strata, a sample of 50% will be picked using the random numbers table, giving each one of them a number unique to itself. The researcher then picked at random and count up to 26. This procedure is considered effective as each insurance company will have a non zero chance of being included in the study. Table 3.1 below presents the sample size.

Table 3.1: Sample size

Strata (Category of Insurance companies)	Population size (Number of companies)	Sample size (60% of the population)
General Companies	22	13
Life Companies	7	4
Composite Companies	14	9
Total	43	26

Data collection

The questionnaire, which was the main data collection instrument, enabled the researcher to gather in-depth information on phenomena under investigation. The questionnaire was pre-tested on five randomly selected respondents to enhance effectiveness and hence data validity. Since all insurance companies have their head offices located in Nairobi, the method of administration was 'drop and pick later' for the attention of the manager in charge of finance; since they are the direct users e-business solutions.

Data Analysis and Reporting

According to Marshall & Rossman (1999), data analysis is the process of bringing order, structure and interpretation to the mass of collected data. Once data has been collected through questionnaires and secondary sources, it was systematically organized in a manner to facilitate analysis. For purposes of the current study, content analysis was employed for data pertaining to the background of the respondents and Company while data pertaining to the objectives of the study was analyzed by employing descriptive statistics such as frequencies,

mean and standard deviations. Descriptive statistics are used to describe the basic features of the data in a study. They provide simple summaries about the sample and the measures. Together with simple graphic analysis, they form the basis of virtually every quantitative analysis of data. Descriptive statistics help us to simplify large amounts of data in a sensible way. Statistical Package for Social Sciences (SPSS) was used in data entry and analysis. For purposes of the current study, the data was analyzed by employing descriptive statistics such as frequencies.

RESULTS AND DISCUSSIONS

Introduction

The study utilized a combination of both quantitative and qualitative techniques in the collection of data. The study targeted 26 insurance companies in Kenya. The persons in charge of finance gave their responses and the relevant documentation relating to e-business in their respective organizations. Out of the 26 questionnaires sent out, 25 questionnaires were returned completed, a 96.2% response rate. The data was analyzed by employing descriptive statistics such as percentages, frequencies and tables. Computation of frequencies, mean scores and standard deviations was used in data presentation. The information is presented and discussed as per the objectives and research questions of the study.

The extent of adoption of e- business by insurance companies in Kenya

In order to meet the first objective of the study, “to assess the extent of adoption of e- business by insurance companies in Kenya” respondents were asked various questions with respect to state of implementation and use of e-business solutions in their respective organizations. Firstly, the respondents were asked to indicate whether their respective companies had implemented any form of e-business solution. All the respondent organizations (100%) indicated that they had at least implemented some form of e-business solution.

Number of years that e-business had been in operation: The findings show that majority of respondent insurance companies (17) have implemented e-business for a period of more than 4 years, 6 of the insurance companies have implemented e-business for a period of between 3 and 4 years and only 2 of the insurance companies have implemented e-business for a period of between 1 and 3 years. Further, all the respondents indicated that their respective organizations used e-business in their day today transactions.

Features of e-business applications in use: The respondents were asked to indicate if their organizations had implemented e-business system and to tick the features that describe its applications from the following list and state the area of e-business the applications as appropriate from the following possible choices: Finance, Customer support/Solution, Procurement, Staff Management, Communication and Money transfer. *Where:* Finance = (1); Customer Support = (2); Procurement = (3); Staff management = (4); Communication = (5); Money Transfer = (6). The responses are summarized and presented in table 4.1 below.

Table 4.1: Features of e-business applications in use

Features of e-business applications in use	Area of e-business application						Mean	Standard deviation
	1	2	3	4	5	6		
Settling supplier invoices	16	4	76	0	0	4	2.72	0.89
Marketing and advertising Company products and services	0	40	0	0	60	0	9.92	5.19
Receiving client's queries online	0	36	0	0	36	28	7.16	5.37
Automatic generation of client's account due	72	0	0	0	0	28	2.40	2.29
Online and real-time customer database and profile	28	36	0	0	36	0	7.16	5.37
Online settlement of claims	36	32	0	0	0	32	5.80	4.20
Online procurement of office Supplies and Services	4	0	64	0	0	32	4.52	2.47
Links and networks with re-insurance companies	28	0	0	0	56	16	9.64	7.24
Links and networks with other insurance companies	16	12	0	0	72	0	6.08	3.66
Links and networks with intermediaries	24	40	0	0	24	12	10.52	8.75
Links and networks and suppliers	12	0	48	0	28	12	13.68	11.36
Online customer quotations	0	72	0	0	28	0	5.36	5.50
Listing of products and services	24	44	0	0	32	0	6.56	5.35
Interfaced with other office systems	16	12	8	40	24	0	3.72	1.89
Provides secure transactions	28	0	0	4	24	44	14.92	9.48
Receiving payments online and real-time	52	0	0	0	0	48	6.80	4.25
Searching for company information online	0	40	20	0	40	0	9.40	6.38
Sending and receiving emails and data files	0	12	20	24	44	0	7.84	6.45
Sending bills and clients statements online	28	24	16	0	24	8	9.64	3.56
Tracks inquiries lodged and services offered	0	28	0	32	40	0	7.76	5.33
Checking and updating prices online	24	4	32	0	40	0	5.12	3.14
<i>N = 25</i>								

