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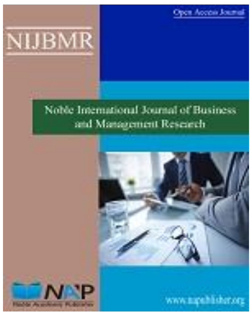

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INFORMATION SYSTEMS OUTSOURCING DRIVERS AND SERVICE DELIVERY OF COMMERCIAL BANKS IN KENYA

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ABSTRACT: Information system is key in the operations of commercial banks. The study was aimed at establishing IS outsourcing drivers and service delivery of commercial banks in Kenya. It was specifically aimed to establish ways that need for quality, cost, flexibility, access to technology and risk of obsolesce drives firms to adopt IS outsourcing drivers of commercial banks in Kenya. The study used descriptive research design in its methodology. The study was guided by Resource based view Theory and transactional cost theory. The study used primary data which was collected and was affected by use of structured questionnaires. Head of departments and the equivalents were the targeted population from the 44 commercial banks Kenya. These questionnaires were issued through drop and pick method, coded, keyed and analyzed using both descriptive and regression analysis. Information system outsourcing drivers which were cost, quality, flexibility, need to reduce obsolesce and access technology was the independent variables while service delivery was the dependent variable which was measured by number of new accounts opened, customer satisfaction, timeliness in service delivery. The study findings on objective one on the IS outsourcing drivers indicated that to a great extent cost was a driver of IS outsourcing as indicated by a mean value of 4.0, Flexibility to a moderate extent as indicated by a mean value of 3.7, focus on strategic issues indicated a mean of 3.8, access to technology indicated a mean value of 3.6, reduce risk of obsolesce to a moderate extent:3.6 and quality to a moderate extent:3.7. This indicated that to a moderate to a large extent all the IS outsourcing drivers had been implemented as IS outsourcing drivers of commercial banks in Kenya. The findings on objective two on the effect of IS outsourcing drivers on service delivery indicated that IS outsourcing drivers have a positive impact on service delivery of commercial banks in Kenya. 60 percent of variations in service delivery in commercial banks was affected by IS outsourcing drivers. The major limitation of the study is that it was based on commercial banks only. Other future academicians should research on IS outsourcing drivers in other firms. There is need to study on IS outsourcing drivers and performance of other sectors other than commercial banks.

Keywords: Information System, Outsourcing, Service Delivery.

1. INTRODUCTION

There is growth in the utilization of IT external service strategies due to increased global collaboration, improved IT capabilities, advanced technologies, the accessibility to widespread Information and communication services as critical component for the efficient operation of an organization and an easier way for firms to communicate globally. This has prompted organizations to invest a fair amount of time and resources to design and implement ICT solutions that are aligned to their set objectives (David and Shao, 2007; Hirschheim, 2006; Lacity and Hirschheim, 1993; Mary A. and Shang-Jin, 2009).

The role that Information and Communications Technology plays as a tool in optimizing operations and implementing important organizational goals cannot be underestimated. With the advent of new Information and Communication Technologies (ICTs) including personal, networked computers, the Internet services, mobile telephony, and email applications, organizations start appreciating the potential use of ICTs in advancing there program implementation. ICT, especially the Internet platform, has accelerated globalization. They are powerful tools that can give the organizations and end beneficiaries access to information and resources that foster their economic and social development. Although many individuals and organizations are already frequent users of ICTs, much more needs to be done to enhance the usage of this sector. The introduction of ICT outsourcing represents huge opportunities, as well as challenges, in the process of transforming and strengthening the use of Technology.

Successful adoption and implementation of an outsourcing strategy by commercial banks results in cutting on costs, increase in productivity, quality improvement, capacity improvement, increased profitability and financial performance, lower innovation costs and risks and improved organizational competitiveness efficiency and effectiveness. Increased competition and emergence of modern technologies have led to high need of various commercial banks to access more advanced strategies to remain competitive in these dynamic markets. Therefore, the information system outsourcing drivers include cost saving, capital investment reduction, cost reduction, flexibility enhancement (Lynch, 2004).

The banking sector in Kenya is regulated by the Central Bank of Kenya (CBK). Commercial banks are licensed and regulated under the Banking Act cap 488; deposits taking micro finance institutions are regulated under Micro Finance Act and the Forex Bureaus under the Central Bank of Kenya Act cap 491 (CBK., 2012).Commercial Banks are further classified into three different classes depending on the market share by net assets, advances, customer deposits and pre-tax profits by Central Bank of Kenya. Large banks have asset size of over 15 billion shillings, medium more than 5 billion shillings and small with asset size of less than 5 billion shillings, six banks are classified as large, fifteen as medium and twenty three as small (CBK., 2011).

The Kenyan financial sector is generally considered to be more of bank based than market based since capital market is largely underdeveloped and narrow. Bank assets as a percentage of total assets of financial sector are about 57 percent. The vital role played by commercial banks in Kenya in financing economic development brings to the fore the need to study the funding structure of commercial banks. The banking environment in Kenya has, for the past decade, undergone many regulatory and financial reforms. These reforms have brought about many structural changes in the sector and have also encouraged foreign banks to enter and expand their operations in the country (Kamau, 2009).

Kenya's financial sector is largely bank-based as the capital market is still considered narrow and shallow (Ngugi, 2001). Banks dominate the financial sector in Kenya and as such the process of financial intermediation in the country depends heavily on commercial banks (Kamau, 2009). In fact, (Oloo, 2009) describes the banking sector in Kenya as the bond that holds the country's economy together. Sectors such as the agricultural and manufacturing virtually depend on the banking sector for their very survival and growth. The performance of the banking industry in the Kenya has improved tremendously over the last ten years, as only two banks have been put under CBK statutory management during this period compared to 37 bank-failures between 1986 and 1998 (Mwega, 2009).

As at December 2014 there were 46 banking and nonbank institutions, 15 micro finance institutions and 109 foreign exchange bureaus. According to the Central bank of Kenya 2014 annual report, there are a total of 45 licensed commercial banks in the country and one mortgage finance company. Out of the 45 institutions, 32 are locally owned and 13 are foreign owned. The locally owned financial institution comprise 3 banks with significant shareholding by government and state corporations, 28 commercial banks and 1 mortgage finance institution. However out of all the banks only 10 of them are listed in the Nairobi stock exchange having met the conditions of listing and applied for the same. The Central bank of Kenya annual supervision report (2009) categorizes the financial institutions into three tiers; Large, Medium and Small in terms of net assets.

2. LITERATURE REVIEW

Various literatures done by previous researchers used to develop this study is what this chapter brings out. It is subdivided into various sections: This section is generally divided into theoretical framework, the outsourcing drivers, empirical review and conceptual framework.

