INFLUENCE OF OUTSOURCING OPERATIONAL FUNCTIONS ON PRODUCT MANUFACTURING PERFORMANCE: A CASE OF GLAXOSMITHKLINE LIMITED, NAIROBI, KENYA.

BY:

MATHEKA, BERNARD KIOKO

A Dissertation Submitted to the Faculty of Business and Communication Studies in Partial Fulfillment of the Requirements for the Award of a Masters of Business Administration (Strategic Management and Leadership) Degree of St. Paul's University.

August, 2017

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DECLARATION

This dissertation is my original work and has not been presented to any other institution for an academic award.

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DEDICATION

I dedicate this dissertation to my family – Bendetta, Maureen and Ruth. You have been the pillars of my strength during my academic journey and I salute you all. I cannot thank you enough in this space but God's grace is sufficient for all of you. May the Almighty bless you abundantly.

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ABSTRACT

The purpose of this research was to study the influences of the outsourcing operational functions on product manufacturing performance at GlaxoSmithKline Limited in Nairobi, Kenya. The specific objectives of the study were to evaluate the influence of outsourcing materials management, human capital and vendor management on product manufacturing performance. The study also sought to identify the risks associated with outsourcing on product manufacturing performance. Study questions aligned with the study variables were first postulated. This study was anchored on four theories: the Core Competencies Theory, Transaction Cost Economics Theory, Resource-Based Theory and the Agency Theory. The study adopted an explanatory research design and targeted a population of one hundred and sixteen (116) employees working for the manufacturing division in the Nairobi plant. Using purposive sampling, a sample of sixty (60) employees working in various departments was selected. Data for the study was collected by the use of questionnaires. Reliability of the research instrument was tested by use of Cronbach's Alpha method. Once the data was collected, Microsoft Excel was used for data analysis. The findings were presented in the form of descriptive statistics, percentages, tables, pie charts and graphs with attendant explanations. Qualitative data was also analyzed and themes generated. The study established a negative influence on product manufacturing performance occasioned by the outsourcing of materials management. As a result, the company was noted to have missed on some of its key performance indicators – conformance to plan (CTP), conformance to shipment (CTS), domestic shipment right first time (DSRFT) and out of stock (OOS). The outsourcing of human capital was also noted to have influenced product manufacturing performance as the findings showed that some of the outsourced employees had become demoralized by poor remuneration leading to poor ownership of processes. Vendor management was also noted to have negatively influenced product management performance since the findings established that some contracts had been terminated owing to vendor incompetence. The study further found out that the adoption of outsourcing had introduced some risks to product manufacturing performance including uninsured employees and failure to comply with required medical surveillance. Recommendations were made in view of these findings. It was recommended that GSK establishes a business continuity plan (BCP) to guard against supplier dependency in materials management. It was also recommended that training programmes, remuneration and staff insurance be discussed and embedded in the contracts of service. Regulators should also step in to ensure that government directives on minimum wage, staff insurance and medical surveillance are taken care of by employers to guard against employee exploitation. It was further recommended that a multi-functional team be formed to carry out supplier due diligence in order to include subject matter experts (SMEs) who have technical knowledge to gauge supplier capacity. Recommendations for further research by other academicians into other factors influencing product manufacturing performance at GSK and other pharmaceutical firms were also made.

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DEFINITION OF OPERATIONAL TERMS

Agency - situations in which one individual (agent) is contracted to work for another individual (principal) based on a designated fee schedule (Namazi, 2013).

Core competence - an organization's ability to integrate, reconfigure, gain and release internal resources in order to match or even create changes in the market place thereby giving the firm competitive advantage (Chen & Chang, 2011).

Complementary worker - agency workers; employees wholly managed and resourced outside GSK (Loovis, 2016).

Human capital - the idea of human capital originates from the observation that schooling develops certain qualities in people and that these qualities enhance economic productivity and economic growth (Odhon'g & Omolo, 2015).

Materials management - the process by which an organization is supplied with the goods and services that it needs to achieve its objectives of buying, storage and movement of materials (Roy, Sharma & Gaikawad, 2015).

Multi-sourcing - firms seek to diversify risk and seek more potential benefits from outsourcing. Multi-sourcing gives the firm the benefit of variety and the spread of risk (Iqbal & Dad, 2013).

Operational functions - operations is that part of an organization which is concerned with the transformation of a range of inputs into the required output (services) having the requisite quality level (Kumar & Suresh, 2009); activities viewed as supplementary to an organization's core businesses (Suraju & Hamed, 2013).

Outsourcing - the act of moving some of an organization's internal activities, decisions and responsibilities to outside providers (Wachira, Brookes & Haines, 2016).

Product Manufacturing - the transformation of a range of inputs into the required outputs

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(products) having the requisite quality level (Kumar & Suresh, 2009).

Resources - those assets that are tied semi-permanently to the firm. It includes financial, physical, human, commercial, technological and organizational assets used by firms to develop, manufacture, and deliver products and services to its customers (Kostopoulos, Spanos & Prastacos, 2002).

Strategic relationships - strategic relationships are concerned with bringing in external service providers to manage essential tasks that would otherwise be managed by internal staff (Festel, Nardo, & Simmen, 2014).

Transaction costs - the direct and indirect expenses incurred by firms when negotiating, monitoring and enforcing contractual obligations between businesses in a contractual relationship (Tiwana & Bush, 2007).

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ABBREVIATIONS

ABAC	-	Anti-Bribery and Anti-Corruption
CEO	-	Chief Executive Officer
CTP	-	Conformance to Plan
CTS	-	Conformance to Shipment
DSRFT	-	Domestic Shipment Right First Time
GMP	-	Good Manufacturing Practices
GSK	-	GlaxoSmithKline Limited
KPI	-	Key Performance Indicator
LDC	-	Least Developed Country
OEE	-	Overall Equipment Efficiency
OOS	-	Out of Stock
QMS	-	Quality Management Systems
RBT	-	Resource Based Theory; also referred to as Resource Based View
RBV	-	Resource Based View
SCM	-	Supply Chain Management
SLT	-	Site Leadership Team
SME	-	Subject Matter Expert
TCE	-	Transaction Cost Economics

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CHAPTER ONE
INTRODUCTION

1.1 Background to the Study

The term outsourcing has been given many different definitions by various scholars. Wachira, Brookes and Haines (2016) define the process as the act of moving some of an organization's internal activities, decisions and responsibilities to outside providers. Tayauova (2012) defines outsourcing as the process of delegation of operations or jobs to a third party, who can do it better, cheaper and faster. Parry and Roehrich (2009) addressed outsourcing as a process which involves the transfer of company activities to external providers who possess the expertise, innovative technologies and specialized resources to perform activities efficiently. Espino-Rodriguez and Padron-Robaina (2006) describe it as a strategic decision that entails the external contracting of determined non-strategic activities or business processes necessary for the manufacture of goods or the provision of services by means of agreements or contracts with higher capability firms to undertake those activities or business processes, with the aim of improving competitive advantage.

According to Espino-Rodriguez and Padron-Robaina (2006), the above definition has three important features. The first one is that outsourcing has to be a strategic decision pursued for the purposes of achieving competitive advantage. The second feature is that the client company has to make decisions regarding which activities or business processes need to be undertaken by suppliers with better skills than those of the firm. The third characteristic is that outsourcing has to involve processes since resources in themselves cannot provide the company with competitive advantage.

One of the key strategies adopted by companies in order to gain this competitive advantage is outsourcing of some operational functions in order to focus on the company's core competencies. This is one way of keeping abreast with the changing techniques and technologies manifest in the market place. According to Espino-Rodriguez and Padron-Robaina (2006), the term outsourcing was coined in the 1980s to refer to the subcontracting of information systems though the term has recently been applied to other functions and activity. According to Vaxevanou and Konstantopoulos (2014), outsourcing has a very complex structure whose varied activities and functions pose myriad challenges and dilemmas to management.

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1.1.1 GlaxoSmithKline Limited and Outsourcing

The history of GlaxoSmithKline Limited can be traced back to the establishment of the Plough Court Pharmacy in London, England in 1715 (Addison & Lawson, 2012). This was followed by the establishment of John K. Smith's drugstore in 1830 and Joseph Nathan's Glaxo Dried Milk Company in 1906. The three firms then went through a series of mergers, acquisitions and name changes till 6th December 1999 when Glaxo Wellcome and SmithKline Beecham merged to form GlaxoSmithKline Limited. It is one of the top five pharmaceutical firms in the world with product sales in over 150 countries and 187 manufacturing sites. Recently the company has been ranked first in the Access to Medicines Index for four consecutive years – 2008, 2010, 2012 and 2014 (Loovis, 2016). This has been achieved primarily owing to the sustained focus on the company mission of enabling more people "to do more, feel better and live longer."

