OUTSOURCING SERVICES IN PARASTATALS: A CASE STUDY OF KENYA PLANT HEALTH INSPECTORATE SERVICE

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D61/77435/2015

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

DECEMBER 2017
DECLARATION

I, the undersigned, declare that this is my original work and has not been presented to any institution or university other than the University of Nairobi for examination.

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

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ACKNOWLEDGEMENTS

I thank the Almighty God for the wisdom and perseverance that He has bestowed upon me during this research project and throughout my life for successful completion of my studies. I take this opportunity to express my profound gratitude to my supervisors; Prof. Gituro Wainaina, Mr. S. O. Nyamwange for their support, patience, guidance, constant encouragement and crucial critiques. Their advice and constructive recommendations throughout the research project were highly appreciated.

To the entire staff of the Kenya Plant Health Inspectorate Service for the assistance they accorded to me during data collection period. Kindly accept my appreciation.

Lastly, I wish to thank my family; parents, brothers and sisters. Their constant love and encouragement provided inspiration and driving force at every stage of my academic life. I owe them everything and wish I could show them just how much I love and appreciate them.

Thank you very much for your support.
DEDICATION

This project is dedicated to my loving family for their love, support and understanding when I was pursuing the project.
TABLE OF CONTENTS

DECLARATION .................................................................................................................. ii
ACKNOWLEDGEMENTS .................................................................................................. iii
DEDICATION ..................................................................................................................... iv
LIST OF TABLES ............................................................................................................. vii
ABBREVIATIONS ........................................................................................................... ix
ABSTRACT ....................................................................................................................... x

CHAPTER ONE: INTRODUCTION ................................................................................. 1
  1.1 Background of the Study .......................................................................................... 1
  1.1.1 Outsourcing Services ......................................................................................... 2
  1.1.2 Firm Performance ............................................................................................... 3
  1.1.3 Outsourcing and Firm Performance .................................................................. 4
  1.1.4 Kenya Plant Health Inspectorate Service ......................................................... 6
  1.2 Research Problem .................................................................................................. 7
  1.3 Objectives of the Study ......................................................................................... 10
  1.4 Value of the Study ................................................................................................ 10

CHAPTER TWO: LITERATURE REVIEW ...................................................................... 11
  2.1 Introduction ............................................................................................................ 11
  2.2 Theoretical Review ............................................................................................... 11
    2.2.1 Transaction Cost Economic Theory ................................................................. 11
    2.2.2 Agency Theory ............................................................................................... 12
    2.2.3 Resource Based Theory .................................................................................. 12
  2.3 Outsourcing Services ............................................................................................. 13
  2.4 Benefits of Outsourcing ....................................................................................... 16
  2.5 Challenges of Outsourcing ................................................................................... 18
  2.6 Empirical Literature Review ................................................................................. 19
    2.7 Conceptual Framework ....................................................................................... 24

CHAPTER THREE: RESEARCH METHODOLOGY ....................................................... 25
  3.1 Introduction ............................................................................................................ 25
  3.2 Research Design .................................................................................................... 25
  3.3 Data Collection ...................................................................................................... 25
  3.4 Data Analysis ......................................................................................................... 26

CHAPTER FOUR: DATA ANALYSIS AND DISCUSSIONS ........................................ 28
  4.1 Introduction ............................................................................................................ 28
  4.2 Reliability Test ....................................................................................................... 28
  4.3 Demographic of the Respondents ....................................................................... 28
  4.4 Outsourcing Services at Kenya Plant Health Inspectorate Service .................... 33
  4.5 Impact of Outsourcing on Kenya Plant Health Inspectorate Service Performance.. 35
  4.6 Challenges Faced at Kenya Plant Health Inspectorate Service in Adopting Outsourcing Services .......................................................... 38

CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS ............. 40
  5.1 Introduction ............................................................................................................ 40
  5.2 Summary ................................................................................................................ 40
LIST OF TABLES

Table 2.1: Summary of Literature Review ................................................................. 22
Table 3.1: Summary of Methodology ........................................................................ 27
Table 4.1: Response Rate ......................................................................................... 29
Table 4.2: Age Bracket of Respondents ................................................................. 30
Table 4.3: Management Level .................................................................................. 31
Table 4.4: Working Duration .................................................................................... 32
Table 4.5: Service Outsourcing .............................................................................. 33
Table 4.6: Firm Performance .................................................................................... 34
Table 4.7: Firm Performance Improvement ............................................................ 35
Table 4.8: Model Summary ...................................................................................... 36
Table 4.9: Analysis of Variance .............................................................................. 37
Table 4.10: Coefficients of Determination ............................................................. 37
Table 4.11: Challenges Faced in Adopting Outsourcing Services ....................... 38
LIST OF FIGURES

Figure 2.1: Relationship Between Outsourcing and Firm Performance .................. 24
Figure 4.1: Distribution by Gender .................................................................. 29
Figure 4.2: Level of Education ........................................................................ 31
Figure 4.3: Department of the Respondents ...................................................... 32
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<tr>
<td>HR</td>
<td>Human Resource</td>
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<td>ICT</td>
<td>Information and Communication Technology</td>
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<tr>
<td>KEPHIS</td>
<td>Kenya Plant Health Inspectorate Service</td>
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<td>SACCOs</td>
<td>Savings and Credit Cooperatives</td>
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<td>TC</td>
<td>Transaction Cost</td>
</tr>
</tbody>
</table>
ABSTRACT
The main aim of outsourcing is to restructure the corporation around its core competencies and maintain outside relationships at the same time. When an outsourcing strategy is successfully implemented it leads to; cost reduction, improvement in capacity, increase in capacity, increase in productivity, improvement of quality, lower innovation costs and risks, improvement of organizational competitiveness and improvement of financial performance. Outsourcing however has some limitations such as reducing the control of a company on the delivery of certain services which makes the company more prone to liabilities. This study sought to determine the impact of outsourcing on performance of Kenya Plant Health Inspectorate Service (KEPHIS). The study used both primary and secondary data. The data was collected from KEPHIS operational departments which were procurement, finance, human resource and administration, Information and Communication Technology (ICT), quality assurance and phytosanitary department. The data collected was analysed using descriptive statistical techniques such as means, standard deviations, frequencies and percentages. The findings of the study were then presented using figures and tables. In order to determine the impact of outsourcing on performance of KEPHIS, the researcher carried out regression analysis. The study concludes that KEPHIS outsources services to a moderate extent. The most outsourced services are cleaning services and guarding services where they are outsourced to a very great extent. Training services, facilities maintenance and ICT services are outsourced to a great extent. This outsourcing has improved the performance of KEPHIS. The study also concludes that there was strong relationship between service outsourcing and firm performance with service outsourcing accounting for 35.1 percent of total variance in the performance of KEPHIS. Further, the study concludes outsourcing of ICT services, cleaning services, guarding services, catering services, training services, transport and logistics services and facilities maintenance services has a positive and significant effect on firm performance. The study found out that outsourcing of ICT services, cleaning services, guarding services, catering services, training services, transport and logistics services and facilities maintenance services leads to improved service delivery. In regard to the challenges faced in adoption outsourcing activities, the study found out that challenges affected implementation to moderate extent. The most faced challenges was lack of suppliers’ flexibility and conflict of interest with outsourcing partners. The study recommends other firms to address the challenges and focus on their core competencies and outsource other services as a way of cutting operational cost and improving service delivery.
CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The need to counter market changes on a regular basis and the difficulty of foreseeing the dimension of such changes forces the organizations to pay keen attention to their core competences and abilities (Valmohammadi & Servati, 2011). Outsourcing occurs when activities that are normally done within an organization are subcontracted to external agents. Eventually, the supervision and development of inventions in activities that are outsourced changes into being the responsibility of organization’s external partner. In the long run, subcontracting allows organizations to concentrate on their core abilities by transferring limited resources to reinforce their core products or services and to calculatingly transfer their internal functions to outside vendors to execute their service activities (Zakkies, 2015).

In the past, the main functions of outsourcing were to cut costs but with the growth of outsourcing as a function, the aim has changed (Leavitt, 2007). Kakabadse and Kakabadse (2000) assert that outsourcing mainly seeks to attain value addition rather than cost reduction. Value addition is evident in many organizations since they strive to ensure quick delivery of services, at the right place, at the right time and in the right qualities. Service outsourcing is still experiencing growth and study shows that it is responsible for the increase of Gross Domestic Product (GDP) in the United States (Aron & Anand, 2006). Some of the service outsourcing practices include: customer service support, transport and logistics services, laundry, cleaning, security guard services, information technology and catering services.
With a rise in globalization, outsourcing is increasingly becoming a vital business tactic; a lot of advantage is gained as external suppliers are able to supply products or services in a highly effective and efficient manner. According to Elmuti (2004), outsourcing is heading towards being very common and is mostly driven by international rivalry, greater need for flexibility, access to global resources and financial benefits.