Outsourcing as process is usually a complex structure that consists of a number of activities and sub-activities, carrying many managerial dilemmas. Based on this fact, various theories have been used to help understand nature of activities, and successfully manage the process. This study will adopt the following theories: The Resource Based View (RBV), suggests that the method in which resources are applied within the firm can create a competitive advantage (Barney and Hesterly, 2006). The resource based view of firms is based on two main assumptions: resource diversity and resource immobility (Barney and Hesterly, 2006). According to this theory, organizations are able to sustain their competitive advantage by based on contributions of human capital management practices. This theory further asserts that creation and maintenance of competitive advantage is by creating resource diversity (increasing knowledge and skills) and/or resource immobility (a culture that people want to work in). For a firm to be competitive, then it needs to have adequate human capital management practices, organizational processes, knowledge management practices and systems, educational opportunity (both formal and informal) and social interaction (community building) practices in place (Barney and Hesterly, 2006). Competitive advantage of a firm can be created if resources and capabilities of a firm are mixed and deployed in a proper way. This facilitates creation of human capital resource diversity and immobility (Barney and Hesterly, 2006). Transaction Cost Economics Theory (TCE) asserts that production economics determine transactions. This theory brings out an analytical framework which is used in making comparison between outsourcing services and in house services (Lacity and Willcocks, 1995). This theory facilitates the determination of outsourcing success in terms of economic benefits. TCE provides the best decision making basis to help firms to decide what to outsource and all preparations required. Infrequency of contracting and environmental and relationship uncertainties are the determinants of the magnitude of transaction cost, which, in turn, provides a basis for the evaluation of outsourcing decision making. TCE deals with not only experiences but also outcomes of outsourcing. Asset specificity, small numbers bargaining, and imperfect information are the experiences to outsourcing of which they have a negative relationship to outsourcing. In terms of the outcomes of outsourcing, increase in outsourcing will result in lower production costs of the market, but increased coordination costs of sourcing the goods from the market, so it does not consider competitive advantage when the potential for opportunism is not significant (Aubert *et al.*, 2004). This theory is related to the topic of study in that it brings out the importance of attaining cost advantages in transactions .This can be achieved through outsourcing of non-core activities to external service providers in order to save on costs.

2.1. Information System Outsourcing Drivers

According to Stear and Wecksell (1997), the practice of contracting people from outside the organization to provide specific services is what is termed as outsourcing. The issue as to whether a firm should make or buy intermediate inputs; an issue that has a long tradition in economics, dating back to the seminal work by on the boundaries of a firm is addressed by outsourcing. Due to this fact, outsourcing can be used to economize on production cost, in particular labor cost by substituting in-house production with the buying-in of components. Outsourcing costs is determined by both the price of the bought-in components and also by transaction costs due to transport and incomplete contracting costs, and the possible implications of asset specificity for supplier and/or customer (Abraham and Taylor, 1996).

Outsourcing provides certain leverage that is not available to a company's internal departments. Firms that outsource seek to realize benefits and address the issue of saving on cost through lowering the overall cost of the service to the business service (Zafar and Aasim, 2013). Resource intensive, relatively discrete activities and those which require specialist competencies, characterized by fluctuating work patterns in loading and throughput, subject to quickly changing markets are and subject to rapidly changing technology requiring expensive investment some of the mostly outsourced services (Lysons and Farrington, 2006).The various outsourcing drivers looked at in this study are: access to technology, cost, flexibility, quality and reduction of risk obsolesce.

Focusing on core strategic Issues is a key driver to outsourcing. Market forces are somehow driving firms to outsource everything but the core business (Gupta and Gupta, 1992). And outsourcing makes it easier for these firms to focus on their basic competences (Hayes *et al.*, 2000). In the computer area this liberates line managers who do not have to coordinate with a large IS department and thus simplifying the organization. Many firms outsource only their non-core activities to external service providers as they focus on the core activities.

Increasing Flexibility is also another driver to IS outsourcing. The great change experienced by technology in recent years gives many firms a chance to obtain a considerable advantage from outsourcing, as they will prevent becoming technologically obsolete without having to make large investments in technology. Outsourcing additionally provides a large degree of flexibility in the utilization of IT resources and makes it easier to face business level volatility, as the provider is left to deal with fluctuations in IT workloads (Jurison, 1995). Firms can equally use outsourcing as a strategy to achieve flexibility during a restructuring or reorganization process.

Outsourcing of the IS function can Improve the Quality delivered by the firm. The provider can access more advanced technologies and count on more motivated staff and better management systems in order to be able to achieve a better service coordination or control, or, simply, is more strongly committed than the internal staff to make the alliance with the client work properly (Clark *et al.*, 1995). At least in theory, firms outsource so that they can have at their disposal high-quality IT services and knowledge. Outsourcing very often serves to Get Rid of Routine Tasks which is very time-consuming in IT management. Also, if the IS function is seen as something difficult to manage often regarded by the top management as a headache, outsourcing can remove or minimize a function that is considered clearly problematic (Hayes *et al*., 2000; Jurison, 1995).

Facilitating access to technology is a key driver to outsourcing which brings client firms advantages related to technology, (Jurison, 1995), as these business organizations can have access to specialized, state of-the-art technology which is supposedly supplied to them by the provider. On the other hand, the efficient use of outsourcing will most probably reduce the need to make investments in mature technology, simultaneously increasing the availability of resources related to new technologies for the client (Clark *et al*., 1995). Additionally, the most 'timid' organizations which prefer to wait and see what happens with state-of-the-art technology may resort to outsourcing as a way to minimize the risks incurred if the technology used is not the most appropriate. In this respect, outsourcing is likely to emerge as a way to experiment with new technologies. (Gupta and Gupta, 1992).

Reducing the Risk of Obsolescence is a key driver of outsourcing IS by firms. It is precisely the fast pace of change in the field of technology that places firms in front of a dilemma: either making investments on new technologies very often or working with very mature technology. This problem can equally be minimized with technological outsourcing, since the technology accessed by the client is owned by the provider, which means that this risk is assumed by the latter and not by the former (Clark *et al*., 1995). Firms can increase their level of flexibility through a process of continuous redesign of the contracts that will help them to cover their information requirements (Hayes *et al*., 2000).

Saving Staff Costs: Outsourcing paves the way to a more specialized IT management, as the provider firm finds itself in a better position to select, train and manage its technological staff; in this way, clients can have at their disposal high-level specialists without them having to be permanent members of their staff (Alner, 2001). Clients have in mind a staff reduction which will mean significant cost savings. Computer work is additionally characterized by the deterioration of knowledge and, particularly, by the shortage of specific knowledge. The ability of firms to identify and acquire the IS knowledge required is very important too. In these circumstances, the effort to retain a permanent workforce with a high level, up-to-date training is likely to end up becoming too expensive for many companies (Olson, 2007).