According to KPMG (2012), GlaxoSmithKline Limited first embraced outsourcing as a strategy in 1999 when it outsourced real estate and facilities maintenance. This was later followed by the outsourcing of finance and accounting functions. The trend continued as the company expanded into other markets looking for ways to leverage its competitive strategy. However, today's pharmaceutical companies are facing a multitude of unyielding challenges occasioned by their adoption of the outsourcing strategy (KPMG, 2012).

Widmer (2015) made the observation that outsourcing can save the company a lot of money but as the standards of business transactions change, the strategy may end up costing companies more. He cites the example of GlaxoSmithKline which came under investigation in China by the government for allegedly committing economic crimes in 2013. Among the crimes allegedly committed by the outsourced staff working for GSK in China was bribery of doctors to prescribe drugs. He further reported that by the second quarter of 2014, the profits of the company had declined owing to sluggish sales and the bribery claims. The above situation is fully indicative of the fact the outsourcing provides competitive advantage to businesses but it also comes with risks that are not easily discernible to the management of many firms until it is too late. It was clearly pointed out that many businesses choose outsourcing as a strategy without full comprehension of its true cost. He recommends that before choosing outsourcing as a strategy to drive the business to the next level, company managements have to consider both the rewards and risks associated with the strategy. His contention is that a company should only go for

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outsourcing if there is a clear and definite economic benefit to be derived from the strategy. If not, the endeavour should be abandoned altogether.

The current study, therefore, seeks to look at product manufacturing performance at the GlaxoSmithKline Limited site at Nairobi with a view to understanding how it intends to attain the envisioned 80% reach in terms of drug supply to Sub-Saharan Africa countries and the LDCs by the year 2020. This will be by way of looking at various parameters that support product manufacturing performance: achievement of production KPIs, materials management, vendor management and outsourcing risks.

1.1.2 Materials Management in an Outsourcing Relationship

Roy, Sharma and Gaikawad (2015) indicate that the quality of finished products in the pharmaceutical industry is highly dependent upon the quality of inputs and materials management is a key operation in this process. They indicate that materials management starts from the selection of vendors for the supply of raw materials and packaging materials to the dispatch of the finished products to the end-users. This includes planning, storage and provision of appropriate material of right quality, right quantity at the right time and place in order to co-ordinate the production schedules. They further note that materials management has become an integral part in streamlining production, the management of material cost, supply and the proper utilization, transportation, storage, handling and distribution.

In the same vein, Achuora, Arasa, Nzioki, Ochiri and Mwangangi (2012) indicate that one key aspect of logistics that has proved to be of great importance to the pharmaceutical industry is distribution since it is an important activity in the integrated supply chain management. They further indicate that pharmaceuticals and healthcare firms are currently operating in a highly dynamic market where the efficacy of distribution is determined by a number of factors: regulatory requirements, handling and storage. The essence is to ensure that the quality and efficacy of pharmaceutical products is not compromised by an ineffective supply chain management.

1.1.3 Human Capital in an Outsourcing Relationship

Adegbami, Makinde and Shiyanbade (2014) indicated that the outsourcing of the human resources function results in casualization of staff in which case staff are awarded contractual or

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temporary employments. Such staff are denied important benefits enjoyed by the permanent employees in an organization. However, human resources are vital tools which need to be "greased, oiled and maintained" in order to deliver on productivity. Casualization of staff therefore serves to denote that outsourced staff are treated as sub-human and the general consequence is that outsourcing of staff ends up destroying human capital instead of building it. These casual and/or temporary staff enjoy no training and therefore have no hopes for development of professional skills and promotion. Such staff in an organization generally become demoralized and are a risk to the organization. Lad, Joshi, Goswani, Pradhan and Upadhyay (2012) further state that the outsourcing of human resources leads to loss of flexibility and responsiveness: without direct control of the manufacturing process, the company loses some of its ability to respond to changes in the supply chain like demand fluctuations which are a risk to customer service levels. Additionally, Iqbal and Dad (2013) also note that the firms run the risk of losing internal know-how of the business process in an outsourcing relationship, a fact supported by Enyinda, Briggs and Bachkar (2009). Other human capital risks identified by Iqbal and Dad (2013) include social costs in terms of job losses, increased monitoring costs, loss of loyal employees, and transferring of the required knowledge to the vendor.

Shammot (2014) notes that employees' training and development are key in contributing to an organization's achievement of objectives. The focus of this study, therefore, is to find out how this aspect of management is undertaken in GSK's outsourced relationships and how it has influenced product manufacturing performance.

1.1.4 Vendor Management in an Outsourcing Relationship

Rodrigo (2016) notes that supplier involvement forms a significant part of product development and having trusted suppliers can lead to competitive advantage in meeting the fast moving pace of market players. He adds that in order to deliver quality products, companies are indulging in outsourcing in order to take advantage of competencies that lie outside the company's boundary. However, this involvement of suppliers comes with challenges to companies. The delivery of a better quality product at a lower cost as well as the involvement of suppliers in product development requires the development of trust and honesty for effective and efficient future projects. However, challenges are faced when the principal firm enters into contracts without clarity of mind on the responsibilities of the parties involved leading to a chaotic situation,

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duplication of roles, waste of money and effort, and poor supplier relationship management. Sometimes, the employees of the business have no know-how on the responsibilities of the vendor thereby leaving the business in uncertainty should anything go wrong. He further points out that most of the firms contracting suppliers allow the vendor access to everything forgetting that a supplier is not a partner, leaving the company badly exposed. He also notes that sometimes companies have so many vendors that the regular employees become complacent with their responsibilities.

Vendor management processes pose challenges to product manufacturing. Rubin (2007) indicated that these are other forms of risks facing pharmaceutical firms using outsourcing as a strategy of achieving competitive advantage. He classified them into five categories namely: performance risk, intellectual property risk, liability risk, enforcement risk and business continuity risk.

1.1.5 Risks Associated with Outsourcing in a Manufacturing Environment

According to Iqbal and Dad (2013), outsourcing has become inevitable and virtually many multinational firms are using the strategy in order to achieve competitive advantage. However, it has not come without challenges. It is important to note the sentiments of Enyinda *et al.,* (2009) who argue that many of the inherent and potential risks have tended to be overlooked. In support of the foregoing argument, Iqbal and Dad (2013) identify three categories of potential risks facing pharmaceutical firms: operational risks, strategic risks and other related risks. Enyinda *et al.,* (2009) state that some of the potential risks relating to pharmaceutical supply chain outsourcing include regulatory risks, operational risks, technical risks and corporate social responsibility risks. This is a clear indication that although some scholars argue in favour of outsourcing as a strategy of achieving competitive advantage, it introduces the concept of risk into an organization. Owing to these risks, manufacturing firms may not be able to meet their production targets since the same will be negatively influenced by the said risks.

The first of the challenges which influence product manufacturing performance in pharmaceutical firms is outsourcing materials management. Thiong'o (2014) contends that pharmaceutical organizations often experience challenges with performance measurement when it comes to third party logistics providers. Enyinda *et al.,* (2009) indicate that logistics outsourcing could influence a business owing to increased lead times, reduced opportunities to

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develop internal competences, loss of control over suppliers and the issue of proprietary information confidentiality. Other risks pharmaceutical companies expose themselves to by outsourcing materials management include, supplier dependence, loss of critical skills, problems of evaluating and monitoring supplier performance (Enyinda *et al.*, 2009; Rodrigo, 2016). They further indicate that other challenges include a potential inefficient management of the outsourced logistics function, latent information asymmetry, loss of logistics innovative capacity by the principal firm, possible loss of key intellectual property and increased monitoring costs.