1.1.1 Outsourcing Services

Outsourcing is the process of transferring decision rights and some activities of the organization to external providers as stipulated in the contract (Greaver 1999). Lysons and Farrington (2006) viewed it as a management technique in which non-core functions are transferred to more experienced external service providers. Oshri, cocks and Kotlarsky (2011) define it as engaging in a contract with third party service providers in order to manage and complete a given task within a specified period taking into account the cost aspects.

Peters and Waterman (1982) state that successful companies outsource the non-core businesses activities and mainly focus on the core activities. The outsourcing concept has been of great benefit to newly established enterprises despite having recently been introduced. Competitive advantage basically originates from the core competencies which enable businesses to adapt to changes in market opportunities. Outsourcing is used both for support services and closer to core activities.

Many companies opt to outsource hoping that they will benefit from it. Outsourcing may lead to improved performance, which includes higher quality products, shorter cycle time, increased productivity, higher profits among other benefits. It may also include more focus on what you do best, improved risk management and reduced
investment on assets and many others (Greaver, 1999). A study by PricewaterhouseCoopers (1999) noted that the main reason why organizations outsource is to reduce overheads but via short term outsourcing. Customers benefit from cost advantages of the supplier such as experience, economies of scale and location as a result of outsourcing (McIvor, 2008).

Studies by Karmakar and Apte (2007) revealed that 84 percent of the value added activities in the US GDP were service related. This therefore, implies that service outsourcing has significant role to play when it comes to countries and firms current and future economic activities. Some of the activities outsourced in firms are Information Technology services, catering services, cleaning services, courier services and customer care services.

1.1.2 Firm Performance

According to Richard, Yip, Johnson and Devinne (2009), firm performance is organization’s ability to attain its mission through sound management, strong governance, and persistent rededication to attainment of results. Efficient nonprofits are adaptable, mission driven, entrepreneurial, customer focused, sustainable and outcome oriented. The initiative of firm performance enables the organization to adjust to increased levels of uncertainty which hinder the attainment of its mission. This initiative seeks to help each organization in every sector of the economy, businesses, charitable organizations and government. The performance of an organization can be measured through examination of the activities it conducts so as to attain its goals. The most notable aspects that can be used to gauge the performance of an organization are the outputs and their effects (Valmohammadi & Servati, 2011). No consensus has been reached on the best or even the most sufficient measure of
firm performance. This is because, there are many varied views of what desirable outcome of organizational effectiveness and because performance is often characterized by the theory and purposes of the research being performed. Performance measurement focuses on the internal processes to determine the effectiveness and efficiency of an action with a given set of metrics. Performance measurement indicators act as proxies for organizational phenomena (Henri, 2003).

Some use financial measures as a criterion to judge the success or fail of a decision or action. According to Richard et al., (2009), the performance of an organization encompasses three specific firm outcome areas: financial performance that is profits, product market performance that is sales, return on investment, return on assets, market share and shareholder return that includes economic value added and total shareholder return. There are, however, challenges in using these measures; for starters most managers are unwilling to allow researchers access their financial records, most studies that are available rely on perceived results rather than actual results. Other challenges to using financial measures include; savings are inconsistent from year to year, constantly changing environments make it more challenging to compare savings many years after outsourcing a contract against inside operations costs that had been earlier discontinued and some organizations outsource services from the onset hence providing no basis for comparison (Bryce & Useem, 1998).

1.1.3 Outsourcing and Firm Performance

Bacon (2009) noted that the application of outsourcing as an organizational strategy leads to improvement of organizational performance. Outsourcing of business activities of a firm improves the competitive edge of the business since it leads to cost reductions. Organizations opt to outsource services for specific business reasons such
as the need for financial improvement performance. Outsourcing enables the firms to function more efficiently through economies of scale and adoption of more efficient technology. Organizations meet their economic goals through cost minimization which enhances the performance of the organization which leads to the elimination of the extra costs that could be transferred to the consumers in the form of higher prices for the commodities since the consumer incur a lower cost for the commodities.

Independent organizations that execute all activities by themselves are exposed to more risks as compared to those who outsource their business activities. Organizations which do not outsource services experience challenges between training their employees in the area of interest, choosing the right alternatives, maximizing efficiency and increasing reliability. Organizations that execute all the activities by themselves find it difficult to eliminate risks and incur high infrastructural capital. This has the consequence of reducing their profitability levels and low growth level (Gupta & Zheuder, 2004).

Jenning (2006) stated that organizations are able to reduce their risk levels regarding high infrastructural expenditures through outsourcing which attracts more investors to these organizations. Outsourcing is of benefit to each business, since it enables it to avoid certain unfavorable situations such as replacement of obsolete technology of which they would not affect it if the business function is outsourced. The implication of this is that organizations need to dedicate their resources to productive activities which enhance their efficiency and effectiveness.
The main aim of outsourcing is to restructure the corporation around its core competencies and maintain outside relationships at the same time. When an outsourcing strategy is successfully implemented it lead to; cost reduction, improvement in capacity, increase in capacity, increase in productivity and improvement of financial performance, improvement of quality, lower innovation costs and risks, improvement of organizational competitiveness and improvement of financial performance. Outsourcing however has some limitations such as reducing the control of a company on the delivery of certain services which makes the company more prone to liabilities (Bacon, 2009).

1.1.4 Kenya Plant Health Inspectorate Service

The KEPHIS is a parastatal under the State Department of Agriculture was incorporated in 1998 as a regulator and facilitator of globally competitive agriculture - agency for plants/plant products entering and leaving the country with an aim of protecting Kenya's agriculture from invasion of foreign pests and diseases. This is done through inspection of all plant materials entering and leaving the country to ensure that they are free from any pests and diseases, that may be transferred into Kenyans farms and hence affect the optimum production. To execute its mandate, the corporation has eight regional offices namely Kisumu, Nakuru, Embu, Muguga, Jomo Kenyatta International Airport, Mombasa, Kitale and Naivasha that man all the entry and border points into the country (KEPHIS, 2016).

The formation of parastatals such as KEPHIS by the government has resulted to excellence in performance, as is evident in the continued growth and success of parastatals such as the various public universities, capital markets authority and Kenya revenue authority among others (Kihanya, 2013). He noted that parastatals are
some of the leading job providers in the market, both directly and indirectly. Directly, there is a large number of Kenyans and foreigners working in parastatals as salaried employees and casual laborers. Indirectly, parastatals outsource services and goods from the private sector through tenders, providing business to a wide range of Kenyans. The economic importance of parastatals cannot be sidelined both in revenue provision and in consumption.

1.2 Research Problem

There has been an increased growth trend in the direction of outsourcing seen all over the developing economies. There is need to specialize in a limited scope of key areas that is driven by the requirements of higher efficiencies and need for cost reductions. To accomplish performance improvements across the corporations, outsourcing is progressively being employed. Companies are greatly benefiting because of access to supplier’s expertise capabilities in different business processes (Romano & Danese, 2010). It is much easier for suppliers specializing in different processes to achieve efficiencies, as they are able to apply economies of scale and through their experience; they are able to have more understanding. Organizations will benefit by utilizing the skills of the more proficient suppliers, this is because they can choose to outsource some business activities that are critical and focus on building internal core abilities (Valmohammadi & Servati, 2011).

Like other organizations operating in a global environment where change is inevitable for a firm to remain competitive, KEPHIS has not been left behind when it comes to adopting the concept of outsourcing. The need for outsourcing at KEPHIS is mostly driven by greater need for cost reduction, need for flexibility, access to global resources and financial benefits. At KEPHIS, overalls and dustcoats are the most used
attires. Once in a while they have to outsource the laundry services in order to do the laundry. In order to concentrate on the main functions, it is significant to outsource some of these activities. According to Zakkies (2015), laundry service providers usually recycle water that is used in washing hence provision of this service, costs are reduced hence efficiency and effectiveness. Some of the other services that are currently being outsourced at KEPHIS include Information and Communication Technology (ICT), cleaning, guarding, consultancy, training, printing and insurance services.