Extent to which insurance companies' e-business solution (s) has been used by customers in seeking products and services

In order to assess the extent to which the organization's e-business solutions has been used by customers, respondents were asked to tick appropriately each of the statements in the table with listed options along a five-point scale. Where: Strongly disagree = (1); Disagree = (2); Somehow agree = (3); Agree = (4); Strongly agree = (5). : The responses are summarized and presented in table 4.2 below.

Table 4.2: Services offered on website

Services offered on website	Mean	Standard deviation
Follow up claims	3.16	0.80
Confirmation of premiums due and payments made	3.44	0.58
Confirmation of policy status	3.40	0.58
Renewal and reporting changes in the policy	3.20	0.65
Obtaining quotations	3.52	0.59
Making electronic payments	3.40	0.65
Confirming fund values	3.68	0.56
Buying new products	3.68	0.63
Launching complains	3.56	0.96
<i>N = 25</i>		

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

The findings of study indicate that all the respondent insurance companies (100%) had at least implemented some form of e-business solution and at least 68% of the respondent insurance companies had used e-business to conduct day to day business for at least 4 years. The e-business applications were used in a number of areas, including the following: finance, customer support, procurement, staff management, communication and money transfer.

Further, the findings show that insurance companies have used the e-business solutions to offer the following services on their websites: follow up claims; confirmation of premiums due and payments made; confirmation of policy status; renewal and reporting changes in the policy; obtaining quotations; making

electronic payments; confirming fund values; buying new products; and launching complains.

E-business is revolutionizing the way that business is conducted. E-business does more than e-commerce as it interconnects the whole and extended organization, thus allowing for improved communication among suppliers, employees, and customers. The high quality communication then leads to high efficiency, as processes take less time and cost. The organization thus enjoys improved profitability and competitive advantages over its competitors. E-business also allows the organization to provide service to many new parties that it never knew before. The costs of implementing and maintaining e-business are high. This situation is typical to any new technology adoption.

Recommendations

Based on findings of the study, it is expected that the stakeholders, who include the management of insurance companies will gain a better understanding of the issues to be addressed in implementation of the e-business systems in order to enhance service delivery. Not only does e-business act as a new channel of interacting and communicating among the various stakeholders, but also changes the way an organization works and practices. Most of the potential legal issues namely liability risks, contract enforceability, security and global trading, arising from e-business are not new, rather these challenges are magnified when compared to performing these tasks via the traditional modes. However with proper training and strategic use of the technology, e-business can maintain higher security than conventional ones. It requires the users to overcome their human psychological barriers of staying in their comfort zone, and change their existing work practices.

To embrace the technology, the organizational stakeholders should be aware of and understand the legal issues arising from implementing e-business. To tackle these legal issues more effectively, the various strategies – legislation, self-regulation, and technology and information security management should be combined. Each strategy has its pros and cons; therefore organizations have to analyze and work out the most suitable and effective instruments to resolve these legal issues. E-business users should plan and strategize such that e-business can integrate smoothly in their work practices, culture, as well as that of their working partners.

E-business involves efforts to change how functions, such as spending and budgets, employing staff, buying goods and services, and managing technological and organizational activity are carried out. It also has the potential to transform the relations between suppliers and customers. However, while e-business is a label used globally, inscribed within its design may be a number of different assumptions and requirements relating to for example, technology, objectives, information, staffing and skills and institutional contexts. Therefore, its implementation may not be as simple as taking a design from one context into another one. Further insights are required into how information systems (IS) enabled business innovation strategies are constructed and enacted in context.

5.5 Suggestion for further research

The findings of this study, it is hoped, will contribute to the existing body of knowledge and form basis for future researches. The following areas of further research are thus suggested: Whereas the current study focused on e-business solutions and firm performance in insurance companies in Kenya, future studies should focus on responses from the suppliers and user departments; future studies should seek to establish whether e-business solutions are applicable to other sectors of the economy; and further studies should also focus on the challenges faced in implementation of the e-business solutions and the possible mechanisms that could be employed to overcome the challenges. Since this research did not focus much on quantifying the business value of e-business in monetary terms, this could also be an area of interest in the future.