According to Enyinda *et al.*, (2009), global outsourcing occasioned by increased demands of supply chain strategies has received little management attention despite the fact that it is an issue of great importance. However, though all these challenges abound in the pharmaceutical industry with regard to logistics outsourcing, there is still some light at the end of the tunnel and the situation could be made better. Boulaksil and Fransoo (2008) further support the fact that pharmaceutical firms face the risks of loss of control as well as financial and human resource influences. Festel, Nardo, and Simmen (2014) also argue along the same lines and point out that outsourcing in pharmaceutical firms leads to loss of control (quality and regulatory compliance), difficulties in co-ordination and management of contracts, less transparency (problems of evaluating and monitoring supplier performance), time taken to negotiate contracts, instability risks in case the external party becomes financially insolvent, merges or is acquired and supplier dependency. These views are further supported by Wachira *et al.*, (2016) who indicate that staff performance in an outsourcing relationship is hindered by poor leadership, micro-management, low compensation and inadequate training.

1.2 Problem Statement

The provision of adequate health care services for citizens remains a major challenge for African governments. In order to respond to this prevailing scenario, GSK has indicated that its vision is to make GSK's products available to 80% of the population in Sub-Saharan Africa and least developed countries (LDCs) by 2020 (Loovis, 2016). In this way, the company would be able to live to by its mission statement of enabling more "people to do more, feel better and live longer." This is an ambitious plan and the company could be facing an uphill task since such markets (as Africa) are smaller, carry lower margins and have stiff competition (Kessel, 2011). Additionally, GlaxoSmithKline Limited has adopted outsourcing as one of its manufacturing strategies and this

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comes with its own unique challenges, including the selection of the outsourcing partners. In the face of these prevailing circumstances, GSK will face an uphill task achieving the 80% reach in just three years.

Most of the raw materials used in the manufacturing processes in the Kenyan pharmaceutical industry, GSK included, are imported. This applies to 95% of these raw materials with only about 5% available locally (Export Processing Zones Authority, 2005). With such a background and an outsourced transport system, this study intends to find out how GlaxoSmithKline Limited is addressing these stiff challenges in meeting the afore-stated ambitious goal of reaching 80% of the population in Africa by the year 2020. GlaxoSmithKline Limited has only three manufacturing sites in Africa – Kenya, Nigeria and South Africa. Achieving 80% coverage of the Sub-Saharan Africa and Least Developing Countries (LDCs) with such an infrastructure will be a tall order for the company.

This study therefore sought to find out how the outsourcing of operational functions is influencing the product manufacturing performance at the Nairobi plant and how the same will affect company's objective of reaching 80% of the population in Africa and LDCs by the year 2020. The study is important since its findings will enable the company to address any gaps in its outsourcing relationships that could negatively influence its access to medicines strategy for Sub-Saharan Africa and the LDCs by year 2020.

1.3 Objectives of the Study

1.3.1 General Research Objectives

The general objective of this study was to analyze the influence of outsourcing of operational functions to product manufacturing performance at GlaxoSmithKline Limited, Nairobi, Kenya.

1.3.2 Specific Research Objectives

The specific objectives of this study were:

(i) To evaluate the influence of outsourcing materials management on product manufacturing performance at GSK, Nairobi.

(ii) To analyze the influence of outsourcing human capital on product manufacturing performance at GSK, Nairobi.

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(iii) To assess the influence of vendor management on product manufacturing performance at GSK, Nairobi.

(iv) To find out what risks outsourcing has introduced to product manufacturing performance at GSK, Nairobi.

1.4 Research Questions

In addressing the objectives of the study, the following questions were used:

(i) In what ways has the outsourcing of materials management affected product manufacturing performance at GSK, Nairobi?

(ii) How has human capital outsourcing influenced product manufacturing performance at GSK, Nairobi?

(iii) What is the influence of vendor management on product manufacturing performance at GSK, Nairobi?

(iv) What are the risks of outsourcing on product manufacturing performance at GSK, Nairobi?

1.5 Scope of the Study

This research was undertaken at the GlaxoSmithKline Limited factory based in Nairobi, Kenya. The inspiration behind the research was attributed to the commitment by the firm to help more people gain access to drugs in their mission of "do more, feel better, live longer" – a clear indication that it is committed to improve the quality of human life in the region. Owing to this noble mission, any support from researchers, however small, would be a welcome pat on the back for the company. Secondly, the focus was on their Nairobi factory since it is the only manufacturing plant that the company has in Eastern Africa. The research specifically focused on the influence of outsourcing activities on product manufacturing performance and not other business processes. The target population was the staff working with the Global Manufacturing and Supply (GMS) Division of the organization. These employees were considered to have pertinent information relating to the study objectives.

1.6 Justification of the Study

GlaxoSmithKline Limited's introduction of the outsourcing strategy was aimed at giving it an edge over its rivals in the contemporary cut-throat competition environment. However the possibilities of negative influence on product manufacturing performance occasioned by the outsourcing strategy could easily erode the benefits. This study therefore looked into and

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analyzed the various ways in which the outsourcing of operational functions influences product manufacturing performance and came up with pragmatic recommendations on how the negative influences can be contained in order to reap the benefits of outsourcing. From this perspective, the management of GSK, Nairobi, will be able to put in place mitigation measures to guard against losses emanating from weaknesses in the strategy. Such plans can also be replicated elsewhere in the GSK network of production plants and among other pharmaceutical firms adopting the same strategy.

The study will also be of benefit to the vendors outsourced by GSK since it has highlighted areas of weaknesses in terms of influencing product manufacturing performance. In order to maintain a symbiotic business relationship with GSK, the vendors will benefit from the study's recommendations by plugging in the gaps identified by the research for better delivery of services to GSK.

Thirdly, the research will also benefit academicians by making suitable contribution to the outsourcing literature and provide the basis for further research on the outsourcing strategy in pharmaceutical firms. Other researchers will be able to build on the study's findings to enrich the available literature on outsourcing. The providers of capital (shareholders) for the firm will be able to make informed decisions regarding the deployment of outsourcing as a strategy. However, this will remain the discretion of the GSK management.

1.7 Limitations of the Study

One of the limitations with the current study was in the formulation of the research objectives. During the research process, it was noted that the research objectives were broadly formulated and this affected the focus of the study. The situation could have been made better by focusing on fewer and focused objectives. This would have enabled the researcher to drill down to the core issues influencing product manufacturing performance at GSK, Nairobi. A case in point would have been focusing on specific issues relating to vendor management like performance assessment instead of focusing on the entire spectrum of vendor management and how it influenced product manufacturing performance.

Another limitation to the current study was in the choice of the data collection method. The questionnaire was used in the collection of primary data. Though it helped in the collection of

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data necessary for analyzing the prevailing situation regarding product manufacturing performance in an outsourced relationship, it could have been integrated with other data collection methods in order to improve the depth of analysis. Situations allowing, face to face interviews integrated with the questionnaire would have proved quite essential in enhancing the quality of the research.

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CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter focuses on a review of relevant literature which has discussed the business concept of outsourcing. Key theories which relate to the outsourcing strategy are reviewed alongside empirical literature which clearly outlines the contemporary thinking with regards to outsourcing. The theories reviewed herein include the core competencies theory, resource based theory, transaction economics theory and agency theory. The study's conceptual framework is further outlined in order to anchor the study with a proper foundation for the study of the subject matter. The chapter concludes with a discussion on the research gap.

2.2 Theoretical Literature

2.2.1 Core Competencies Theory

According to Chen and Chang (2011), the core competencies concept manifests an organization's ability to integrate, reconfigure, gain and release internal resources in order to match or even create changes in the market place thereby giving the firm competitive advantage. The term competence was first introduced by White in 1959 to describe unique personality characteristics associated with superior performance and high level of motivation.

According to Vaxevanou and Konstantopoulos (2014), the Core Competencies Theory refers collectively to the organizational knowledge – the combination of the productive skills and the integration of different technologies used by the organization. Edgar and Lockhood (2008) define organizational competence as a set of progressive, iterative understandings and skills held by the employees of a company that collectively operate at the firm level – "corporate knowledge constituted as varied understandings". These are the capabilities and attributes that distinguish a firm from its competitors (Parry & Roehrich, 2009). From this perspective, a company seeking to outsource the services of another firm clearly assesses and determines the core competencies of the latter. This should be a key focus for the principal organisation that seeks to outsource because it is the competencies that are sought after as a way of enhancing the principal's competitive advantage. They further contend that, in outsourcing, a firm should look for capabilities that supplement the ones existing in the firm.