Empirical studies that have been conducted on the effects of outsourcing on organizational performance include Khaki and Rashidi (2011) research on outsourcing and its effects on operational performance and objectives of telecommunication industries in Iran. The study found out that outsourcing leads to cost reduction, increase in flexibility, financial performance improvement and better performance of financial and non-financial services. Hila and Dumitrascu (2014), researched on outsourcing within a supply chain management framework. They found out that outsourcing was a great business strategy and through its initiation, it could reduce costs, improve quality, capabilities and skills, and make a company concentrate on its strengths, enhance a company’s competitive advantage and reduce lead time. Jiang, Frazier and Prater (2015) empirically investigated the effect of outsourcing on the operational performance of the firm in the USA. Results of this research indicated that outsourcing could improve the cost efficiency of the firm but do not improve both profitability and productivity of the firms.
In Kenya, several studies have been conducted focusing on different aspects of outsourcing. Magutu, Chirchir and Mulama (2013) investigated how outsourcing of logistics affected the performance of manufacturing organizations in Nairobi, Kenya and established that warehousing, transport and material handling in many organizations were the most common operations outsourced; the study concluded that as a survival tactic most manufacturing organizations had adopted outsourcing. Maku & Iravo (2013) investigated how the organizational performance at Delmonte Kenya Limited had been impacted by the outsourcing decision. The findings showed a positive correlation between outsourcing and performance. Bosire, Nyaoga and Ombati (2013) who did a research on impact of outsourcing to customer service and lead time in the supermarket industry concluded that, the supermarket outsource most of their activities. Most of these studies have not considered all the implications of outsourcing and this is the gap the current study intends to fill. In addition, the previous studies cannot be used to generalize the impact of outsourcing as they have concentrated on different industries.

The above summary shows that a lot of research has been done on the subject of outsourcing. Brannemo (2006) highlights that organizations are making outsourcing their choice of strategy believing that it helped them gain access to other companies’ competencies, reduce costs, concentrate on their core business specialization, unfortunately this is done without considering all the implications of outsourcing. This study sought to answer the question: does outsourcing influence the performance of KEPHIS?
1.3  Objectives of the Study

The main objective of this study is to determine the impact of outsourcing on performance of KEPHIS. The specific objectives of the study were to:

1. Establish outsourcing services at KEPHIS.
2. Establish the impact of outsourcing on KEPHIS’s performance.
3. Establish the challenges faced at KEPHIS in adopting outsourcing services.

1.4  Value of the Study

Managers normally battle with the decision of whether to outsource or not, and after the outsourcing decision has been made, most organizations was left without facts that help them to be sure whether the decision to outsource was a good one or not. This case study is important in that, it helped inform whether the decision to outsource benefits organization. From the findings of the study, other similar organizations learnt from it and were able to confidently make the decision of whether to outsource or not. If indeed, outsourcing leads to improved firm’s performance, the study can encourage the organization to consider outsourcing more functions that lead to improved operations performance.

This study provided additional information to existing literature concerning outsourcing practices and the performance of firms. To the policy makers, the study enables them to acquire more knowledge concerning the dynamics of service industry and the strategies that can be applied in order to gain performance improvement which help in the formulation of policies which regulate the industry.
CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction
This chapter covers literature review related to the study. The chapter entails theoretical literature review, outsourcing strategies and benefits of outsourcing. The chapter also presents the empirical literature review comprising of local and international studies, conceptual framework and finally literature review summary.

2.2 Theoretical Review
The practice of outsourcing entails a lot of activities that gives it a complex structure; this contributes to a lot of challenging managerial dilemmas. This has led to many theories being suggested to help the professionals understand and manage the outsourcing process. On the other hand, the many theories put forward have created confusion among the scholars handling the outsourcing practice (McIvor, 2008). The study build on three theories: Transaction cost economic theory, Agency theory and the Resource based theory.

2.2.1 Transaction Cost Economic Theory
This theory basically seeks to determine the actual costs incurred in the process of outsourcing, the production of products and the delivery of services including transaction costs, contract costs, coordination costs and search costs. Van Hoek (2000) asserts that, analyzing the transaction cost and deciding whether to “buy or make” helps the manager to adopt organizational forms which reduce the transactional costs.

This theory is a vital tool in managerial decision making. Various researches have been done on transaction cost theory and their findings and conclusions reported. The transaction cost approach is related to this study as it gives a good framework that helps organizations decide what processes they should outsource and which they
should maintain. It also helps in success prediction of outsourcing in terms of financial benefits.

### 2.2.2 Agency Theory

This theory studies the relationship that exists between a firm’s management and all the stakeholders (Jensen & Meckling, 1976). Outsourcing as an organization practice can be used to explain the relationship that exists between an organization (principle) and its suppliers (agents). This theory suggests the application of continual reinforcement and monitoring in order to strengthen the ties between two organizations, which in turn solve any disputes that may arise (Barney & Hesterly, 1996).

This theory has been of significance to organization in the preparation stages where it checks all potential suppliers and what kind of relationships to build with them. According to Mitra (2009), this relationship aims at resolving disputes arising between the principal and the agent. It has received several criticisms from various researchers because it presumes that social life is just a series of contracts ignoring the fact that authority and social relationships exists in economic transactions (Spencer, 2005). It is useful especially when the organization is evaluating all the possible partners for the outsourcing process; this is because it helps to choose the relationship style it apply.

### 2.2.3 Resource Based Theory

This theory is mainly based on the internal competences of the firm which are its resources and capabilities. The competitive advantage of a firm mainly arises from the firm’s capabilities, which are unique and non-substitutable which have a great influence on the performance of the firm (Barney, 1991). This theory argues that there
is imperfect transfer of resources across firms since they are heterogeneously distributed and disagree with the assumptions of traditional economics that resources are perfectly mobile and homogeneous (Barney, 1991).

The limitations of the resource-based view and the transaction cost theory has led to the development of the relation view which combines the two approaches and it focuses creation of value through many forms of partnerships between the two parties. Dyer and Singh (1998) argue that relational rents arise when partners combine, share, or invest their assets, capabilities, or knowledge, or adopt effective governance to improve synergies and lower their transaction costs. The theory is related to this study in the fact that a resource may be outsourced implies the availability of substitutes, which could possibly reduce the resource's potential for sustained competitive advantage. The resource may still possess this potential if the substitute resource is rare and imperfectly imitable.

2.3 Outsourcing Services

Bender (1999) affirms that the world is embracing the practice of outsourcing and firms too are adopting this phenomenon in order to expand into other global markets. Some of the services outsourced by firms are: customer service support, transport and logistics services, laundry, cleaning, security guard services, information technology and catering services and these are discussed below.

Cleaning services are usually consumed by the residential and non-residential markets for example firms, offices, churches and organizations. In 2008, the non-residential market accounted for three quarters of the total cleaning services (The Freedonia Group, 2010). They further found out that outsourcing cleaning services in non-residential markets aimed at cutting costs. Outsourcing of cleaning services is usually
most adopted in manufacturing firms as a way to enhance sanitation, increase the company’s operating flexibility and give the company a chance to concentrate on its core functions.

Catering outsourcing is an outsourcing practice that is commonly adopted by manufacturing firms. This is usually important in saving time and creating efficiency and effectiveness in the work practices. When lunch is served in manufacturing firms, it reduces the movement of employees to various food outlets in search of lunch services. Subsidized or free meals can be provided on the employer’s grounds or building or in any canteen where food can be given to employees only. These subsidized services are provided to employees if the meals are given at a reasonable scale, the employer gives a subsidized meal voucher to staffs and when employees can get subsidized meals at a good scale on the employers’ premises (Bender, 1999).

Information Technology (IT) function is usually outsourced in many manufacturing firms since the costs related with building internal competencies are usually high. Manufacturing firms are usually motivated by the need to reduce costs related to IT outsourcing (Gilley & Rasheed, 2000). Various factors have been found to affect IT outsourcing decisions namely risk sharing on technology investment, access to expertise, fixed contract hence cost predictability, reduction in operating costs, political issues that hinder information systems efficiencies (Malhotra, 1995). According to Wang, Wang, Gwebu and Zhu (2008), IT capabilities are usually important in improving the value of business and through IT outsourcing, the performance of cement manufacturing firms have improved.
Customer services is a function commonly outsourced by many cement manufacturing firms as a way to ease the company of the funds they could have used in creating an effective customer care. It is a cost saving strategy and is mostly used during economic downturns (Juras, 2008). Deloitte consulting group (2005), states that in the near future only 50 percent of outsourcing practices was successful. The failure in the process come about as a result of the clients who do not know that they do not understand their business and outsourcing practices, hence do not know how to manage and structure their outsourcing strategies. Many firms have concentrated on cost saving in fixed overheads, that is salaries and forget the hidden costs that come with outsourcing for example cost of contracting, monitoring and appraisal of performance of the outsourcing provider (Ren & Zhou, 2008).