REFERENCES

- Ahmad, F., Razak, A. & Bakar, A.A. (2004). "Determining success indicators of e-commerce companies using rough set approach", *Journal of American Academy of Business*, Vol. 5 No.1/2, pp.64-9.
- Ahonen, A. (2002). *Vakuutusyhtiön verkkopalveluiden hyödyntäminen vakuutusmeklareiden palveluketjussa – Case: Varma-Sampo*. Tampere: University of Tampere.
- Arthur, A. & National Small Business United. (2000). *Survey of small and mid-sized businesses: Trends for 2000*.
- Ash, C.G. & Burn, J.M. (2003). "A strategic framework for the management of ERP enabled e-business change", *European Journal of Operational Research*, Vol. 146 No.2, pp.374-87.
- Beheshti, M.H. (2004). "Gaining and sustaining competitive advantage with activity based CMS", *Industrial Management & Data Systems*, Vol. 104 No.5, pp.377-83.
- Bradford, M. & Florin, J. (2003). "Examining the role of innovation diffusion factors on the implementation success of enterprise resource planning systems", *International Journal of Accounting Information Systems*, Vol. 4 No.3, pp.205-25.
- Cummings, J. (2001). "The e-comm ROI squeeze", *Network World*, 26 February.
- Follit, E. (2000). "The keys to e-transformation", *InformationWeek*.

- Hinton, C.M. & Barnes, D.L. (2005a). "Towards a framework for evaluating the business process performance of e-business investments", *International Journal of Business Performance Management*, Vol. 7 No.1, pp.87-99.
- Järvinen, R., Eriksson, P., Saastamoinen, M. & Lystimäki, M. (2001). *Vakuutukset verkossa – Vakuutusyhtiöiden tarjonta ja kuluttajien odotukset (Insurance in the Net – The offer-ings of the insurance companies and the expectations of consumers)*. Helsinki: Kulutta-jatutkimuskeskus, Publications 7.
- Kauffman, J.R. & Walden, A.E. (2001). "Economics and electronic commerce: survey and directions for research", *International Journal of Electronic Commerce*, Vol. 5 No.4, pp.5.
- Marr, B. & Neely, A. (2001). "Organizational performance measurement in the emerging digital age", *International Journal of Business Performance Management*, Vol. 3 No.2, pp.191-215.
- Marshall, C. and Rossman G. (1999). *Designing qualitative research* 3rd Ed., Thousand Oaks-CA: Sage.
- Mbuvi, M. (2000). *A survey of the potentials for the adoption of e-commerce by tour operators in Nairobi*. Unpublished MBA thesis, University of Nairobi.
- McGee, M. (2000). "Chief of the year", Electronic Publishing, pp.49-56.
- Muganda, N. (2001). *An investigation of business value of e-commerce: the case of selected firms in Kenya*. Unpublished MBA thesis, University of Nairobi.
- Musembi, M.M. (2001). *An investigation into the factors that have influenced the adoption of e-commerce in the retailing industry. The case of supermarkets in Nairobi*. Unpublished MBA thesis, University of Nairobi.
- Muyoyo, J. L. (2000). *Factors influencing the adoption and implementation of e- business technologies in companies quoted at the Nairobi Stocks exchange*. Unpublished MBA Thesis, University of Nairobi.
- Ncube B. M. (2002). *E- Business practices of SME's in the craft industry in Kenya: The case of members of AMEGA in Nairobi*. Unpublished MBA thesis, University of Nairobi.
- Poon, S. & Swatman, P. (1999). "An exploratory study of small business internet commerce issues", *Information & Management*, Vol. 35 pp.9-18.
- Rajkumar, T. M (2001). "E-procurement: Business and technical issues," *Information Systems Management*, 18 (4), 52-62.
- Ranganathan, C., Dhaliwal, J.S. & Teo, T.S.H. (2004). "Assimilation and diffusion of web technologies in supply-chain management: an examination of key drivers and performance impact", *International Journal of Electronic Commerce*, Vol. 9 No.1, pp.127-61.
- Roberts, J. & Hersch, W. (2000). "Web security, consulting, get hot in coming months", Computer Reseller News, No.886, .
- SIBIS (2003). available at: www.sibis-eu.org/sibis/files/SIBIS_DMS_BasicData_Survey.pdf
- Small Business Administration (2000). *Small Business Expansion in Electronic Commerce. Small Business Administration – Office of Advocacy*, June 2000.
- Stylianou, A.C., Robbins, S.S. & Jackson, P. (2003). "Perceptions and attitudes about eCommerce development in China: an exploratory study", *Journal of Global Information Management*, Vol. 11 No.2, pp.31-47.
- Tonchia, S. (2002), "Editorial", *International Journal of Business Performance Management*, Vol. 4 No.2/3/4, pp.129-35.
- Vehovar, V. & Jovan, M. (2003). *Companies Slovenia: EU 2002/2003, comparisons RIS: SIBIS*, available at: <http://slovenia.ris.org/main/baza/baza.php?bid=64> (accessed 3 September 2004).
- Vehovar, V., Batagelj, Z. & Lozar-Manfreda, K. (2001), "Sensitivity of e-commerce measurement to the survey instrument", *International Journal of Electronic Commerce*, Vol. 6 No.1, pp.31-51.
- Wagner, M., Koller, M. & Yasin, R. (1999). "Get ready to upgrade", Internet week, No.794, pp.26-30.
- Williams, V. (1999). *E-commerce: Small Businesses Venture Online. Small Business Administration – Office of Advocacy*, July 1999.
- Zhu, K. (2002). "The complementarily of information technology infrastructure and e-commerce capability: a resource-based assessment of their business value", *Journal of Management Information Systems*, Vol. 21 No.1, pp.167-202.