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Srivastava (2005) looks at core competences of a firm as a problem-defining and problem-solving approach aimed at developing strategic growth. He adds that core competencies manifest three distinct features namely: provision of access to a wide variety of markets, contribution to the end product benefits and difficulties to imitate by competitors. Firms essentially benefit from core competencies because they focus on those things which they do best. As such, he recommends that companies should strategically focus on identification and development of their core competencies for the achievement of competitive advantage which they can sustain over time. Tayauova (2012) points out that a company is said to have gone for the core competency approach in outsourcing when it keeps its key attributes which give it competitive advantage and then gives out those activities which are not considered core competencies to outside firms which can provide these services at lower costs.

In view of the foregoing, this study sought to find out whether, in adopting the outsourcing strategy, GlaxoSmithKline Limited considered its core competencies as well as those of the outsourced vendors. The study also sought to find out how the outsourcing of the vendors and their core competencies has influenced product manufacturing performance at GSK, Nairobi.

2.2.2 Transaction Cost Economics Theory

According to Espino-Rodriguez and Padron-Robaina (2006), Coase was the first person in 1937 to show that, in situations of uncertainty, it is more prudent for an organization to perform its transactions in-house. This is also supported by Mikko Ketokivi and Joseph Mahoney (2016) who indicate that Coase was the main architect of TCE. However, according to Lukasz (2009), the TCE Theory emerged in 1940 when Tibor Scitovsky introduced the terms "transaction costs" into economics literature. The term "transaction cost economics" first appeared in the title of Oliver Williamson's article in 1979 entitled "*Transaction Cost Economics: the Governance of Contractual Relations"* (Lukasz, 2009).

According to Vaxevanou and Konstantopoulos (2014), TCE has been the traditionally used model on which outsourcing has been based owing to its usefulness in providing decision-making tools regarding which organizational operations should be outsourced and the implementation of the requisite organizational changes arising from the outsourcing strategy. Tiwana and Bush (2007) contend that business interactions between firms incur transaction costs that arise from the implementation of complex governance structures. They further point out that

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these transaction costs are the direct and indirect expenses incurred by firms when negotiating, monitoring and enforcing contractual obligations between businesses in a contractual relationship.

Additionally, Tayauova (2012) contends that the TCE theory was initially used to facilitate analysis of the comparative costs of planning, adapting and monitoring task completion under alternative governance structures. In this case, managements must assess the costs of production and transaction costs when the services are provided from within an organization and when the same have been outsourced. The decisions reached should be based on the relative costs – which should be the combined cost of production and cost of the transaction.

On the same subject matter, Adegbami *et al.* (2014) reported that many employers remain focused on the strategy of wage reduction by outsourcing labour without compromising the quality of the services provided. In this way, the outsourcing strategy helps in cutting down on staff maintenance costs thereby saving the organization money by way of contracting jobs to outsourced staff. This approach falls well within the TCE.

The current research sought to study how the TCE theory has been applied as a decision-making tool for GSK in outsourcing its operational functions. Key focus was on vendor management. This was extended to cover the area of product manufacturing performance by reviewing contract management and whether the same provided GSK with competitive advantage.

2.2.3 Resource-Based Theory

Kostopoulos, Spanos and Prastacos (2002) indicate that it is Selznick's 1957 idea that gave rise to the debate on the resource based view of the firm. This was closely followed by similar views of Chandler in 1962 and Andrews in 1971. The afore-mentioned approaches led to the identification of the unique competencies of organizations. However, the founding of the idea of viewing the firm as a conglomeration of resources was founded by Penrose in 1959. Penrose indicated that it is the heterogeneity of the productive services available from its resources that make each firm different from the others. This was the basis of the Resource-Based View (RBV) of the firm. However, the Resource-Based Theory emerged in the 1980s initiated by Wernerfelt, Rumelt and Barney (Bridoux, 2007).

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On the same subject, Vaxevanou and Konstantopoulos (2014) contend that organisations have different capabilities and resources, factors which remain stable. They further postulate that when properly mixed and well-used these capabilities and resources are a source of competitive advantage for an organization. Again, in an outsourcing scenario, the principal enterprise must keenly assess and evaluate the vendor's capabilities and resources before entering into the outsourcing agreement. The key factor is to select the vendor with the most appropriate capabilities and resources. Roy and Aubert (2001) add that the RBT has gained much influence as a strategy basically because it strategically positions a company in a vantage position inside the given industry in which it competes.

The above view is highly supported by Espino-Rodriguez and Padron-Robaina (2006) when they point out that a firm's resources and capabilities should be treated as strengths that must be supported to enhance the company's strategy. However, this can only be achieved if the company has free access to the requisite resources needed to influence the market forces. According to Roy and Aubert (2001), it's these resources that determine the differences in organizational performance within the same industry and this is more important than variations in performance between different industries. Thus the greatest source of competitive advantage comes from within the company in the form of its resources which are not easy to imitate. Such resources include a company's assets, organizational characteristics, processes, aptitudes, information and knowledge which are in the control of both the company and its employees. They can also include technical skills, managerial skills and the ability to forecast the future. It's the company's ability "to reconfigure and exploit its assets in such a way as to attain a competitive advantage." Looked at from this perspective, a firm's resources can therefore be said to include both the tangible resources (easy to identify and assess) and the intangible resources (which cannot be easily identified yet remain assets which have sufficient potential to propel the firm's competitive advantage).

Srivastava (2005) denotes that from the RBT, firms are conceived as a collection of resources and capabilities – an indication that it focuses on the internal environment of the organization in the creation of competitive advantage. Included in these resources are the firm's assets, capabilities, organizational processes, firm attributes, information and knowledge. From this perspective, he classifies the firm's resources into three distinct classes: physical capital, human

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capital and organizational capital. He further argued that competitive advantage from the resource based approach is achieved by possession of unique and difficult to imitate skills, knowledge, resources and competencies.

The RBT indicates that the strategic value of resources emanates from the degree to which the resources contribute to the growth and prosperity of the organization – creation of added value for the customers (Roy & Aubert, 2001). From the RBT approach, outsourcing will be considered in cases where the firm is holding less necessary resources whose strategic value is also low.

The current research endeavoured to study the prevailing outsourcing position at GSK, Nairobi with the objective of establishing whether the company established the resources and capacities of the vendors before engaging them. It was extended to establish how this has affected product manufacturing performance in the firm.

2.2.4 Agency Theory

Namazi (2013) points out that the issue of agency was developed in the economics literature of the 1960s and 1970s in order to determine the optimal amount of the risk-sharing among different individuals. In its basic form, agency theory relates to situations in which one individual (agent) is contracted to work for another individual (principal) based on a designated fee schedule. Problems abide in this relationship as the agent's actions may be incompatible with the desires of the principal. Kathleen Eisenhardt (1989) traces the development of the agency theory to the works of Jensen and Meckling who in 1976 explored the ownership structure of the corporation. However, the first scholars to propose that a theory of agency be created and to begin its formulation were Stephen Ross and Barry Mitnick (Mitnick, 2006).

The theory was originally used to refer to the relationships existing between an organization's management and other stakeholders – otherwise referred to as agents (Vaxevanou and Konstantopoulos, 2014). However, the Agency Theory was later widened to describe outsourcing relationships that exist between a business organisation and the vendor. Its key premise is that continuous monitoring and reinforcement of ties between the parties to the contract is important in order to eventually address any challenges that may arise out of the outsourcing contract.

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According to Tate, Ellram, Bals, Hartmann and Valk (2009), Agency Theory explicitly describes how the contractual relationship between a principal and agent can be made more effective. However, there are underlying assumptions on human nature regarding the Agency Theory that serve to highlight the risks associated with this kind of relationship. These include self interest, bounded rationality, risk aversion, information and goal conflict. With regard to human interest, they contend that during unanticipated events, human beings will behave in the best interests of their companies. As such, the agent's decisions and the requirements to maximize the principal's welfare and interest are in conflict. They further point out that the theory assumes that the principal and agent differ with regards to risk aversion – whereas one party takes business risks, the other one does not. It is further pointed out that when it comes to information management in an agency relationship where there are incongruent interests, information may be hidden thereby creating an information asymmetry – another risk in the outsourcing relationship created through the agency approach.

Finally, Tate *et al.,* (2009) argue that with regards to organization, it is of paramount importance to have goal congruence between the principal and agent in order to have an effective contract in place. In such a situation, the principal will be assured that the agent can deliver on the contract and even exceed expectations whilst the agent will be optimistic that they will be compensated fairly for their efforts. However, more often than not, the principal and agent remain fearful that this situation will not obtain, thereby manifesting another challenge associated with outsourcing.