Saving Technology Costs is also a driver to IS outsourcing. Service providers are exposed to a wider variety of problems and experiences associated with IS, which is why a greater volume of knowledge and skills can be obtained that will help to solve these problems. Likewise, service providers dedicate all their capacity to the provision of IS services, as a result of which greater economies of scale and scope can be obtained. It is assumed that part of these economies are transferred to the client through lower prices in the achievement of the same services through outsourcing and through the work of the IS internal department (Hayes *et al*., 2000). Outsourcing equally makes it possible to turn fixed costs (to maintain an IS department) into variable ones (depending on client needs) and, if the contract has been properly designed, into predictable costs. What is more, outsourcing contracts will probably mean an injection of liquidity for the client firm when it transfers software licenses and staff to the provider (Alner, 2001).

2.2. Service Delivery

Service Delivery is a set of components that provide service delivery architecture (such as service creation, session control and protocols) for a type of service. Service delivery often requires integration of telecommunication and information technology capabilities and the provision of services that are unmatched in the industry (Burnes, 2004). Service delivery available today in city county of Nairobi tends to be optimized for the delivery of a service in modern technological innovations and expertise. Service delivery programs are applicable to both the consumer and business applications. The business objective of implementing the service delivery programs is to enable rapid development and deployment of new converged services, from basic services to complex services.

Good governance is not the creation of a democratic process only, but must entail also how fast, well and reactive the service is to demands from the society regarding the basic needs in form of basic social services. Currently substandard and slowness in service delivery continue to lead to loss of confidence in some organizations. Experience elsewhere, shows that there is a relationship between work methods and performance in service delivery. It is imperative that for the service to deliver the desired outputs, it needs to strive to look or encourage better ways of performing the delivery process. Service organization may not necessarily directly deliver the service but much as a matter of policy and good governance should develop or approve, benchmark processes that are effective and efficient in delivery of services (Burnes, 2004).

The commercial banks in Kenya is charged with the responsibility of provision of financial services like lending and service delivery to the customers with the objective of securing sustainable development and ensuring all have access to good conditions of life. The services offered include housing, lending, credit services, saving, mortgages among others. Current competitive environment induced by globalization and advances in information technology have forced companies to focus on service delivery, and in particular customer satisfaction and customer loyalty in order to efficiently maximize revenues. In the age of customer delivering quality service, it is considered an essential strategy for success and survival in today's competitive environment (Scott *et al.*, 2007). The focus of any business system is to provide all customers with the level of service delivery they require.

2.3. Information System Outsourcing Drivers and Service Delivery

According to (Mungai and Moturi, 2015), there exists a link between successful supply chain and outsourcing relationship as it allows customers to realize multiple beneficial business outcomes, including: Faster introduction of new products and accelerated innovation of existing products due to redirection of resources to focus on product innovation, research and development, sales and marketing, and customer service, access to technologies that can eliminate manual processes (e.g. data analytics and reporting) and provide real-time information that enable optimized business capabilities, such as improved inventory management, demand planning and manufacturing efficiencies, decreased direct cost of goods sold driven by the outsourced manufacturer's capability and expertise to aggregate raw, packaging and incidental material requirements across its other customers that use similar materials.

Outsourcing facilitates improved service delivery through improved asset utilization derived from higher throughput rates and by leveraging the service provider's assets across multiple clients for reduced overhead allocation on a per-unit basis and improved productivity for up- and downstream supply chain stakeholders based on having the right product(s), in the right place, at the right time. However, outsourcing does generate some problems in the supply chain if not well managed. Outsourcing usually reduces a company's control over how certain services are delivered, which in turn may raise the companies liability exposure. Companies that outsource should continue to monitor the contractors' activities and establish constant communication (Kinyua, 2000).

Outsourcing may have a positive or negative impact on performance of an organization. In general, the literature supports outsourcing as a strategy, which may offer improved business performance on numerous dimensions (Quinn, 2000).Outsourcing leads to greater flexibility in firms operations which leads to long term improved performance of the organization. Cost is the key driver to outsourcing and if well implemented facilitates better performance of the organization due to substantial cost savings realized by outsourcing. (Quinn, 2000) emphasized the benefits of outsourcing in providing increased focus upon a set of core activities and reduction in the functional scope of the organization, enabling the development of a more focused organization capable of increased responsiveness to market change hence better performance.

Outsourcing can provide access to ''best in the world'' quality for particular activities or components (Quinn, 2000) hence improve organizational performance. However, in the absence of fully developed service level monitoring the development of quality may fail. While an organization's managers may share a concern to avoid outsourcing core or near core activities (Kinyua, 2000), the frequent absence of formal policy guidelines (Kinyua, 2000; Quinn, 2000) can allow the incremental loss of key competencies to take place and hence undermine capability leading to a loss of critical skills hence leading to low performance.

2.4. Research Problem

There has been an alarming increase in the growth and development of outsourcing as an emerging issue in the business area globally. Outsourcing has gained so much emphasis due to challenges encountered in the flow and cost of goods and services in a firm. The three main causes of the problems include lack of specialist skills, poor quality applicants and pay inflexibility, all of which are very critical in an organization.

In order to remain competitive in the market, firms employ strategies like ICT outsourcing (Thompson *et al.*, 2007). Outsourcing facilitates focusing on few critical issues in their value chains by the firms and outsources the non-core activities to service providers. According to (Porter, 1998), competitive advantage is seen as the ability to stay ahead of present or potential competition, thus superior performance reached through competitive advantage will ensure market leadership. Outsourcing poses a number of challenges too which are increase in the risk of leakage and reduced confidentiality, as well as introduce additional privacy and security concerns in non-governmental organizations.