Security guard services are commonly outsourced in many manufacturing firms. Minieri Associates (2009), states that each security program has its own objective for example, minimizing the risk of losses that are caused by potential threats. Every firm wants its functions performed in the most cost effective manner. This is the main reason for contracting security services. They go ahead to confirm that reasonable long-term cost savings arise from reviewing the security master plan prior to seeking new proposals for contract guard services. The outsourced guard services are appraised to check their successes and hence contracting. Through outsourcing, companies are able to save on costs associated with building internal competencies.

In some firms such as KEPHIS, overalls and dustcoats are the most used attires. Once in a while they have to outsource the laundry services in order to do the laundry. In order to concentrate on the main functions, it is significant to outsource some of these activities. Laundry service providers usually recycle water that is used in washing
hence provision of this service, costs are reduced hence efficiency and effectiveness. Water reuse in laundry service providers assists in making use of the waste water, reduces water use, enhance energy saving and reduces pretreatment costs (Riesenberger & Koeller, 2005).

According to Ogorelec (2007), one of the most outsourcing being practiced currently is the outsourcing of transport and other logistics services. These services are usually a major determinant of a firm’s competitiveness, a firm’s market share and its profitability. Transport services are needed in the whole supply chain since they act as a link between all the supply chain members. He further states that the quality of transport affects the competitiveness of the supply chain. Through effective transportation management, the firm is able to get raw materials in good time and end users get the products in appropriate time for consumption (Szuster, 2010).

2.4 Benefits of Outsourcing

Advantages are the positive effects that follow and are anticipated by companies from the decision of outsourcing. The most acknowledged paybacks of outsourcing are to reduce costs and increase efficiency (Lankford & Parsa, 1999). Suppliers commonly work with diverse customers and by doing so they take advantage of economies of scale resulting in lower prices for outsourcing organizations. Due to consolidation, outsourcing organizations can either offer their products to customers at a more competitive price or reduced cost and increase profits (Reichhart, Framinan & Holweg, 2008).

Exploiting outsourcing opportunities allows the outsourcing company to focus on its core activities (McIvor, 2010), which are fundamental to fulfill customer needs and to
sustain the organization viable gain. Outsourcing actions which are not critical for the organization competitiveness releases valued resources, which can be transferred to the activities and functions that are critical instead (McIvor, 2010). Outsourcing non-core activities possesses the theoretical benefit of getting them performed by a supplier in a more effective way and devoid of the need of investing capital to continuously improve them internally (Jiang & Qureshi, 2006). The outsourced activity becomes the core activity for the supplier, who is able to carry it out quickly, providing a short lead time to avail the product in the market (Jiang & Qureshi, 2006).

Companies that outsource production are thereby able to access resources that are not available in their organization such as special technology and machineries, which in turn contribute to more flexibility (Kremic, Tukel & Rom, 2006). Besides, the experienced workforce enable any type of product customization which enables the outsourcing company to adjust products or services according with the dynamics of the changing market (Scully & Fawcett, 1994).

Another significant advantage is with regard to the possibility of lowering the uncertainty in demand, which can be decreased through the risk pooling effect at the supplier level (Romano & Danese, 2010). When production is outsourced, ambiguity in demand earlier faced by the outsourcing corporation is transferred to the external supplier. The risk pooling effect takes place when the supplier (who generally produces goods of the same nature of the outsourcing company) is able to combine the unevenness in demand from many clients. In such cases, there is a higher chance that a positive variation in demand from one client compared to the average can be balanced by a negative variation from another customer (Romano & Danese, 2010). Hence, the larger the production volume suppliers are handling at a time, the lower
the uncertainty they experience. If a supplier experiences lower uncertainty then the outsourcing organization can benefit from that, having less need for materials and stock items, which normally represent tied up assets which is a cost.

2.5 Challenges of Outsourcing

According to Balakrishnan and Dhar, (2006), management believes that any business function that is not core and better returns can be attained externally needs to be outsourced. However, outsourcing comes with its own challenges which may include selection of the right vendor and choosing the activities to outsource and those to keep in-house. Designing a good governance model, maintaining the spirit of partnership and, continuous management of the vendor relationship and some key challenges that firms could also experience.

Failures in outsourcing mainly arise due to lack of a well outlined methodology. (Lonsdale, 2009) asserts that outsourcing failures are not caused inherent problems but lack of methodologies that guide managers. This leads to irritation, frustration and failure to understand why the goals of outsourcing are not being met.

Bragg (2006) argues that some of the challenges of outsourcing include future change in supply circumstances, for example, may have financial difficulties or change their strategy; there may be political fallout between the two organizations, loss of confidential information and job loss by company seeking to outsource some of its functions or activities. Earl (2006) asserts that outsourcing could lead to loss of important skills and the limits room for future innovation. Innovation needs slack resources, organic and fluid organization processes and experimental competencies that outsiders do not guarantee.
2.6 Empirical Literature Review

Several empirical literature review exist which address the relationship between outsourcing and firm performance and the factors and rationale when making outsourcing decisions. Outsourcing improves the performance of the firm since it enables it anchor its resources in production activities that are core and they can be able to exercise value addition and of strategic importance and outsource others (Thompson, 2007). Jumah and Wood (2000) did a study on the implication of outsourcing on firm performance with the objective of determining the impact of outsourcing on firm performance. Descriptive statistics were used in the study. The results of the study indicated a strong positive association between the two variables under study. They further stated that outsourcing provides both long term and short term benefits.

Stephan and Görzig (2002) did an analysis of the effects of outsourcing on the level of performance of the firm in German manufacturing firms between 1992-2000 by use of a dataset of 43,000 observations per firm per year. Descriptive statistics were used in the study to determine the effect of outsourcing on performance of selected firms. Three proxies were used to determine capture the firms’ outsourcing degrees: external contract work over labor costs as proxy for the outsourcing of production functions, material inputs over labor cost, representing the “make or buy”-type of outsourcing and external services over labor costs. When the performance in terms of return per employee was measured, all the three types of outsourcing were noted to bring about positive performance.

A study by Jiang et al. (2015) empirically investigated the effect of outsourcing on firms’ operational performance in the United States of America. Descriptive statistics were used in the study and the results of this revealed that outsourcing can improve a
firm’s cost efficiency but does not improve both productivity and profitability of the firms. They observed that arrangements that transfer the assets of the outsourcing firm to a vendor could convert operating expenses and fixed costs to variable usage costs. Outsourcing also reduces full-time human resource expenses, fixed-cost commitments and other overhead costs by use of contracts which provide the required development skills which improves the cost efficiency of the firm.

Locally, Ogola (2013) studied the association between outsourcing and organizational performance in the book publishing industry. His objectives of research were to establish the activities that were outsourced by Kenya’s book publishing industries, to find out the benefits of outsourcing in the book publishing industry in Kenya, to investigate the challenges of outsourcing in Kenya’s book publishing industry and to establish the relationship that existed between outsourcing and organizational performance in Kenya’s book publishing industries. She used descriptive statistics in her research and she found out that the book publishing firms in Kenya outsourced their services as a means of improving customer satisfaction, achieving strategic goals and providing efficiency and effectiveness. Firms are increasingly outsourcing in order to enjoy cost, process and time advantages.