ABBREVIATIONS AND ACRONYMS

E-business	Electronic Business
E-Commerce	Electronic Commerce
E-Procurement	Electronic Procurement
ERP	Enterprise Resource Planning
EU	European Union
GDP	Gross Domestic Product
GoK	Government of Kenya
ICTs	Information and Communications Technologies
IS	Information Systems
IT	Information Technology
JIT	Just In Time
PWC	PriceWaterhouseCoopers
ROA	Return on assets
ROI	Return on investment
SMEs	Small and Micro Enterprises
SPSS	Statistical Package for Social Sciences
SWOT	Strengths, Weaknesses, Opportunities and Threats
TMS	Transactional Management Systems
UNCTAD	United Nations Conference on Trade and Development
USA	United States of America
WB	World Bank
WTO	World Trade Organization

APPENDIX I: INSURANCE COMPANIES IN KENYA

GENERAL COMPANIES	
1.	African Merchant Assurance Company (AMACO)
2.	AIG Insurance Company
3.	APA Insurance Company
4.	Concord Insurance Company
5.	Direct line Assurance Company
6.	Fidelity Shield Insurance Company
7.	First Assurance Company
8.	Gateway Insurance
9.	General Accident Insurance Company
10.	Intra Africa Assurance Company
11.	Invesco Insurance Company
12.	Kenya Orient Insurance Company
13.	Lion of Kenya Insurance Company
14.	Mayfair Insurance Company
15.	Occidental Insurance Company
16.	Pacis Insurance Company Limited
17.	Phoenix of East Africa Assurance Company
18.	REAL Insurance Company
19.	Kenya Alliance Insurance Company
20.	Standard Assurance Company
21.	Tausi Assurance Company
22.	Trident Insurance Company
LIFE INSURANCE COMPANIES	
1.	Apollo Life Assurance Company
2.	CFC Life Assurance Company
3.	Metropolitan Life Insurance Kenya Ltd.
4.	Old Mutual Life Assurance Company
5.	Pan Africa Life Assurance Company
6.	Pioneer Life Assurance Company
7.	Trinity Life Assurance Company

COMPOSITE COMPANIES	
1	Blue Shield Insurance Company
2	British America Insurance Company
3	Cannon Assurance (Kenya) Limited
4	Co-operative Insurance Company
5	Corporate Insurance Company
6	Geminia Insurance Company
7	Heritage A.I.I Insurance Company
8	Insurance Company of East Africa (ICEA)
9	Jubilee Insurance Company
10	Kenindia Assurance Company
11	Madison Insurance Company
12	Mercantile Life and General Insurance Company
13	Monarch Insurance Company
14	UAP Provincial Insurance Company

Source: Association of Kenya Insurers, June 2013

The IISTE is a pioneer in the Open-Access hosting service and academic event management. The aim of the firm is Accelerating Global Knowledge Sharing.

More information about the firm can be found on the homepage:

<http://www.iiste.org>

CALL FOR JOURNAL PAPERS

There are more than 30 peer-reviewed academic journals hosted under the hosting platform.

Prospective authors of journals can find the submission instruction on the following page: <http://www.iiste.org/journals/> All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Paper version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <http://www.iiste.org/book/>

Academic conference: <http://www.iiste.org/conference/upcoming-conferences-call-for-paper/>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digital Library, NewJour, Google Scholar