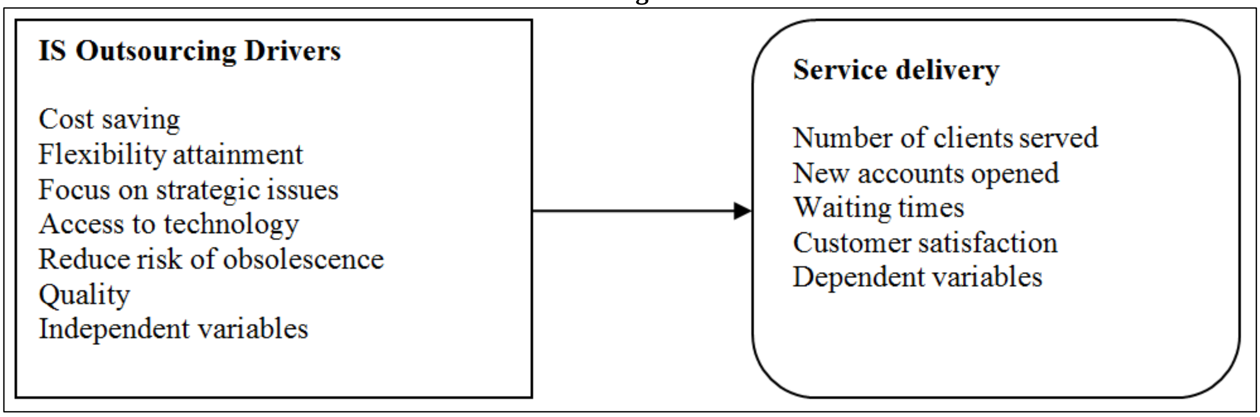
A number of studies have been carried out on the effects of outsourcing on performance both globally and locally. Globally, Ahmad and Juma'h (2000) carried out a study on outsourcing implications on companies' profitability and liquidity: a sample of UK companies. The studies indicated that outsourcing transactions reduced financial pressures and increased profitability in the UK companies. Bin *et al.* (2006), studied on outsourcing effects on operational performance an empirical study .They asserted that cost efficiency can be improved by outsourcing. Mary M. *et al.* (2014) Studied on the effects of production outsourcing on factory cost performance: an empirical study. The findings indicate that there is a strong effect of outsourcing on cost of labor, materials tending to decrease labor and increase materials.

Locally, Caroline (2014) carried out a study on determinants for effective information technology outsourcing: a case of International Business Machines Corporation Kenya. The study objectives were to ascertain what are the various determinants of information technology outsourcing .The study adopted use off case study in its research design whereby data was collected by use of structured questionnaires .The study findings indicated that mutual trust, core competencies complementation, sharing of principles, sharing of common values, cooperation ideas and exchange of organizational and managerial know-how influenced effective IT outsourcing to a great extent. The study also found out that strategic agility affected the effective IT outsourcing to a very great extent .However the study suffered a methodological weakness based on the fact that it was solely focused on International Business Machines Corporation Kenya. Besides the study failed to look at the impact of ICT outsourcing on service delivery.

Otieno. (2013) Studied outsourcing as a strategy for competitive advantage by Barclays Bank of Kenya .His findings indicated that there is a positive relationship between outsourcing and competitive advantage since Barclays has been able to cut on costs and improve its operations through outsourcing of its non-core activities. However the study was solely based on Barclays bank and not all the commercial banks in Kenya, besides it failed to look at ICT outsourcing and service delivery in commercial banks in Kenya. Mbii. (2015) Carried out a study on outsourcing and performance of Savings and Credit Cooperative Societies in Nairobi where he established that most SACCOs carried out outsourcing of the human resource management practices, information technology practices, transport management, logistics practices, and financial management and customer support practices. Besides, there existed a positive relationship between outsourcing and performance. However the study was focused on outsourcing as a whole and not specifically information systems outsourcing. Besides the study failed to look at the impact that information systems outsourcing has on service delivery of commercial banks in Kenya. Agoti. (2014) studied on information and communication technology outsourcing and performance of humanitarian organizations in Kenya. The purpose of the study was to establish the impact that ICT outsourcing has on performance in humanitarian firms in Kenya and the extent of ICT outsourcing in humanitarian sector in Kenya. The study adopted descriptive statics where data was collected by use of structured questionnaires .The study findings indicated that there exists a positive relationship between ICT outsourcing and performance in humanitarian firma in Kenya. However the study failed to look at the impact of information system outsourcing on service delivery in commercial banks in Kenya. The following conceptual framework guided the study.

The independent variables are the IS outsourcing drivers. The dependent variable was represented by service delivery as shown below:

Figure 1.



Source: Authors, (2018)

2.5. Research Focus

Globally, Ahmad and Juma'h (2000) in their study on outsourcing implications on companies' profitability and liquidity: a sample of UK companies. The aim of the study was to ascertain the correlation between outsourcing and performance. Sample sizes of 17 firms were used in the research methodology. Data was collected by use of questionnaires and from secondary sources and analyzed using descriptive statistics and multiple regressions. From the findings, it was ascertained that outsourcing has a positive effect on profitability and leads to decrease in financial pressures. Besides it results in reduction in employee costs and research and development expenditures. The limitation of the study was that the researchers only focused on the UK firms and hence the results cannot be used to generalize findings in the African countries like Kenya where this study is based.

Bin *et al.* (2006) carried out a study on Outsourcing effects on firms' operational performance an empirical study .He established that cost efficiency can be improved by outsourcing. The objective of the study was to establish the effect of outsourcing on firm's performance. The researchers used a sample size of 51 publicly traded firms. Questionnaires were used in data collection. The results of the study indicated that outsourcing improves firm's productivity and efficiency. The major limitation of the study was that it failed to look at IS outsourcing drivers.

Bin *et al.* (2006) studied on Productivity effects of outsourcing, new evidence on the strategic importance of vertical integration decisions. The objective of the study was to investigate the effects of firm level product .The researchers used a sample size of 500 firms in data collection. The findings strongly recommend a revision of established decision-making schemes for vertical manufacturing range based on cost-efficiency considerations. Decision making should instead integrate cost efficiency and transaction cost analysis with the competence and innovation capability formation perspectives. Procedural schemes for this integrated view are still to be developed, however the study failed to look at information system outsourcing drivers.

Mary M. *et al.* (2014) studied on the effects of production outsourcing on factory cost performance: an empirical study. The objective of the study was to establish the performance implications associated with production outsourcing. The findings indicated that there exists an insignificant effect of outsourcing on cost of goods sold. However, there is significant effect of outsourcing on components of cost of goods sold. The major limitation of the study was that the information got did not give clear drivers to IS outsourcing.

Locally, Kabura. (2012) carried out a study on the effect of outsourcing on the financial performance of supermarkets in Nairobi. The objectives of the study were to determine the effect of outsourcing on financial performance of supermarkets in Nairobi and to establish the services that are outsourced by supermarkets in Nairobi. The researcher used a sample size of 50 supermarkets in his secondary data. The findings of the study indicated that there exists a positive relationship between operating income as compared to direct outsourcing costs, labor outsourcing costs and overhead outsourcing costs .The major limitations of the study is that it only focused on supermarkets within Nairobi and hence the results cannot be used to conclude results for all commercial banks in Kenya.