Muriithi (2014) studied outsourcing and performance of Savings and Credit Cooperatives (SACCOs) in Nairobi. The objectives were to determine the relationship that existed between outsourcing and performance of SACCOs in Nairobi and to establish the services outsourced by SACCOs in Nairobi. He used descriptive statistics in his research and he found out that outsourcing did not affect performance to a greater extent. From his findings, decrease in outsourcing of customer support practices led to reduced performance.
Anyango (2014) studied outsourcing and the performance of state corporations in Kenya. Her research was meant to establish the extent of outsourcing by state corporations in Kenya, to establish the performance levels of state corporations in Kenya and to determine the relationship that exists between outsourcing of state corporations in Kenya. She used descriptive statistics in her study and found that outsourcing is not much adopted by the state corporations in Kenya but its initiation improves the quality of products, increased efficiency, low staff turn-over, customer satisfaction and innovation and creativity. The empirical studies are summarized as shown in Table 2.1 below.
<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Study</th>
<th>Objectives</th>
<th>Methodology</th>
<th>Findings</th>
<th>Research gap</th>
</tr>
</thead>
</table>
| Jumah & Wood, 2000 | Outsourcing linkage to performance                                     | 1. Determine outsourcing linkage to performance of the firm in accounting perspective         | Data for the study was collected from prominent organizations and the relationships proposed in the framework were tested using rigorous techniques | 1. Significant positive linkage between outsourcing and performance.  
2. Outsourcing cannot only provide a benefit in short term, but it can be beneficial in long term also. | The context of this study cannot be generalized to reflect the findings in other organizations |
| Görzig & Stephan, 2002 | Impact of outsourcing on the firm level performance of German manufacturing firms | 1. Determine the impact of outsourcing on the firm level performance of German manufacturing firms | Data was collected for the period between 1992 and 2000 using a large data set of 43,000 firm-year observations and the relationships tested using rigorous techniques | 1. All three types of outsourcing lead to better performance in terms of return per employee.  
2. Only increased material input had a positive influence on overall firm performance measured as return over sales while services outsourcing has a negative effect | This study only covered manufacturing firms. The period is also different and circumstances might have changed |
| Ogola, 2013       | Relationship between outsourcing and organizational performance in the book publishing industry | 1. Establish the activities that were outsourced by book publishing industries in Kenya  
2. Find out the benefits of outsourcing in the book publishing industry in Kenya  
3. Investigate the challenges of outsourcing in the book publishing industry in Kenya  
4. Establish the relationship that existed between | Data was collected from 10 companies in the book publishing industry and descriptive statistics was used for analysis | 1. Book publishing firms in Kenya outsourced their services as a means of improving customer satisfaction, achieving strategic goals and providing efficiency and effectiveness.  
2. Firms are increasingly outsourcing in order to enjoy cost, process and time advantages | The findings of this study cannot be generalized to reflect the impact of outsourcing on performance of KEPHIS as the context is different |
Table 2.1: Contd…

<table>
<thead>
<tr>
<th>Author (s)</th>
<th>Study</th>
<th>Objectives</th>
<th>Methodology</th>
<th>Findings</th>
<th>Research gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muriithi, 2014</td>
<td>Outsourcing and performance of SACCOs in Nairobi</td>
<td>1. Determine the relationship that existed between outsourcing and performance of SACCOs in Nairobi 2. Establish the services outsourced by SACCOs in Nairobi</td>
<td>Data for the study was collected from prominent organizations and the relationships proposed in the framework were tested using rigorous techniques</td>
<td>1. Outsourcing did not affect performance to a greater extent. 2. Decrease in outsourcing of customer support practices led to reduced performance.</td>
<td>The findings of this study cannot be generalized to reflect the impact of outsourcing on performance of KEPHIS as the context is different</td>
</tr>
<tr>
<td>Anyango, 2014</td>
<td>Outsourcing and the performance of state corporations in Kenya</td>
<td>1. Establish the extent of outsourcing by state corporations in Kenya 2. Establish the performance levels of state corporations in Kenya 3. Determine the relationship that exists between outsourcing of state corporations in Kenya</td>
<td>Data for the study was collected from all state corporations and the relationships proposed in the framework were tested using rigorous techniques</td>
<td>1. Outsourcing is not much adopted by the state corporations in Kenya but its initiation improves the quality of products, increased efficiency, low staff turn-over, customer satisfaction and innovation and creativity</td>
<td>This study dealt with all state corporations as a whole and could therefore not capture factors related to outsourcing that are specific to certain organizations</td>
</tr>
</tbody>
</table>
2.7 Conceptual Framework

Figure 2.1 below guide the study and determine the relationship that exists between the dependent and independent variables. It is expected that through outsourcing, there was changes in performance of KEPHIS.

Figure 2.1: Relationship Between Outsourcing and Firm Performance

Independent variable: Outsourcing
- ICT
- Cleaning
- Guarding
- Catering
- Training
- Transport and Logistics
- Facilities Maintenance

Dependent variable: Firm Performance
- Cost
- Service Delivery

Outsourcing was the independent variable and it was measured by ICT services, cleaning services, guarding services, catering services, training services, transport and logistics services and facilities maintenance services. Firm performance was the dependent variable that the study seeks to explain and it was measured by the variables shown above in Figure 2.1.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes methods of research to be applied to objectively establish the impact of outsourcing on firm performance. It looks at the research design, the population of study, test of reliability and validity, criteria for data collection and analysis.

3.2 Research Design

The selected research design is a descriptive case study. Descriptive research approach was chosen for the study because the study involves getting detailed information from public units and using numbers to analyze or determine the existing relationship (Khan, 2008). A case study is considered suitable since it allows the researcher to focus on one unit namely KEFHS and to conduct an in-depth study on the impact of outsourcing on performance at KEFHS.

The KEFHS has six operational functions that are directly involved in the outsourcing process. The departments are namely; procurement, finance, human resource and administration, ICT, quality assurance and phytosanitary department. The senior heads in departments or their equivalents in the organization are responsible for the performance of KEFHS and are knowledgeable of the functions outsourced by KEFHS as well as the impact of the decision to outsource certain functions within the organization on performance and they therefore provided insight to this study.

3.3 Data Collection

This study used both primary and secondary data to address the three objectives of the study. In-order to address objective one –‘establish the outsourcing services at
KEPHIS’, secondary data was collected from the organization’s records showing all the services that are outsourced and for how long they have been outsourcing each service. The objective also addressed by asking the respondents an open ended question on the services that can be outsourced at KEPHIS (see Appendix 1 section b (2)).

For objective two – ‘establish the impact of outsourcing on KEPHIS’s performance’, both primary and secondary data was used. The primary data was collected directly from the respondents and this was done using a well-structured questionnaire. The questionnaire had both open and closed ended questions and captured the respondents’ perception about the impact of outsourcing on the firm’s performance (see Appendix 1 section c). Documentary secondary data was obtained from the organization’s records dates ranging from (2008 - 2016). The secondary data captured the varying costs and quality of services before and after the company started outsourcing.

For objective three – ‘establish the challenges faced at KEPHIS in adopting outsourcing activities’, primary data was used. The primary data was collected directly from the respondents and this was done using a well-structured questionnaire. The questionnaire had both open and closed ended questions and captured the respondents’ perception about the challenges of outsourcing at KEPHIS (see Appendix 1 section d).

3.4 Data Analysis

Before analysis, data was sorted and coded to enable responses to be grouped into various categories. Both descriptive and inferential statistics was used to analyze the data. These consisted of frequency distribution tables and percentages, measures of central tendency such as mean and measures of dispersion such as standard deviation.
Inferential statistics, in particular linear regression analysis was used to study the relationship between independent variables and dependent variable as shown in Table 3.1 below.

The regression model below was used:

\[ FP = \beta_0 + \beta_1 ICTS + \beta_2 CS + \beta_3 GS + \beta_4 CAS + \beta_5 TS + \beta_6 TLS + \beta_7 FMS + \varepsilon \]

where: \( FP = \) Firm performance

\( \beta_0 = \) intercept of the regression equation

\( \beta_1, \beta_2, \beta_3, \beta_4, \) = the slope of the regression

ICTS = ICT services, CS = Cleaning services, GS = Guarding services, CAS = Catering services, TS = Training services, TLS = Transport and logistics services, FMS = Facilities maintenance services, \( \varepsilon = \) error term

Table 3.1: Summary of Methodology

<table>
<thead>
<tr>
<th>Objectives</th>
<th>Data</th>
<th>Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish the outsourcing practices at KEPHIS.</td>
<td>Both primary and secondary data</td>
<td>Graphical and descriptive statistics.</td>
</tr>
<tr>
<td>Establish the impact of outsourcing on KEPHIS’ s performance.</td>
<td>Both primary and secondary data</td>
<td>Graphical and descriptive statistics.</td>
</tr>
<tr>
<td>Establish the challenges faced at KEPHIS in adopting outsourcing services</td>
<td>Both primary and secondary data</td>
<td>Graphical and descriptive statistics.</td>
</tr>
</tbody>
</table>
CHAPTER FOUR: DATA ANALYSIS AND DISCUSSIONS

4.1 Introduction

This chapter presents the findings and discussions of the data analysis. This study used both primary and secondary data collected from KEPHIS. Specifically, the study sought to determine the impact of outsourcing on performance of KEPHIS. The data collected was analysed using descriptive statistical techniques such as means, standard deviations, frequencies and percentages. The findings of the study were then presented using figures and tables. In order to determine the impact of outsourcing on performance of KEPHIS, the researcher carried out linear regression analysis.