The current study sought to establish whether GSK, Nairobi has established methods of measuring and monitoring vendor performance and how this has influenced product manufacturing performance. The study further sought to find out whether the vendors have acted in the best interests of GSK or personal interests on the side of the vendors has served to influence product manufacturing performance.

The four theories discussed herein were not viewed separately in the study of the outsourcing relationships at GSK, Nairobi. They were seen as playing complementary roles in shaping the relationships. The vendors were viewed as agents of the principal firm (GSK). The study further sought to find out if the choice of the outsourced vendors was based on their core competencies (their resources base and capabilities). The study also sought to find out if the outsourcing

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relationships were developed from the perspective of cost management as per the postulations of the TCE.

2.3 Empirical Literature

2.3.1 Product Manufacturing Performance

According to Soriano-Meier, Garza-Reyes, Lal and Rocha-Lona (2012), the process of outsourcing is a strategic move to reduce the overall cost of sustaining or enhancing product quality. It also enables organizations to focus on their core business activities and to reduce operational costs. They further indicate that the running of a company's operations in-house may negatively influence the company's financial performance. It is from this perspective that outsourcing has therefore been considered a better option for pharmaceutical firms in terms of product manufacturing.

One of the ways which companies have pursued to improve their competitive advantage in the new competitive business environment is outsourcing their operational functions because this improves performance (Masinga & Kiarie, 2014). The two further indicate that as global competition pressurizes firms to look for better ways to improve performance, outsourcing has been selected as one of the best ways to leverage competitive advantage. This has, therefore, seen businesses focus on improving key contemporary measures of performance which include cost, quality, service and speed. They add that outsourcing in developing countries is becoming increasingly important because of the role it plays in service delivery.

On the same matter, Yeboah (2013) notes that most firms go into business in order to make profit which logically means that they have to put measures in place to reduce operational costs. One of the strategies commonly used by businesses in the contemporary world to achieve this objective is outsourcing in which firms endeavour to leverage on the competencies of expert companies. He, however, notes that in order to make proper decisions on what to outsource at the operational level, companies need to focus on a number of issues: the supervision and guidance controls required, obligations by the business and service provider, performance targets and the time-cost trade-off points. He further felt that suppliers who fail in the delivery of goods in time or provision of quality services can negatively influence a company's reputation with its clientele.

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Suraju and Hamed (2013) noted that the purpose of outsourcing was to delegate non-core business functions to specialized and efficient service providers – an indication that the agents would do a better job in terms of performance as compared to the principal firm. They, therefore, indicated that outsourcing benefits an organization owing to improved performance which leads to an enhanced financial position and competitive advantage. This is achieved by way of incorporating into the contract service-level agreements related to cost, quality and timelines on deliverables. When this is done and implemented, products or services are produced in a more effective and efficient manner – thereby enhancing an organization's competitive advantage.

The reduction of operational costs helps organisations achieve better financial performance (Suraju & Hamed, 2013). The extra costs which would have been passed to consumers by way of increased prices for goods and services becomes irrelevant and consumers pay less which allows businesses to compete favourably in the market place. From this perspective, GSK would benefit from outsourcing by way of reducing the cost of drugs, an approach that is well-aligned with the achievement of the 80% market reach of Sub-Saharan Africa and LDCs by year 2020. However, they indicate that outsourcing comes with challenges by way of reducing an organization's level of control on service delivery which, in turn, raises an organization's exposure to liability.

In support of the preceding argument, Elmuti, Grunewald, and Abebe (2011) contend that the consequences of job outsourcing are the twin undesirable states of unemployment and loss of capital. They further argue that job outsourcing leads to deteriorated morale among employees, decrease in the quality of work life and low organizational commitment attitudes among employees. This is likely to influence on product manufacturing performance in a factory set-up since it had negative effects on quality of work life dimensions and turnover rates at the plant. Generally, poor organizational commitment and staff turnover have negative influences in a production environment.

In view of the foregoing, it is of essence to study the prevailing situation at GlaxoSmithKline Limited's factory in Nairobi with regard to the outsourcing strategy and how the latter has influenced product manufacturing performance. This is from the perspective that GSK plays a major role in the Eastern Africa region as it is one of the major manufacturers and suppliers of both pharmaceutical and consumer products. Many of its pharmaceutical and consumer products are relied on by major hospitals, pharmacies and healthcare practitioners for the role they play in

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both preventive and curative healthcare. The current research on the influence of outsourced operational functions on product manufacturing performance at GSK, Nairobi, Kenya is undertaken with this background in mind.

2.3.2 Materials Management in an Outsourcing Relationship

Roy *et al.* (2015) define materials management as the process by which an organization is supplied with the goods and services that it needs to achieve its objectives of buying, storage and movement of materials. It is related to the processes of planning, procuring, storing and providing the appropriate material in the right quality, right quantity at the right place in the right time to ensure proper co-ordination and schedule of production activities in an integrative way in an industrial undertaking. The advantages of materials management include the proper management of material cost and the proper utilization, transportation, storage, handling and distribution of materials. They further indicate that the quality of finished products solely depends upon the quality of inputs and hence the importance of materials management in pharmaceutical manufacturing operations. As such materials management will directly influence product manufacturing performance within any manufacturing organizations, GSK included.

According to the Export Processing Zones Authority (2005), Kenya has minimal raw materials for pharmaceutical products and relies highly on imported raw materials. The Authority further indicated that the country imports over 95% of the raw materials with only a meager 5% available locally. This is a clear indication that proper processes must be put in place to ensure that imported raw materials are made available at the right time, in the right quantity and quality to support product manufacturing if performance targets are to be achieved.

Thiong'o (2014) indicated that since the 1990s, many organizations began to realize that it is not enough to improve internal efficiencies but that it was also prudent to improve their whole supply chain in order to remain competitive. The goal of supply chain management was therefore to integrate a seamless flow of materials. She further indicated that this situation gave rise to the outsourcing of logistics functions to vendors. However, many organizations face challenges related to performance measurement and supplier's competence evaluation. In such an environment, product manufacturing performance will also get influenced negatively.

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Mubarik, Warsi, Nayaz and Malik (2012), while studying the operations of the pharmaceutical industry in Pakistan, reported that transportation outsourcing not only improved SCM performance but also led to a significant improvement of supply chain effectiveness and efficiency in the country's pharmaceutical industry. They further indicated that the outsourcing of transportation is motivated by a cost reduction strategy and a focus on the core business activities. However, some of the major challenges noted were declining on-time delivery and damages of property whilst in the hands of the third-party logistics providers. The latter is also likely to influence product manufacturing performance negatively.

Rodrigo (2016) indicated that many firms do not consider suppliers as outsiders when signing the contract and end up granting them access to everything. This is aimed at capitalizing on the supplier's resources but in doing so, he denotes that a risk of sheer reliance on the vendor prevails thereby leading to problems of supply risks. Enyinda *et al.,* (2009) also support this argument and indicate that at some point, organizations face challenges related to over-dependence on suppliers. This will ultimately lead to loss of control by the principal firm which can negatively influence product manufacturing performance.

From a different perspective, Silverman (2015) indicated that manufacturing companies can also face challenges when raw materials are degraded or contaminated during harvesting, storage or transportation. This risk can be greater where the processes are being handled by third party service providers. When issues of this nature arise, product manufacturing performance will be negatively influenced since raw materials will not be available in the right quantity and quality to facilitate production.

The current study therefore sought to find out how the outsourcing of materials management was undertaken at GSK and how the same had influenced product manufacturing performance. Key areas of focus were the handling of the materials en route to the firm, storage, vendor capacity, damages and material contaminations. Dependence by the firm on the vendors with regards to materials management was also studied.

2.3.3 Outsourcing and Human Capital

Adegbami *et al.,* (2014) indicated that human resource outsourcing helps reduce staff maintenance costs without necessarily compromising service quality. While studying this subject

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in Nigerian firms, they, however, established that whilst the organisations and businesses where thriving, the human resources that are responsible for the success of the businesses were not well taken care of. They noted that the outsourced staff were poorly remunerated and held stressful and demanding jobs. The outsourced staff also worked under poor working conditions, manifested poor living standards, worked long hours without leave entitlement, had no hope of promotion or job advancement and were generally dissatisfied with the nature of their jobs. This is likely to negatively influence product manufacturing performance.