Otieno. (2013) studied on outsourcing as a strategy for competitive advantage by Barclays Bank of Kenya. The major objectives of the study were to determine the competitive advantage experienced by Barclays Bank of Kenya when it outsources some of its functions and challenges faced due to outsourcing some of its functions by Barclays. The researcher used a case study where data was collected by use of an interview guide .The findings indicate that there is higher competitive advantage sourced by Barclays Bank due to outsourcing its non-core activities. The major challenge faced was the aspect of lack of confidentiality of information by the bank and training of the outsourced staff. The study too failed to look at IS outsourcing drivers.

Ngetich. (2014) studied on outsourcing and supply chain performance of Kenya Medical Supplies Agency. The objectives of the study were to establish the influence of supply chain outsourcing on performance of KEMSA and to establish challenges of outsourcing at KEMSA. The researcher used questionnaires in data collection from a sample size of 100 employees. The findings indicated that cost challenges and loss of confidentiality of information are the greatest challenges sought of outsourcing. Besides there exists a significant relationship between outsourcing and supply chain performance on aspects to do with, reduced lead times, reduced costs, and increased flexibility among other aspects. The major weakness of the study was that it only focused on KEMSA a pharmaceutical company.

Mbii. (2015) carried out a study on outsourcing and performance of savings and credit cooperative societies in Nairobi, Kenya. The objectives were to determine the extent of outsourcing by the SACCO's, and to establish challenges faced due to outsourcing. Questionnaires were used in data collections which were used to collect information from 40 SACCOs in Nairobi. The findings indicated that many SACCOs have implemented specific outsourcing practices which are in line with their specific strategies .Besides there exists a strong relationship between outsourcing and supply chain performance.

From the above studies it is evident that there exists a gap in knowledge in that no study has been done on the Information systems outsourcing drivers and service delivery in commercial banks in Kenya. This study therefore seeks to answer the following research questions; what are the various IS outsourcing drivers by commercial banks in Kenya? What is the relationship between information systems outsourcing and service delivery in commercial banks in Kenya? The specific objectives of the Study were:

i. To establish the information systems outsourcing drivers of commercial banks in Kenya
ii. To determine the relationship between information system outsourcing drivers and service delivery of commercial banks in Kenya.

3. METHODOLOGY OF RESEARCH

3.1. General Background of Research

This study adopted a descriptive research. It was used in explaining the relationship between the IS outsourcing drivers and service delivery of commercial banks in Nairobi. It was preferred because it ensured that the respondents input are documented as practiced and easy to use.

3.2. Population

The target population of this study was as all commercial banks in Kenya. According to the banking sector in Kenya is regulated by the Central Bank of Kenya (CBK), there are 46 banks in Kenya. Since the population is relatively small, hence a census was proposed.

3.3. Data Collection

The study respondents were made of ICT managers, procurement managers, supervisors, procurement officers and heads of departments at commercial banks. The study used primary data which was collected by use of self-administered questionnaire which consist of both open and closed ended questions which was designed to elicit specific responses. The questionnaires had three sections. Section A contained questions on the bio-data of the organization's personnel, Section B addressed the various IS outsourcing drivers by commercial banks in Nairobi; Section C ascertained the effect of IS outsourcing drivers on service delivery of commercial banks in Kenya.

3.4. Data Analysis

The research data was be both qualitative and quantitative in nature. Data collected was edited to ensure correctness. Data collected on the objective of finding out the IS outsourcing drivers of commercial banks in Nairobi was analyzed by use of descriptive statistics particularly frequency distribution, percentages, mean and standard deviation. Data on the second objective of effects of IS outsourcing on service delivery of commercial banks in Nairobi was analyzed by use of multiple regression analysis.

Regression equation $= \beta 0 + \beta 1X_1 + \beta\ 2X_2 + \beta\ 3X_3 + \beta 4\ X_4 + \beta 5\ X_5\ \beta 6\ X_6 + €$

Y=Service delivery ,
X1= cost
X 2= flexibility attainment
X3= Focus on strategic issues
X4= Access to technology
X 5=reduce risk of obsolescence
X 6=quality
€=error term
β_{ij} =Regression Coefficients

4. RESULTS OF RESEARCH

4.1. Introduction

This section contains data analysis, findings and interpretation of the study. It entails the findings on the study sought on IS outsourcing drivers and service delivery of commercial banks in Kenya. The study used questionnaires in data collection from the ICT managers, or their equivalent in the commercial banks in Kenya. In evaluation the response rates, a response rate of 50% is considered adequate, 60% good and above 70% rated very good (Mugenda and Mugenda, 2003). The response rate for this study was 76% where out of 46 questionnaires that were distributed, only 35firms dully filled the questionnaires. Thus this was considered efficient and will give out substantial information that can be used in generalization of the various aspects of the study being sought and hence the researcher proceeded for data analysis.

4.2. Biographic Information

This entails information about gender, experience, education levels among others of the respondents in the study. To carry out this study effectively there background information was sought from the respondents on the IS outsourcing drivers effect on service delivery. Background checks were carried out to establish the relationship between the information gathered on their experience, education level and the knowledge sought.

4.2.1. Gender

In Kenya gender mainstreaming and equality is a constitutional requirement .The respondents were required to indicate their gender either as male or female. See table 4.1 below:

Table 4.1. Gender

	Frequency	Percent
Male	18	51.4
Female	17	48.6
Total	35	100.0

Source: Authors, 2018

From the findings majority of the respondents: 51% of the respondents were male while 49% were female. These implying a fair gender distribution among employees as the respondents of commercial banks in Kenya .This findings indicate that commercial banks had fair gender distribution. Hence they are able to meet the government regulations on gender balance in offering employment opportunities.

4.2.2. Education

Education background is very important in the carrying out of day to day operations of a firm. Employees need to have adequate skills in order to carry out day to day operations of the firm and attain objectives and goals of the firm. The respondents were asked to indicate their education background. The study findings are as indicated in table 4.2 below:

Table 4.2. Education

Education level	Frequency	Percent
Undergraduate	29	82.9
College	3	8.6
Masters	3	8.6
Total	35	100.0

Source: Authors, 2018

The study findings indicated that majority 82% had degree level education while, 9% of the respondents had college level education, 9% of the respondents has a master's level education. These were an indication that most of the respondents were knowledgeable and were able to address issues under the study. This confirms that education levels will influence the implementation of outsourcing.

4.2.3. Work Experience in Present Management

The number of years one has worked in a functional department determines their grasp of the best practices especially in present management. The respondents were asked to indicate the number of years they had worked in the present management.

Table 4.3. Experience

Experience	Frequency	Percent
less than 5 years	4	11.4
6-10 years	26	74.3
over 10 years	5	14.3
Total	35	100.0

Source: Authors, 2018

From the results in the table above, majority 74% had working experience of 6-10 years, 14% had over 10 years and 11% of the respondents had worked for less than 5 years, working experience .This findings indicated that the respondents had adequate working experience in the data sought and they are in a position to provide data that will facilitate meeting of the study objectives. This findings indicate that work experience facilitate proper use of best practices like outsourcing.