4.2 Reliability Test

Reliability analysis was done in order to find out whether the questionnaire used was internally consistent and actually measured what it purported to measure. The researcher considered a Cronbach’s Alpha coefficient of 0.7 or more as an indicator of a reliable instrument that was internally consistent. The researcher found out that the questionnaire had a Cronbach’s Alpha coefficient of 0.781 which was interpreted to mean that the questionnaire was reliable, internally consistent and actually measures what it purports to measure in regard to the impact of outsourcing on performance of KEPHIS.

4.3 Demographic of the Respondents

In this study, a total of 15 questionnaires were issued to employees in the operational departments of KEPHIS. These departments were procurement, finance, human resource and administration, ICT, quality assurance and phytosanitary department. A total of 10 questionnaires were filled and returned to the researcher. The 10 questionnaires resulted to 66.67 percent response rate which the researcher
determined to be an adequate representative sample. Richardson (2005) recommends at least 50 percent response rate for it to be considered an adequate representation. The response rate is shown in Table 4.1 below.

Table 4.1: Response Rate

<table>
<thead>
<tr>
<th>Response rate</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Filled and returned</td>
<td>10</td>
<td>66.67</td>
</tr>
<tr>
<td>Not filled</td>
<td>5</td>
<td>23.33</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Researcher (2017)

The general information of the respondents included gender, age, management level, work duration, and the department of the respondents. The study intended to find out the extent to which the researcher observed gender balance when distributing questionnaires to the employees of KEPHS. The study found out that male and female gender accounted for 50 percent of the respondents each. This clearly indicates that the researcher was gender sensitive and there was no bias when administering the study questionnaires. The study also reveals that KEPHS promotes both genders to its senior, middle and lower leadership levels. The study findings are expressed in Figure 4.1 below.

Figure 4.1: Distribution by Gender

Source: Research Findings (2017)
The researcher further sought to know how the respondents were distributed in terms of age. This was important because age has a bearing on how various employees are affected by factors that influence their performance. The results are shown in Table 4.2 below.

Table 4.2: Age Bracket of Respondents

<table>
<thead>
<tr>
<th>Age Bracket</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 30 years</td>
<td>4</td>
<td>40.0</td>
</tr>
<tr>
<td>36-40 years</td>
<td>4</td>
<td>40.0</td>
</tr>
<tr>
<td>31-35 years</td>
<td>2</td>
<td>20.0</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Research Findings (2017)

It was found out that those with less than 30 years and those between 36 to 40 years accounted for 40 percent of the respondents. Those aged between 31 to 35 years were the least at 20 percent. These findings revealed that majority of the employees in KEPhIS are young people who are aware of the impact of outsourcing on performance of KEPhIS.

In addition, the researcher requested the respondents to provide details about their professional training and education. The level of professional training and education was used to gauge the ability of the respondent’s to understand the impact of outsourcing on the performance of KEPhIS. The results are as shown in Figure 4.2 below.

The results of the study revealed that 70 percent of the respondents from KEPhIS were bachelor’s degree holders followed by master’s degree holders at 20 percent and then diploma holders at 10 percent. Only one of the respondents indicated to possess
Certified Investment and Security Analyst (CISA) and Certified Public Accountant, Kenya (CPA (K)) qualification on top of their bachelor’s degree. These findings act as an indicator that the respondent had adequate levels of education to understand how outsourcing affects the performance of KEPHIS. The researcher requested the respondents to indicate the management levels they belonged to in their respective firms. The findings of the study are as shown in Table 4.3 below.

![Figure 4.2: Level of Education](image)

Source: Research Findings (2017)

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle level management</td>
<td>6</td>
<td>60.0</td>
</tr>
<tr>
<td>Lower level management</td>
<td>4</td>
<td>40.0</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Research Findings (2017)

The findings showed that 60 percent of the respondents belonged to the middle level management while 40 percent of the respondents belonged to the lower level management - none of the respondents was a senior manager. Therefore, it is clear that the respondents held positions that allowed them to understand how outsourcing
affects the performance of KEPHIS. The respondents were further requested to indicate the duration they had been working for KEPHIS and the results are shown in Table 4.4 below.

Table 4.4 Working Duration

<table>
<thead>
<tr>
<th>Duration</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-10 years</td>
<td>6</td>
<td>60.0</td>
</tr>
<tr>
<td>Below 5 years</td>
<td>4</td>
<td>40.0</td>
</tr>
<tr>
<td>Total</td>
<td>10</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Source: Research Findings (2017)

It was found out that 60 percent of the respondents had been working at KEPHIS for 5 to 10 years while the remaining 40 percent had been working for less than 5 years. These results show that the respondents from KEPHIS had adequate working experience to understand how outsourcing affects the performance of KEPHIS.

Further, the study sought to establish the departments in which the study respondents belonged. The findings are as shown in Figure 4.3 below.

Figure 4.3: Department of the Respondents

Source: Research Findings (2017)
4.4 Outsourcing Services at Kenya Plant Health Inspectorate Service

The study further sought to establish the extent to which KEPHIS has implemented outsourcing service. The recorded mean scores were interpreted using the following scale: 1.00 to 1.49 = very low extent; 1.50 to 2.49 = low extent; 2.50 to 3.49 = moderate extent; 3.50 to 4.49 = great extent; and 4.50 to 5.00 = very great extent. The results are as shown in Table 4.5 below.

Table 4.5: Service Outsourcing

<table>
<thead>
<tr>
<th>Service</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cleaning services</td>
<td>4.70</td>
<td>0.483</td>
</tr>
<tr>
<td>Guarding services</td>
<td>4.50</td>
<td>1.269</td>
</tr>
<tr>
<td>Training services</td>
<td>3.70</td>
<td>0.823</td>
</tr>
<tr>
<td>Facilities maintenance</td>
<td>3.60</td>
<td>1.265</td>
</tr>
<tr>
<td>ICT services</td>
<td>3.50</td>
<td>0.850</td>
</tr>
<tr>
<td>Transport and logistics services</td>
<td>2.30</td>
<td>1.337</td>
</tr>
<tr>
<td>Catering services</td>
<td>1.70</td>
<td>1.252</td>
</tr>
<tr>
<td>Aggregate Mean</td>
<td>3.43</td>
<td>1.040</td>
</tr>
</tbody>
</table>

Source: Research Findings (2017)

An aggregate Mean (M)=3.43 indicated that overall, KEPHIS outsources the services to a moderate extent. The most outsourced services are cleaning services and guarding services where they are outsourced to a very great extent as evidenced by mean scores of 4.70 and 4.50. Training services M=4.50, facilities maintenance M=3.70 and ICT services M=3.60 are outsourced to a great extent. Transport and logistics services M=2.30 and catering services M=1.70 were the least outsourced where they were only outsourced to a low extent. The respondents also indicated that KEPHIS could outsource services such as catering services, publicity, events planning, and planning for meetings/trainings.
These findings are in line with observations from other scholars, for example the Freedonia Group (2010) observed that non-residential market accounted for three quarters of the total cleaning services outsourcing in 2008. Cleaning services are outsourced to enhance sanitation, increase the company’s operating flexibility and give the company a chance to concentrate on its core functions. At KEPHIS for instance, overalls and dustcoats are the most used attires and laundry services are usually outsourced so that the firm can focus on the core business competency. According to Minieri Associates (2009), security guard services are commonly outsourced by firms to meet various objectives such as minimizing the risk of losses caused by potential threats.

The study further sought to know the extent to which the respondents agreed that outsourcing has influenced the performance of KEPHIS. The mean scores were interpreted using the following scale: 1.00 to 1.49 = strongly disagree; 1.50 to 2.49 = disagree; 2.50 to 3.49 = undecided; 3.50 to 4.49 = agree; 4.50 to 5.00 = strongly agree. The results are as shown in Table 4.6 below.