Srivastava (2005) classifies human capital as part of an organization's core competencies and indicates that it can be leveraged for a firm's competitive advantage. This postulation is based on the premise that firms possess unique and difficult to imitate skills, knowledge, resources and competencies. He continues to argue that firms should systematically work on the identification of their core competencies and developing them for a sustainable competitive advantage as this is what will set them aside from the rest of the players in the industry. The possession of core competencies by a firm is not an end in itself but the most important thing is the ability of the organization to leverage the core competencies to set itself apart from its competitors. This view is supported by Espino-Rodriguez and Padron-Robaina (2006) who indicated that resources can only be a source of competitive advantage when fully exploited through business processes. This will be by way of supporting better performance in terms of product manufacturing.

Han, Porterfield and Li (2012) contend that contract manufacturing has the benefits of alleviating capacity shortages, improving production capacity and reducing time to the market. They indicate that firms engage in primary activities which include inbound logistics, operations, outbound logistics, marketing and sales, and service. These activities are, in turn, supported by secondary activities which cover procurement, human resource management, technology development and infrastructure. From this perspective, they argue that a firm's value chain efficiently links it upstream suppliers to its downstream buyers. Companies won't become competitive unless they make their overall supply chains more competitive through value creation, overall cost reduction and the co-ordination of linked activities throughout the supply chain. This achievement is highly dependent on the human capital deployed across the supply chain as Thiong'o (2014) is very categorical that the competence of suppliers is critical in the success of an outsourcing relationship.

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The current study intended to find out how the transition to outsourcing was done at GSK and the influences it had on product manufacturing performance. The study also covered the human resources capacity of the vendors and the capability of the outsourced teams and related these to product manufacturing performance.

2.3.4 Vendor Management in an Outsourcing Relationship

Thiong'o (2014) indicates that there is a need to select a reputable third party supplier as this can yield important benefits like reduced logistics costs and fixed logistics assets, improved order fill rates, shortened average order cycle lengths and cash-to-cash cycles. She further indicated that if an appropriate third party supplier is not selected, serious problems can occur which include low quality logistics services and contract non-fulfillment. This may, in turn, lead to damaged reputation, image and trust of the party concerned. A similar opinion is expressed by Iqbal and Dad (2013) who indicate that a vendor's inability to perform will affect the client's performance to achieve competitive advantage. From such a perspective, weak vendor management will lead to poor performance in product manufacturing as key objectives will not be met.

Festel *et al.*, (2014) argued that since the final responsibility for the product remains with the pharmaceutical company, it is important that the outsourced business is well-controlled. They indicate that the choice of the right contractor cannot be gainsaid as some of the largest pharmaceutical product recalls have been due to inadequate efforts when managing contractors. As research-oriented firms, pharmaceutical businesses have tended to focus more on research while contracting manufacturing and related issues to third party suppliers through strategic partnerships. These strategic relationships are concerned with bringing in external service providers to manage essential tasks that would otherwise be managed by internal staff. Poor control of vendors will therefore imply poor performance in product manufacturing.

Iqbal and Dad (2013) note that as firms try to maximize the benefits of outsourcing, a new trend has emerged where companies have turned to multi-sourcing. This is a relatively new trend in which firms seek to diversify risk and seek more potential benefits from outsourcing. They contend that a contract with one vendor is usually lengthy and risky and they give the example of a failure or bankruptcy of the vendor which would put the contracting firm at great risk. As such, multi-sourcing gives the firm the benefit of variety and the spread of risk.

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Rodrigo (2016) made the contention that supplier involvement is a significant part of the whole process of product development. However, this will involve the development of a trusted supplier relationship management in order to meet the fast moving pace of market players. In the process, challenges abound for the contracting firm. He indicates that the company executives are not clear on the responsibilities for both the business and the supplier leading to a chaotic situation and duplication of roles. He further notes that company employees do not have the knowhow on what the supplier is expected to do and the vendor cannot be held to account in such a situation. He also reported that suppliers are allowed access to everything thereby risking confidential information. Finally, businesses sometimes outsource processes to too many vendors leading to complacency.

The current study looked into the vendor management processes, frequency of communication between the firm and the vendors, separation of roles between the firm's and the vendors' employees and the matter of vendor contracts. All these issues were reviewed with a view to establishing how they influenced product manufacturing performance at GSK.

2.3.5 Production Manufacturing Performance Risks in Pharmaceutical Firms

According to Iqbal and Dad (2013), outsourcing has become inevitable and virtually many multinational firms are using the strategy in order to achieve competitive advantage. However, it has not come without challenges. As a starting point, it is important to note the sentiments of Enyinda *et al.,* (2009) who argue that many of the inherent and potential risks of outsourcing have tended to be overlooked. In support of the foregoing argument, Iqbal and Dad (2013) identify three categories of potential risks which pharmaceutical firms have to contend with and which must be considered when outsourcing: operational risks, strategic risks and other related risks. Some of the potential risks relating to pharmaceutical supply chain outsourcing include regulatory risks, operational risks, technical risks and corporate social responsibility risks. This is a clear indication that although some scholars argue in favour of outsourcing as a strategy of achieving competitive advantage, it introduces the concept of risk into an organization's manufacturing environment. Owing to these risks, manufacturing firms may not be able to meet their production targets since the same will be negatively influenced by the said risks. The current study will seek to find out how such risks as stated by the scholars here-in-above have influenced product manufacturing performance at GSK, Nairobi.

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The first of the challenges which may influence product manufacturing performance in pharmaceutical firms is outsourcing materials management. Thiong'o (2014) contends that pharmaceutical organizations often experience challenges with performance measurement when it comes to third party logistics providers. Enyinda *et al.,* (2009) indicate that logistics outsourcing could influence a business owing to increased lead times, reduced opportunities to develop internal competences, loss of control over suppliers and the issue of proprietary information confidentiality. Other risks pharmaceutical companies expose themselves to by outsourcing logistics include supplier dependence, loss of critical skills, problems of evaluating and monitoring supplier performance. They further indicate that other challenges include a potential inefficient management of the outsourced logistics function, latent information asymmetry, loss of logistics innovative capacity by the principal firm, possible loss of key intellectual property and increased monitoring costs.

Pharmaceutical firms also face the risks of loss of control as well as financial and human resource influences (Boulaksil & Fransoo, 2008; Festel *et al.,* 2014). It is further noted that outsourcing in pharmaceutical firms leads to loss of control (quality and regulatory compliance), difficulties in co-ordination and management of contracts, less transparency (problems of evaluating and monitoring supplier performance), time taken to negotiate contracts, instability risks in case the external party becomes financially insolvent, merges or is acquired and supplier dependency. Such scenarios will see product manufacturing performance negatively influenced.

Rubin (2007) indicated that there are other forms of risks facing pharmaceutical firms using outsourcing as a strategy of achieving competitive advantage. He classified them into five categories namely: performance risk, intellectual property risk, liability risk, enforcement risk and business continuity risk. He indicated that performance risk affects both the principal and agent in the sense that the principal expects the agent to deliver products of quality and according to specifications within the agreed time-frames whilst the vendor will expect the customer to order, pay and perform their obligations under the contract. If the agent does not perform as per the expectations of the principal in a manufacturing environment, product manufacturing performance will be negatively influenced.