4.3. Information System Outsourcing Drivers

The first objective of the study was to ascertain the various IS outsourcing drivers of commercial banks in Kenya. To ascertain this, frequencies and descriptive statics were carried out of all the data collected on the various IS outsourcing drivers. The summary of descriptive statics is as indicated in the table below:

4.3.1. Cost

Cost is a driving factor to the day to day operations of firm. Firms have to evaluate the cost implications of various actions and best practices that they intend to implement in their operations. The study sought to determine the extent to which cost is an IS outsourcing driver in commercial banks, as indicated in the table 4.4 below:

Table 4.4. Cost

	Mean	Standard Deviation
The desire to cut on staffing costs has driven tour bank to adopt Information system outsourcing	3.9524	.50475
The desire to cut on costs involved in purchasing new Information system has driven you bank to adopt IS outsourcing	4.1905	.51177
The desire to cut on training costs has driven has driven you bank to adopt Information system outsourcing	4.4762	.67964
Average	**4.0286**	**.70695**

Source: Authors (2018)

The study findings indicated that cost as an IS outsourcing driver to a large extent is IS outsourcing driver as indicated by average of 4.0286 .This implies cost is a major determination of whether firms decide to outsource IS or not. These findings are in-line with Bin *et al.* (2006) that cost is a major driver of IS outsourcing.

4.3.2. Flexibility

Flexibility is a firm’s major need and desire to facilitate its ability to meet a variety of varying needs from the customers. The study sought to determine the extent to which Flexibility is an IS outsourcing driver in commercial banks. The findings are as shown in table 4.5 below:

Table 4.5. Flexibility

	Mean	Standard Deviation
The desire to offer variety of services to clients has driven you bank to adopt Information system outsourcing	4.1905	.51177
The desire to meet all customer needs at all times has driven you bank to adopt Information system outsourcing	3.4762	.67964
The desire to offer varying services has led to adoption of IS outsourcing	3.2381	.62488
Average	**3.7714**	**.54695**

Source: Authors, (2018)

The study findings indicated that flexibility as an IS outsourcing driver to a moderate extent is an IS outsourcing driver as indicated by average of 3.7714.This implies need for flexibility is a major determination of whether firms decide to outsource IS or not. This findings are in-line with Otieno. (2013) that need for flexibility is a major driver of IS outsourcing. This is an indication that flexibility is a major driver of outsourcing of commercial banks in Kenya.

4.3.3. Focus on strategic Issues

Focus on strategic issues is a key to attainment of the organization’s objectives and requirements based on its ability to use resources on their core activities and outsource non-core activities. The study sought to determine the extent to which the need to focus on strategic issues is an IS outsourcing driver in commercial banks. The findings are as shown in table 4.5 below:

Table 4.6. Focus on strategic issues

	Mean	Standard Deviation
The desire to put much emphasis on business development of your products has driven you bank to adopt Information system outsourcing	4.1524	.60475
The need to focus on increasing the number of new clients in your bank has driven you bank to adopt Information system outsourcing	3.7905	.51177
The desire to improve levels of customer satisfaction through various products has driven you bank to adopt Information system outsourcing	3.6762	.67964
Average	**3.8000**	**..63246**

Source: Authors (2018)

The study findings indicated that focus on strategic issues as an IS outsourcing driver to a moderate extent is an IS outsourcing driver as indicated by average of 3.8000.This implies need for flexibility is a major determination of whether firms decide to outsource IS or not. This findings are in-line with Kabura. (2012) that need to focus on strategic issues is a major driver of IS outsourcing. This is an indication that focusing on strategic issue is a major driver of outsourcing in commercial banks in Kenya.

4.3.4. Access to Technology

Technology is key to the competitiveness attainment of firms in the market. The need to cut on costs, and achieve efficiency of operations is a key determinant adoption of IS outsourcing. The study sought to determine the extent to which access to technology is an IS outsourcing driver in commercial banks. The findings are as shown in table 4.6 below:

Table 4.7. Access to Technology

	Mean	Standard Deviation
The desire to get access to modern technology has driven you bank to adopt Information system outsourcing	3.9524	.50475
The desire to get improved IS that is up to the task to perform various services has driven you bank to adopt Information system outsourcing	3.3655	.31177
Average	**3.6857**	**.67612**

Source: Authors (2018)

The study findings indicated that access to technology as an IS outsourcing driver to a moderate extent is an IS outsourcing driver as indicated by average of 3.6857.This implies access to technology is a major determination of whether firms decide to outsource IS or not. This findings are in-line with Kabura. (2012) that need to access to technology is a major driver of IS outsourcing. This is an indication that the need to access to technology is a major driver of outsourcing in commercial banks in Kenya.

4.3.5. Reduce the Risk of Obsolesce

In the current dynamic world with changing needs , technologies and dynamic environment needs firms to always be on the know and update their technology and operations to avoid obsolesce. The study sought to determine the extent to which the need to reduce the risk of obsolesce is an IS outsourcing driver in commercial banks as shown in table 4.8below:

Table 4.8. Reduce risk of Obsolesce

	Mean	Standard Deviation
The desire by your bank to avoid risks of non-functional Information systems has driven you bank to adopt Information system outsourcing	3.9524	.50475
The desire by your bank to be relevant to the competitive banking industry in terms of service provision has driven you bank to adopt Information system outsourcing	3.7905	.51177
The desire by your bank to improve the service delivery through having modern up to the task Information system has driven you bank to adopt Information system outsourcing	3.1762	.67964
Average	**3.6571**	**.68354**

Source: Authors (2018)

The study findings indicated that need to reduce obscelesce as an IS outsourcing driver to a moderate extent is an IS outsourcing driver in commercial banks in Kenya as indicated by average of 3.6571.This implies reduction of risk of obsolesce is a major determination of whether firms decide to outsource IS or not. This findings are in-line with Kabura. (2012) that reduction of risk of obsolesce is a major driver of IS outsourcing. This is an indication that the reduction of risk of obsolesce is a major driver of outsourcing in commercial banks in Kenya.