Table 4.6: Firm Performance

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service delivery</td>
<td>4.10</td>
<td>0.316</td>
</tr>
<tr>
<td>Productivity</td>
<td>4.00</td>
<td>0.471</td>
</tr>
<tr>
<td>Flexibility</td>
<td>3.80</td>
<td>0.632</td>
</tr>
<tr>
<td>Cost reduction</td>
<td>3.80</td>
<td>0.919</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>3.80</td>
<td>0.632</td>
</tr>
<tr>
<td>Production technique</td>
<td>3.60</td>
<td>0.699</td>
</tr>
<tr>
<td>Innovation</td>
<td>3.30</td>
<td>0.823</td>
</tr>
<tr>
<td>Aggregate Mean</td>
<td>3.77</td>
<td>0.642</td>
</tr>
</tbody>
</table>

Source: Research Findings (2017)
The respondents agreed that outsourcing influences the performance of KEPHIS as evidenced by mean of 3.77. The most influenced performance indicators were service delivery $M=3.77$, productivity $M=3.77$ and flexibility $M=3.77$ where the findings indicated that the respondents were in agreement. The least influenced performance was innovation with a mean of 3.30, which indicated that the respondents were neutral in regard to how it has been influenced. There was a small variation in the responses given in regard to the influence of outsourcing as evidenced by the standard deviations that were recorded.

4.5 Impact of Outsourcing on Kenya Plant Health Inspectorate Service Performance

The study also sought to know the level of improvement in the performance indicators of KEPHIS. The recorded mean scores were interpreted using the following scale: 1.00 to 1.49 = greatly reduced; 1.50 to 2.49 = reduced; 2.50 to 3.49 = constant; 3.50 to 4.49 = improved; 4.50 to 5.00 = greatly improved. The results are as shown in Table 4.7 below.

Table 4.7: Firm Performance Improvement

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Service delivery</td>
<td>4.10</td>
<td>0.568</td>
</tr>
<tr>
<td>Productivity</td>
<td>3.90</td>
<td>0.316</td>
</tr>
<tr>
<td>Customer satisfaction</td>
<td>3.90</td>
<td>0.568</td>
</tr>
<tr>
<td>Flexibility</td>
<td>3.80</td>
<td>0.919</td>
</tr>
<tr>
<td>Production technique</td>
<td>3.40</td>
<td>0.699</td>
</tr>
<tr>
<td>Innovation</td>
<td>3.40</td>
<td>0.843</td>
</tr>
<tr>
<td>Cost reduction</td>
<td>3.40</td>
<td>0.699</td>
</tr>
<tr>
<td>Aggregate Mean</td>
<td>3.70</td>
<td>0.659</td>
</tr>
</tbody>
</table>

Source: Research Findings (2017)
The study found out that performance of KEPHIS has greatly improved as a result of outsourcing various services such as cleaning services, guarding services and training services. This is evidenced by the aggregate mean of 4.68. Performance has most improved on service delivery M=4.10, productivity M=3.90, and customer satisfaction M=3.90. The least improved performance were innovation M=3.40, and cost reduction M=3.40. Exploiting outsourcing opportunities allows the outsourcing company to focus on its core activities (McIvor, 2010), which are fundamental to fulfill customer needs and to sustain the organization viable gain. The most acknowledged paybacks of outsourcing are to reduce costs and increase efficiency (Lankford & Parsa, 1999). Another significant advantage is with regard to the possibility of lowering the uncertainty in demand, which can be decreased through the risk pooling effect at the supplier level (Romano & Danese, 2010).

The research sought to determine the impact of outsourcing on performance of KEPHIS. The outsourced services were ICT services, cleaning services, catering services, training services, transport and logistics services and facilities maintenance services. Firm performance has regressed these outsourced services. The findings of model summary indicate the strength of the relationship between firm performance and service outsourcing. The findings are as shown in Tables 4.8 below.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.713a</td>
<td>.508</td>
<td>.351</td>
<td>.1325</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ICT services, cleaning services, guarding services, catering services, training services, transport and logistics services, facilities maintenance services


The findings indicate that there was moderate relationship ($R^2 = 0.508$) between service outsourcing and firm performance, meaning that 50.8 percent of the firm performance was explained by ICT services, cleaning services, guarding services, catering
services, training services, transport and logistics services, and facilities maintenance services, while 49.2 percent was explained by other factors not considered in the model. The study further sought to establish the overall significance of the model in establishing the relationship between service outsourcing and firm’s performance using Analysis of Variance (ANOVA) and the results are as shown in Table 4.9 below.

Table 4.9: Analysis of Variance

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1.650</td>
<td>70</td>
<td>.024</td>
<td>3.00</td>
<td>.001b</td>
</tr>
<tr>
<td>Residual</td>
<td>.246</td>
<td>30</td>
<td>.008</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>1.896</td>
<td>100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Firm Performance
b. Predictors: (Constant), ICT services, cleaning services, guarding services, catering services, training services, transport and logistics services, facilities maintenance services

The ANOVA indicated significant results (p-value = 0.001 was less than level of significance of 0.05). The study further sought to determine the various outsourced services individually affects the performance of KEPHIS and the results are shown in Table 4.10 below.

Table 4.10: Coefficients of Determination

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>2.322</td>
<td>.501</td>
<td>4.635</td>
<td>.000</td>
</tr>
<tr>
<td>ICT services</td>
<td>.473 (ICT)</td>
<td>.121 (ICT)</td>
<td>.330</td>
<td>3.909 .001</td>
</tr>
<tr>
<td>Cleaning services</td>
<td>.435 (CS)</td>
<td>.101 (CS)</td>
<td>.302</td>
<td>4.307 .000</td>
</tr>
<tr>
<td>Guarding services</td>
<td>.366 (GS)</td>
<td>.098 (GS)</td>
<td>.246</td>
<td>3.735 .001</td>
</tr>
<tr>
<td>Catering services</td>
<td>.362 (CS)</td>
<td>.101 (CS)</td>
<td>.341</td>
<td>3.584 .001</td>
</tr>
<tr>
<td>Training services</td>
<td>.348 (TS)</td>
<td>.137 (TS)</td>
<td>.253</td>
<td>2.540 .017</td>
</tr>
<tr>
<td>Transport and logistics</td>
<td>.237 (T&amp;L)</td>
<td>.067 (T&amp;L)</td>
<td>.151</td>
<td>3.537 .001</td>
</tr>
<tr>
<td>Facilities maintenance</td>
<td>.188 (FM)</td>
<td>.053 (FM)</td>
<td>.102</td>
<td>3.547 .001</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Firm Performance


As Table 4:10 above shows, all predictor variables had a positive impact and significant at 95 percent confidence level on the performance of KEPHIS. The following regression equation was derived:

\[ FP = 2.322 + 0.473ICT S + 0.435CS + \]
0.366GS + 0.362CAS + 0.348TS + 0.237TLS + 0.188FMS. This means that if ICT; cleaning; guarding; catering; training; transport and logistics; and facilities maintenance services go up by one unit, firm performance will go up by 0.473, 0.435, 0.366, 0.362, 0.348, 0.237, and 0.188 units, respectively.

4.6 Challenges Faced at Kenya Plant Health Inspectorate Service in Adopting Outsourcing Services

In regard to challenges facing implementation of outsourcing services at KEPHIS, the researcher sought to define the magnitude to which various challenges affects implementation of outsourcing services. Respondents used a Likert scale of 5-very great extent, 4 - great extent, 3- moderate extent, 2 -low extent and 1 – very low extent and the findings are as presented in Table 4.11 below.

Table 4.11: Challenges Faced in Adopting Outsourcing Services

<table>
<thead>
<tr>
<th>Challenge</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of supplier flexibility</td>
<td>4.5000</td>
<td>.70711</td>
</tr>
<tr>
<td>Interest conflicts with outsourcing partners</td>
<td>4.2000</td>
<td>.63246</td>
</tr>
<tr>
<td>Delays in delivery</td>
<td>3.6000</td>
<td>.69921</td>
</tr>
<tr>
<td>Loss of sensitive information</td>
<td>3.5000</td>
<td>.52705</td>
</tr>
<tr>
<td>Customer complaints</td>
<td>3.4000</td>
<td>.51640</td>
</tr>
<tr>
<td>Costs escalation</td>
<td>3.3000</td>
<td>.48305</td>
</tr>
<tr>
<td>Poor quality of goods and services</td>
<td>3.2000</td>
<td>.78881</td>
</tr>
</tbody>
</table>

Source: Research Data (2017)

The findings in Table 4.11 above on the challenges faced by KEPHIS during implementation of outsourcing services indicate that lack of supplier flexibility mean 4.50 and conflict of interest with outsourcing partners mean 4.20 were the most faced challenges affecting implementation of outsourcing activities to a large extent. Majority of the respondents were in agreement that delay in delivery (mean = 3.60), loss of sensitive information (mean = 3.50), customer complaints (mean = 3.40), costs escalation (mean = 3.30), and poor quality of goods and services (mean = 3.2)
affected implementation of outsourcing services at KEPHIS to a moderate extent. These findings correspond with the literature on the fact that by adoption of outsourcing activities, KEPHIS is able to deliver moderate quality of goods and services, reduce cost of operation and minimize on customer complaints. From the above findings, it is evident that for effective adoption of outsourcing activities, KEPHIS need to put in existence measures to address above challenges especially on supplier flexibility and conflicting interest between outsourcing partner
CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter presents summary, conclusion and recommendations of the study findings. Also discussed are limitations, policy change, recommendations and suggestions for future research.