Lad *et al.,* (2012) summarize the key issues in outsourcing relationships when they identified seven types of risk associated with manufacturing in pharmaceutical firms. The first of these

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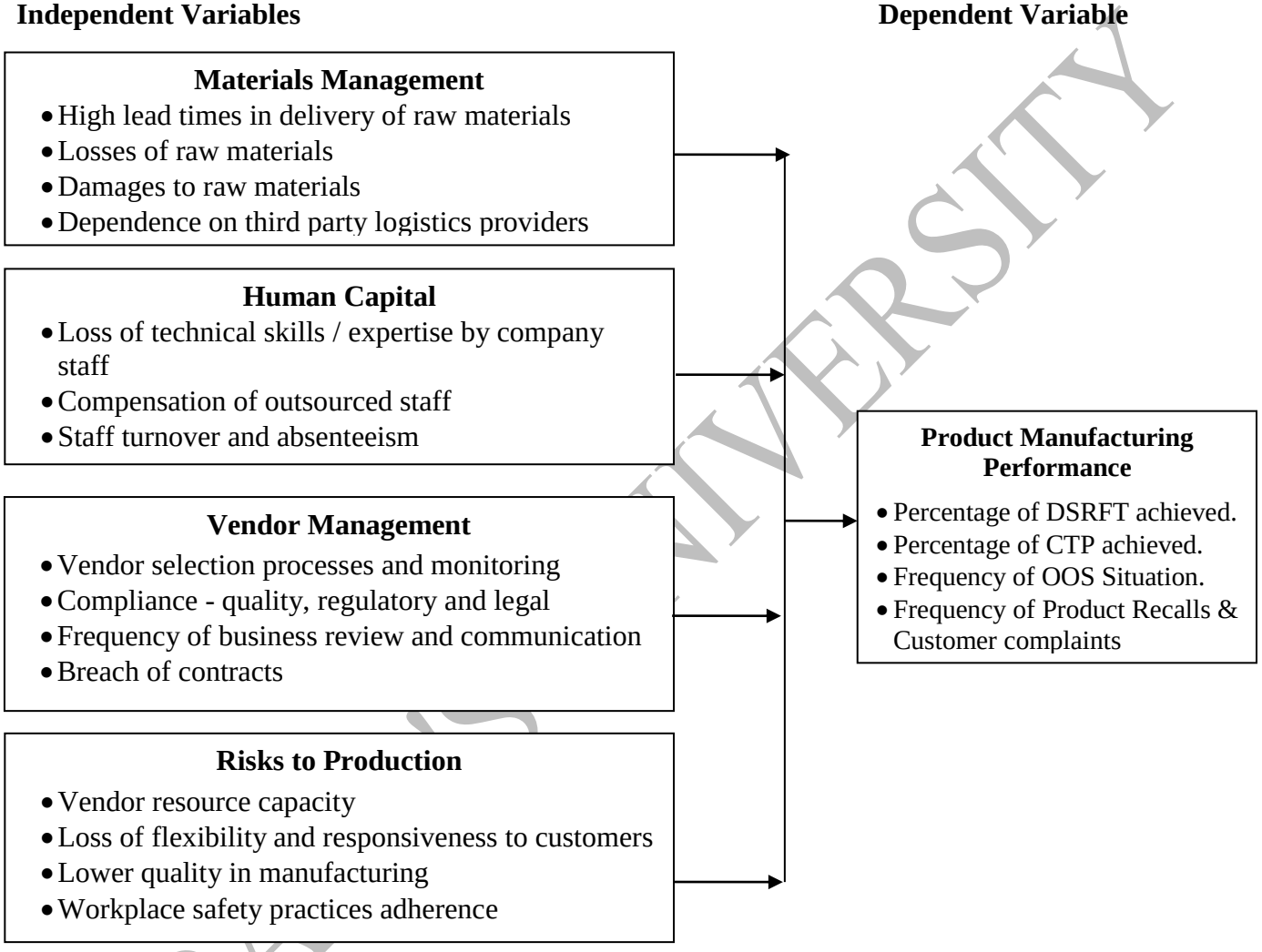
risks is lack of control – the principal firm loses control over the product manufacturing resulting in a scenario where they can only recommend strategies to the vendor but they cannot force the latter to implement the strategies. Secondly, they argue that the delivery of results by the vendor is highly dependent on the way the principal responds by way of awarding the vendor more business for good performance. Thirdly, they identified quality risks in which case it's argued that the vendor may fail to deliver the quality of products envisaged by the principal firm. The fourth risk identified is on intellectual property loss – the principal letting someone else in on their formulas or technologies. Such intellectual property can easily be downloaded by rogue contract employees and stolen. The fifth category of risk is outsourcing risks – language barriers, cultural differences and long lead times. Capacity constraints form the sixth category of risks relating to outsourcing in pharmaceutical firms. The outsourced company may not have adequate resources to manage the principal's business requirements; hence the principal firm may not be able to get the product they need when they need it and this will have a negative influence on product manufacturing performance. Finally, they stated that outsourcing leads to loss of flexibility and responsiveness: without direct control of the manufacturing process, the company loses some of its ability to respond to changes in the supply chain like demand fluctuations which are a risk to customer service levels.

As Enyinda *et al.,* (2009) rightly put it, outsourcing as a strategy for achieving competitive advantage has many benefits for the pharmaceutical firm. However, the same approach is fraught with risks as discussed above. As such, supply chain management strategies can be employed to reduce the firm's exposure to the outsourcing risks among them risk avoidance, reduction or mitigation, transfer and acceptance. The current study endeavoured to look into the matter of these risks, how they have influenced manufacturing performance and the mitigation measures that GSK has put in place to address them.

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2.4 Conceptual Framework

Figure 2.1



(Source: Author, 2017).

Some of the empirical literature reviewed here-in-above indicated that most pharmaceutical businesses have opted for the outsourcing option in order to contain escalating business costs and to focus on their core competencies (Tiwana & Bush, 2014; Pary & Roehrich, 2009; Srivastava, 2005; Tayauova, 2012). Iqbal and Dad (2013), however, note that this approach has usually seen firms pegging their decisions on consideration of core competencies and outsourcing what is considered less strategic work to vendors. The general agreement between the scholars is that the

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vendor outsourcing strategy comes with risks that have the potential to influence product manufacturing performance for pharmaceutical firms.

This study looked at the manner in which outsourcing is deployed as a strategy for GlaxoSmithKline Limited in Nairobi and the influence it has had on product manufacturing performance. Regarding the dependent variable (product manufacturing performance), the current research sought to establish how the firm frequently achieved its Domestic Shipment Right First Time (DSRFT) and the frequency of the firm's achievement of the weekly production Conformance to Plan (CTP). The study also sought to find out how frequent out of stock (OOS) situations prevail at the production plant as well as the frequency of product recalls and customer complaints (either occasioned by poor quality or related reasons).

Among the independent variables studied were materials management, human capital, vendor management, and the risks of outsourcing to product manufacturing performance. The study looked at materials management and sought to establish how the outsourcing of this operational area had affected product manufacturing performance at the plant. Key areas of focus in this variable were the transportation, delivery, storage and security of raw materials as well as dependence on third party transport service providers.

The study also looked into the influences of outsourcing human capital in various operational functions that support product manufacturing. Key focus was on the transition period during outsourcing and any associated loss of jobs and casualization of previously permanent staff (if any). The outsourced teams' staff's skills, competences, attendance and job retention were also looked into. The objective related to this area of the study was to understand how the outsourcing of human capital had affected product manufacturing performance at the Nairobi plant of GlaxoSmithKline Limited.

The third variable studied was vendor management – selection, monitoring and accountability processes. This area chiefly focused on vendor selection methods, performance measurement and supplier monitoring tools, quality and regulatory compliance by outsourced teams, the frequency of business review meetings and the management of communications between the company and its vendors. The variable also targeted the review of matters relating to breach of contracts by the vendors and how this has influenced product manufacturing performance.

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The final area which was studied was the matter of potential risks posed by outsourcing to product manufacturing performance. Specific areas considered included vendor resource capacities, quality and compliance, intellectual property and privacy issues, flexibility and responsiveness to customers in the outsourced relationship. Vendor adherence to workplace safety regulations was also studied. All these areas were then related to their influence on product manufacturing performance.

2.5 Research Gap

While carrying out a research on the strategic partner selection process in the outsourcing strategy by pharmaceutical manufacturing firms, Festel *et al.*, (2014) identified three main research gaps in the available literature on outsourcing. The first one is the lack of objective metrics for the evaluation of the outsourcing results. The second one relates to the lack of research on the relationship between outsourcing implementation and firms' value. The third and final gap identified was the lack of research on the outsourcing contract itself. He went ahead and conducted a research on the third gap regarding the outsourcing contract and made recommendations for studies to be carried out on the other two. Thiong'o (2014) came closer to addressing this gap but only looked at the determinants of logistics outsourcing for pharmaceutical firms in Nairobi, Kenya only. Additionally, the unique outsourcing scenario prevailing at GSK, Nairobi, where many vendors have been contracted (multi-sourcing) has not been previously studied. The current research therefore sought to cover the second gap identified above – lack of research on the relationship between outsourcing implementation and firms' value. It also sought to study the matter of using multiple vendors in an outsourcing relationship and how the same has influenced product manufacturing performance at the Nairobi plant of GSK.