4.3.6. Quality

Quality is key in the quest to satisfy varying customer needs and requirements by firms. In the modern world, customers are ready to pay high prices for goods and services as long as they achieve customer satisfaction. In the current dynamic world with changing needs , technologies and dynamic environment needs firms to always be on the know and update their technology and operations to avoid obsolesce. The study sought to determine the extent to which quality is an IS outsourcing driver in commercial banks as shown in table 4.9 below:

Table 4.9. Quality

Quality	Mean	Standard Deviation
The banks desire to offer quality services as compared to your competitors has driven you bank to adopt Information system outsourcing	3.9524	.50475
The banks' desire to offer timely services and cut on waiting times has driven you bank to adopt Information system outsourcing	3.9405	.51177
The banks desire to offer first class services to customers has driven you bank to adopt IS outsourcing	3.6789	.67964
Average	**3.7143**	**.71007**

Source: Authors (2018)

4.4. The Relationship between IS outsourcing Drivers and Service Delivery of Commercial Banks in Kenya

To ascertain the relationship between IS outsourcing drivers and service delivery, of commercial banks in Kenya, the study adopted use of regression analysis.

4.4.1. Regression Coefficients

The table 4.11 below summarizes the regression analysis at 5% confidence level indicates that IS outsourcing has a positive effect on service delivery of commercial banks in Kenya as indicated by all positive regression coefficients for all independent variables.

Table 4.10.

Coefficients						
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	5.450	2.244		2.428	.022
	Flexibilty	.207	.218	.198	.948	.351
	Cost saving	.721	.183	.697	3.945	.000
	Focus on strategic Issues	.390	.150	.392	2.599	.015
	Access to technology	.192	.123	.197	1.555	.131
	Risk of obsolesce	.168	.191	.130	.881	.386
	Quality	.104	.202	.093	.512	.612

a. Dependent Variable: service delivery
b. Predictors: (Constant), Cost saving, Flexibility, Focus on strategic issues, Access to technology, Reduce Risk of obsolesce, Quality

The results show that the need for flexibility as an IS driver and service delivery ispositively and significantly related as indicated by 0.207 cost benefits and service delivery has a positive value of 0.721.The need to focus on strategic issues affects service deliverly:0.390, the need to access technology is positively related to service delivery by 0.192, need to reduce risk of obsolesce is positively related: 0.168 and quality is positively related to service delivery :0.104 .This indicates that an increase in the level of outsourcing of IS drivers in commercial banks in Kenya results to an increase in the levels of service delivery to customers in commercial banks in Kenya.

Regression equation **= 5.450 + 0.207X_1 + 0.721X_2+ 0.390X_3+ 0.192X_4 +0.168X_4+0.104 X_4 €**

Y=Service delivery,
X1=Flexibility
X 2=Cost
X3= focus on strategic issues
X4=Access to technology
X5=Quality
€=error term
β_{ij} =Regression Coefficients

Table 4.11. Model Summary

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.768[a]	.590	.502	.49847

a. Dependent Variable: Service delivery
b. Predictors: (Constant), Cost saving, Flexibility, Focus on strategic issues, Access to technology, Reduce Risk of obsolesce, Quality

The findings indicated a correlation coefficient value of 0.768 and R value of 59% .From this we can conclude that IS outsourcing drivers are a representative of 59% of variations in service delivery of commercial banks in Kenya.

4.4.2. Anova

From the findings in the a nova table the results indicate a significance level of 0.000 which is an indication that IS outsourcing drivers are a significant contributor to service delivery since the p-value of 0.000 is lower than the critical value of 0.005 at 95% confidence level.

Table 4.12.

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.014	6	1.669	6.717	.000[b]
	Residual	6.957	28	.248		
	Total	16.971	34			

a. Dependent Variable: Service delivery
b. Predictors: (Constant), Cost saving, Flexibility, Focus on strategic issues, Access to technology, Reduce Risk of obsolesce, Quality

5. CONCLUSIONS

The main objective of the study was to ascertain the IS outsourcing drivers of commercial banks in Kenya. The other objective was to establish the impact of IS outsourcing drivers on service delivery of commercial banks in Kenya. The findings of the study established that: Cost saving, Flexibility, Focus on strategic issues, Access to technology, Reduce Risk of obsolesce, Quality were the major IS outsourcing drivers of commercial banks in Kenya. This was indicated by a positive mean value for supply chain management practices. Besides the results of descriptive results indicated that to a large extent, all the IS outsourcing drivers affect the outsourcing decisions of commercial banks in Kenya as indicated by mean values greater than three.

The second objective of this study was to establish the impact of IS outsourcing drivers on service delivery of commercial banks in Kenya. The results ascertained that IS outsourcing had a positive impact on SC performance. Besides the regression analysis findings indicated that a substantial; 59% of the independent variable which was SC service delivery was well explained by the IS outsourcing implemented in commercial banks.

Information system is very crucial to the operations of a firm. Commercial banks in Kenya a source of funding for businesses both small and large. They are used in saving funds for customers and offering other financial services. Use of information system is a key in the operations of banks and can lead to effectiveness of its operations and improve the levels of service delivery to the clients. Banks can outsource there IS to external service provider to facilitate effectiveness in their operations, improve security of their operations, attain flexibility and cut on costs. In conclusion, the study was aimed at establishing the IS outsourcing drivers and their impact on service delivery of Commercial banks in Kenya.

The findings indicated that to a large extent, all the IS outsourcing had impact on service delivery as indicated by positive mean values above 3.0 an indication that all the activities were drivers to IS outsourcing of commercial banks in Kenya. The findings from the regression analysis indicated that IS outsourcing to a moderate extent have effect on service delivery in commercial banks. The results of the study ascertained a positive correlation between the various IS outsourcing drivers and SC performance of commercial banks in Kenya. In addition to that the p-value indicated a 0.000 value which was an indication that the IS outsourcing had been implemented commercial banks in Kenya, are statically significant based on the fact that the value is less than the 0.05 level at 95% confidence level.

6. RECOMMENDATIONS TO POLICY AND PRACTICE

From this study findings, it was established that most of commercial banks, had implemented IS outsourcing. There is need to evaluate IS drivers while making outsourcing decisions. However a few have not implemented it, there is need for the management to incorporate the IS outsourcing into their system in order to improve their performance and competiveness. There is need for adoption of IS outsourcing in financial and non-financial firms in Kenya to improve their focus on core activities.

The study was solely based on commercial banks in Kenya and it failed to tackle on other sectors rather than commercial banks. The study period was a little bit narrow for a study of this nature. The researchers experienced great challenges in collecting data from the commercial banks in Kenya, since most of the respondents were operating under strict rules of the management not to issue out information to outsiders on any issue or operations of the firm .The study was narrowly focused on the commercial banks in Kenya, and hence the results could not be generalized for a wider population area like for example, the whole Kenyan country, Besides some of the respondents did not accept the questionnaires thus making it a challenge to effectively carry out the study.