5.2 Summary

The study used both primary and secondary data and the data was collected from KEPHIS operational departments which were procurement, finance, human resource and administration, ICT, quality assurance and phytosanitary department. The study sought to determine the impact of outsourcing on performance of KEPHIS. The data collected was analysed using descriptive statistical techniques such as means, standard deviations, frequencies and percentages. The findings of the study were then presented using figures and tables. In order to determine the impact of outsourcing on performance of KEPHIS, the researcher carried out linear regression analysis.

The study established that KEPHIS outsources the services to a moderate extent. The most outsourced services were cleaning services and guarding services where they were outsourced to a very great extent. Training services, facilities maintenance and ICT services are outsourced to a great extent. Transport and logistics services and catering services were the least outsourced where they were outsourced only to a low extent. The respondents also indicated that KEPHIS can outsource services such as catering services, publicity, events planning, and planning for meetings/trainings. The study found out that performance of KEPHIS has greatly improved as a result of outsourcing the services. The most improved performance was on service delivery, productivity, and customer satisfaction.
From linear regression analysis, there was moderate relationship ($R^2 = 0.502$) between service outsourcing and firm performance. The study found out that service outsourcing affects 35.1 percent of the total variance in the performance of KEPHIS. Further, the study found out that outsourcing of ICT services, cleaning services, guarding services, catering services, training services, transport and logistics services and facilities maintenance services had a positive and significant effect on KEPHIS performance.

The findings also revealed that implementation of outsourcing activities at KEPHIS was faced with challenges to a moderate extent with lack of supplier flexibility, and conflict of interest between outsourcing partners being the most dominant challenges. Poor quality of goods and services, and cost escalation were the least faced challenges during implementation of outsourcing activities.

5.3 Conclusions

The study concludes that KEPHIS outsources services to a moderate extent. The most outsourced services were cleaning services and guarding services where they are outsourced to a very great extent. Training services, facilities maintenance and ICT services were outsourced to a great extent. This outsourcing has improved the performance of KEPHIS.

The study also concludes that there was strong relationship between service outsourcing and firm performance with service outsourcing accounting for 35.1 percent of total variance in the performance of KEPHIS. Further, the study concludes that outsourcing of ICT services, cleaning services, guarding services, catering services, training services, transport and logistics services and facilities maintenance services had a positive and significant effect firm performance. The study also
concludes that challenges affecting implementation of outsourcing activities were to a moderate extent hence KEPHIS should put in place systems, measures and processes to mitigate and address challenges so as to enable smooth adoption of outsourcing activities

5.4 Recommendations

The study found out that outsourcing of ICT services, cleaning services, guarding services, catering services, training services, transport and logistics services, and facilities maintenance services leads to improved service delivery. Therefore, the study recommends other firms should focus on their core competencies and outsource other services as a way of cutting operational cost and improving service delivery.

The study further recommends that the organization’s management should minimize conflict of interests with outsourcing partners as this erodes the gains such service outsourced. Corrupt practices during procurement of such service is a major cause of cost escalation and poor quality of service which were among the challenges identified. Additionally, least strategic functions such as catering, and transport and logistics should be outsourced more as they least predispose the organization to information insecurity.

5.5 Limitations of the Study

The researcher had no absolute control over the accuracy of the primary data provided by the respondents in regard to the effect of service outsourcing on firm performance. However, the researcher contacted the respondents to verify any unclear issues. The KEPHIS information is confidential and proprietary, therefore, it was difficult to get the information, but the organization provided the data on condition of strict confidentiality and that the data should be used only to fulfill academic requirements.
5.6 Suggestions for Further Research

This study was a case study of KEPHIS and therefore the study findings might not be adequately generalized to all firms since they all have unique operating environments. Therefore, more research should be carried out to broadly determine how service outsourcing impacts firm performance.
REFERENCES


PricewaterhouseCoopers (1999). *Growth companies that outsource grow faster larger, and were profitable than non-out sourcers*, PricewaterhouseCoopers, Yankelovich Partners, Goldstein consulting Group, New York, NY


APPENDICES

Appendix I  Questionnaire
This questionnaire has been designed to collect information on the impact of outsourcing services on performance of KEPHIS. Please read carefully and answer the questions as honestly as possible. The information gathered was used purely for the purpose of academic research and was treated with utmost confidence.

Instructions
1. Tick appropriately in the box or fill in the space provided.
2. Feel free to give further relevant information to the research.

PART A: DEMOGRAPHIC INFORMATION

1. Your Gender?
   a) Male  □  b) Female  □

2. Your age bracket in years?
   Less than 30 □ 31-35 □ 36-40 □ 41-45 □ 46-50 □ greater than 51 □

3. Your highest level of professional training and education?
   Diploma □ Degree □ Master’s degree □ PhD □
   Any other Specify…………………………………………………………………………………………

4. Your management level in the organization
   Senior Level Management □
   Middle Level Management □
   Lower Level Management □

5. How long have you worked with the organization?
   Below 5 years □
   5 to 10 years □
   Above 10 years □

6. Which department do you work in the organization? ………………………
PART B: TO WHAT EXTENT ARE THE FOLLOWING OUTSOURCING SERVICES IMPLEMENTED AT KEPHIS.

By use of a tick (√) in the boxes, kindly indicate the extent to which the outlined services have been outsourced at KEPHIS

1) Use 1- Very low extent, 2-Low extent, 3-Moderate extent, 4- Great extent, 5- Very great extent

<table>
<thead>
<tr>
<th>Outsourced services</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cleaning services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guarding services</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Training services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Catering services</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport and logistic services</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Facilities maintenance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Others (please specify)</td>
<td></td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

2) In the space provided below, please suggest additional areas where you feel Outsourcing can be applied in KEPHIS

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........................................................................................................................................
........................................................................................................................................
........................................................................................................................................

49
PART C: OUTSOURCING AND FIRM PERFORMANCE

a) Below are some performance indicators, indicate using a tick (√) to what extent do you agree that outsourcing has influenced the performance of the firm. Rate using a scale of 1-5, where: 1 Strongly disagree, 2 Disagree, 3 Neither agree nor disagree, 4 Agree, 5 Strongly agree

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost reduction</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Productivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Flexibility</td>
<td></td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Service delivery</td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>Innovation</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Customer satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Production technique</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

b) In your own opinion how would you rate the performance indicators below before and after outsourcing some of the operations of the organization? First

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Greatly improved</th>
<th>Improved</th>
<th>Constant</th>
<th>Reduced</th>
<th>Greatly reduced</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost reduction</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Productivity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Flexibility</td>
<td></td>
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<td></td>
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<tr>
<td>Service delivery</td>
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<td></td>
</tr>
<tr>
<td>Innovation</td>
<td></td>
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<tr>
<td>Customer satisfaction</td>
<td></td>
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</tr>
<tr>
<td>Production technique</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Other (specify)</td>
<td></td>
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</tr>
</tbody>
</table>
PART D: CHALLENGES OF OUTSOURCING

a. To what extent has KEPHIS encountered the following challenges as a result of outsourcing? Use 5- Very great extent, 4- Great extent, 3- Moderate extent, 2- Low extent and 1-Very low extent.

<table>
<thead>
<tr>
<th>Outsourced Challenges</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costs escalation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delays in delivery</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer complaints</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Loss of sensitive information</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Lack of supplier flexibility</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Interest conflicts with outsourcing partners</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poor quality of goods and services</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

b. List other challenges faced in outsourcing activities in your organization?

------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------------------------
------------------------------------------------------------------------------------------------------------------

Thank you for your co-operation