The aim of this study was to establish the IS outsourcing drivers of commercial banks in Kenya. Despite the fact the objectives of the study were attained, the study recommends that this was a cross sectional study of commercial banks in Kenya. A further research needs to be done on other sectors rather than the banking sector. A study can be done in the non-governmental firms, private sector among other sectors. Further studies can be carried out on outsourcing as a whole of commercial banks in Kenya and its impact on performance rather than the IS outsourcing.

REFERENCES

Abraham, K. G. and Taylor, S. K. (1996). Firms’ use of outside contractors: Theory and evidence. *Journal of Labor Economics, 16(3): 395-424*.

Agoti. (2014). Information and Communication Technology Outsourcing and Performance of Humanitarian Organizations in Kenya. Unpublished Research Project, University of Nairobi, Nairobi, Kenya.

Ahmad, H. and Juma’h, D. W. (2000). Outsourcing implications on companies’ profitability and liquidity: a sample of UK companies", Work Study. *49(7): 265-75*.

Alner, M. (2001). The effects of outsourcing on information security. *Information Systems Security, 10(2): 35-43*.

Aubert, B. A., Rivard, S. and Patry, M. (2004). A transaction cost models of IT outsourcing. *Information & Management, 41(7): 921-32*.

Barney, J. B. and Hesterly, W. (2006). Organizational Economics: Understanding the Relationship between Organizations and Economic Analysis”, in Clegg S.R.

Bin, J., Gregory, V., Frazier., Edmund, L. and Prater. (2006). Outsourcing effects on firms' operational performance: An empirical study. *International Journal of Operations & Production Management, 26(12): 1280-300*.

Burnes, B. (2004). Managing Change: A Strategic Approach to Organisational Dynamics, 4th edn (Harlow:Prentice Hall).

Caroline, W. M. (2014). Determinants For Effective Information Technology Outsourcing: A case Of International business Machines Corporation Kenya; Unpublished MA project, University of Nairobi.

CBK. (2011). Annual Financial report.Government printers.

CBK. (2012). Annual Financial report. Government printers.

Clark, T. D., Zmud, R. W. and McCray, G. E. (1995). The outsourcingof information services: Transforming the nature of business in the information industry. *Journal of Information Technology, 10(4): 221-37*.

David , J. and Shao, B. (2007). The Impact of Offshore Outsourcing on IT Workers in Developed Countries. Communications of the ACM. *89-94*.

Gupta, G. and Gupta, H. (1992). Outsourcing the is function. Is it necessary for your organization? *Information Systems Management, 9(3): 44-50*.

Hayes, D. C., Hunton, J. E. and Reck, J. J. (2000). Information systems outsourcing announcements: Investigating the impact on the market value of contract-grantingfirms. *Journal of Information Systems, 14(2): 109-25*.

Hirschheim, R. (2006). Challenge to the Information Systems Discipline, In Information Systems Outsourcing. Enduring Themes, New Perspectives and Global challenges. Offshore Outsourcing, . *687-99*.

Jurison, J. (1995). The role of risk and return in information technology outsourcing decision. *Journal of Information Technology, 10(4): 239-47*.

Kabura. (2012). The Effect of Outsourcing on the Financial Performance of Supermarkets in Nairobi. Unpublished Research Project, University of Nairobi, Nairobi, Kenya.

Kamau, A. (2009). Efficiency and Productivity of the Banking Sector in Kenya: An Empirical Investigation'. PhD dissertation, University of Nairobi (forthcoming).

Kinyua, S. (2000). A Survey of Outsourcing of selected financial activities by publicly quoted companies in Kenya. Unpublished MBA project, University of Nairobi.

Lacity, M. and Hirschheim, R. (1993). The information systems outsourcing bandwagon. *Sloan Management Review, 35(1): 73-86*.

Lacity, M. and Willcocks, L. (1995). Interpreting information technology sourcing decisions from a transaction cost perspective: Findings and critique. *Accounting, Management and Information Technology, 5(4): 204-44*.

Lynch, C. F. (2004). Why outsource? Supply Chain Management Review. *8(7): 44-49*.

Lysons, K. and Farrington, B. (2006). *Purchasing and Supply Chain Management, 7th ed, Prentce Hall, Pearson Education.*

Mary, A. and Shang-Jin, W. (2009). Service Offshoring and Productivity: Evidence from the US," The World Economy, Blackwell Publishing. *32(2): 203-20*.

Mary, M., George, N., Kenyon. and Peter, H. W. (2014). The effects of production outsourcing on factory cost performance: An empirical study. *Journal of Manufacturing Technology Management, 25(6): 750-74*.

Mbii. (2015). Outsourcing and Performance of Savings and Credit Cooperative Societies in Nairobi. Unpublished Research Project, University of Nairobi, Nairobi, Kenya.

Mugenda, O. and Mugenda, A. (2003). Research methods quantitative and qualitative approaches. Nairobi: Act Press.

Mungai, V. and Moturi, C. (2015). Effect of information technology outsourcing on the performance of banks in kenya: Application of the balanced scorecard. *IOSR Journal of Business and Management, 17(3): 83-89*.

Mwega, F. M. (2009). *Global Financial Crisis: Kenya: Discussion series. Paper 7.*

Ngetich. (2014). Outsourcing and Supply Chain Performance of Kenya Medical Supplies Agency. Unpublished Research Project, University of Nairobi, Nairobi, Kenya.

Ngugi, R. W. (2001). An Empirical Analysis of Interest Rate Spread in Kenya. African Economic Research Consortium, Research Paper 106.

Oloo, O. (2009). The Banking Survey 2009. Think Business. Nairobi.

Olson, D. L. (2007). Evaluation of ERP outsourcing. *Computers & Operation Research, 34(12): 3715-24*.

Otieno. (2013). Outsourcing as a strategy for competitive advantage by Barclays Bank of Kenya. Unpublished Research Project, University of Nairobi, Nairobi, Kenya.

Porter, M. E. (1998). Competitive advantage: Creating and sustaining superior performance. New York: The Free Press.

Quinn, J. B. (2000). Strategies for Change: Logical Incrementalism, Irwin, Homewood, IL.

Scott, A., Kesten, C. and Greene. (2007). Competitor-oriented Objectives. The Myth of Market Share. . *International Journal of Business, 12: 117-36*.

Stear, E. B. and Wecksell, J. (1997). Information Resource Center Management (IRCM), Bulletin of the American Society for Information Science. *23(4): 11-24*.

Thompson, J. A. A., Strickland (III), A. J. and Gamble, J. E. (2007). *Crafting and Executing Strategy: The Quest for Competitive Advantage, Concepts and Cases. 15th Ed. New York. McGraw-Hill Irwin.*

Zafar, I. and Aasim, M. (2013). Outsourcing: A review of trends, winners & losers and future directions. *International Journal of Business and Social Science, 4(8): 91-107*.