Secondly, from the empirical literature reviewed herein, it was noted that much focus has been given to the types and benefits of outsourcing as well as the risks of outsourcing. Little attention has been given to an attempt to understand the relationships between outsourcing and product manufacturing performance. This leaves a research gap which the current research sought to fill.

2.6 Summary

From the literature reviewed herein-above, it is quite evident that a firm needs to assess the core competencies of its vendors in order to enhance its competitive advantage (Parry & Roehrich,

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2009). Additionally, in order to decide which operational functions to outsource, the TCE and RBT theories come in handy as evaluation tools since they will give a comparative cost analysis in contract management and identify the vendors' capabilities and resources, respectively.

Outsourcing has also been described as a process that allows organizations to focus on their core business activities in order to reduce the overall operational costs (Soriano-Meier *et al.,* 2012). It is noted that since the vendors are specialized in the work they undertake, this leads to increased efficiency, effectiveness and better performance. To achieve this, it is important for the organization to set performance targets for service providers (Yeboah, 2013). Better performance will lead to reduced costs which can then be transferred as a benefit to the principal's clients by way of reduced product costs (Suraju & Hamed, 2013).

Since 95% of the raw materials in the pharmaceutical industry in Kenya are imported (EPZA, 2005), it is important to ensure that raw materials are delivered at the right time, in the right quality and quantity in order to achieve production targets. However, outsourcing the supply chain management has been reported to have challenges – late deliveries, damages of raw materials, contamination and over-dependence on suppliers (Silverman, 2005; Enyinda *et al.*, 2009). The outsourcing of human resources was also reported to result in staff casualization and an inhuman treatment of staff – all of which negatively influence a firm's performance (Adegbami *et al.*, 2014).

The selection of reputable third party suppliers is also noted to be important in an outsourcing relationship since vendor inability to perform will affect the client's performance (Thiong'o, 2014). This also comes along with other associated risks among them: regulatory risks, operational risks, technical risks and corporate social responsibility risks (Enyinda *et al.*, 2009).

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CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter describes the research methodology that was used to arrive at the sample population as well as the collection and analysis of data. Areas covered under the chapter include research design, target population, sample design and procedures of getting to the sample, sampling frame, data collections instruments, data collection methods, validity and reliability of research instruments, methods of data analysis and presentation. The chapter also looked at research ethics and how they relate to the current research.

3.2 Research Design

An explanatory research design was adopted for this study since it was well-aligned with the objectives of the study. Greener (2008) states that in an explanatory model, we look at why the data behave the way they do and try to identity key variables that influence the data values. The focus on *why* questions used in this approach is therefore appropriate for the explanatory research design. Ponelis (2015) further indicates that the design focuses on describing processes, individual or group behaviour in its total setting and/or the sequence of events in which the behaviour occurs. The explanatory research design was therefore appropriate for the current study since it sought to establish the influence of outsourcing on product manufacturing performance at the GSK in Nairobi, Kenya. In this way, the research was establishing a causal relationship.

3.3 Target Population

The study targeted staff working in the Global Manufacturing and Supply (GMS) Division which runs the production facility. There are currently one hundred and sixteen (116) employees running the division. This number comprises management staff and supervisors in various functions as shown in Table 3.1.

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Table 3.1

Description	Number	Percentage
Site Leadership Team (SLT)	16	13.79
Finance	3	2.59
Supply and Logistics	20	17.24
Quality Assurance	20	17.24
Production Supervisors	6	5.17
Production Technicians	27	23.28
Procurement	1	0.86
Technical	4	3.45
Human Resources	1	0.86
Facilities and Maintenance	2	1.72
Environment, Health and Safety	3	2.59
Engineering	13	11.21
Total	**116**	**100**

(Source: Author, 2017)

3.4 Sample Design and Procedures

The current study adopted a purposive or judgemental sampling. Oladipo, Ikamari, Kiplang'at and Barasa (2015) view this type of sampling as an approach where the researcher targets only people who meet certain predetermined criteria. This approach was adopted for the current study because the individuals targeted were considered to possess pertinent information regarding their engagement with outsourced teams and were able to assess their performance first hand. The team selected included those who had a direct role to play in the supervision of contracted teams. This is the population that would provide useful information for the purposes of the current study.

The sample frame therefore included the following employees working for the GMS Division in Nairobi:

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Table 3.2

Description	Number	Sample	Percentage
Site Leadership Team (SLT)	16	5	8.33
Finance	3	1	1.67
Supply and Logistics	20	9	15.00
Quality Assurance	20	8	13.33
Production Supervisors	6	6	10.00
Production Technicians	27	20	33.33
Procurement	1	1	1.67
Technical	4	2	3.33
Human Resources	1	1	1.67
Facilities and Maintenance	2	1	1.67
Environment, Health and Safety	3	2	3.33
Engineering	13	4	6.67
Total	**116**	**60**	**100**

(Source: Author, 2017)

Considering that there are one hundred and sixteen (116) employees working for the GMS Division, 60 employees gave a 51.72% sample which is within the recommended standards for research.

3.5 Data Collection Instruments

This study adopted the questionnaire approach of data collection. Each item in the questionnaire was developed to address a specific item as outlined in the conceptual framework set out in Chapter Two. This is the approach recommended by Mugenda and Mugenda (2003). The questionnaires used contained two types of questions: closed and open-ended questions. Closed questions used a 5-Likert scale approach to give the respondents the opportunity to choose the alternative that best described the situation as they perceived it. Open-ended questions were used to give the respondents the freedom in expressing themselves regarding the subject matter.

The questionnaire approach was best suited for the explanatory research design adopted for this research since questionnaires were easily used with the respondents and required less skill. The

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questionnaires also gave respondents the freedom to express themselves without feeling intimidated by the presence of the researcher. Additionally, the data collected through questionnaires was easily coded and analyzed.

3.6 Data Collection Methods

Before the actual data collection, a pilot test was carried out with some respondents who were not included in the actual study. The results of the pilot study were used to establish the reliability and validity of the research tool by exposing them to the Cronbach Alpha method with the following results:

Table 3.3

Description of Variable	Cronbach Alpha
Logistics Management	0.69
Human Capital	0.58
Accountability Processes	0.72
Contractual Relations	0.65

From the results of the analysis of the pilot study results, the researcher revised and expanded the scope of the research instrument to include all areas targeted for the study. This necessitated the changing of some of the descriptions of the study variables as follows:

The dependent variable was changed to Product Manufacturing Performance and included in the questionnaire since it was missing from the initial questionnaire. The independent variable "logistics management" was changed to "materials management" and the closed questions increased from 5 to 10 and the open-ended questions from 1 to 2. The independent variable on human capital was also expanded from 5 closed questions to 9 and from 2 open-ended questions to 3. The independent variables "accountability processes" and "contractual relations" were merged into one new independent variable – "vendor management". It was given 15 closed questions and 2 open-ended questions. In the initial questionnaire, there was no open-ended question in this section. A new independent variable on "Risks to Production" was introduced and given 9 closed questions and 5 open-ended questions.

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The final data for this study was collected by way of printed questionnaires which were hand-delivered to the respondents. The questionnaires had open-ended and closed questions (See Appendix II). Appointments were booked through the Heads of Department in order to facilitate the delivery of the questionnaires which were hand-delivered by the researcher. Attached to the questionnaires were two letters – an introduction letter from the researcher and a letter of authority from the GSK management granting authority to carry out the research within the company. The respondents were then given a week to fill the questionnaires before the same were collected again. However, due to an ongoing Level 3 audit within the company, the proposed one week was not adequate and the researcher had to extend the period to two weeks. This was within the contingency plan for the research and served to improve the response rate and also gave the respondents adequate time to clearly express themselves by interrogating the various areas covered under the study. The researcher then collected the questionnaires after the expiry of this period.

3.7 Validity

To ensure that the research instrument used in this study was valid, the questionnaire was pre-tested with a small sample as indicated here-in-above in order to correct any inherent ambiguities and/or omissions before the actual data collection process as recommended by Oladipo *et al.,* (2015).

The second method that was used to ensure the validity of research instrument deployed was by way of ensuring that all areas under the research were adequately covered in the questionnaire. This was done by focusing on the study variables as set out in the conceptual framework in Chapter Two.

3.8 Reliability

The reliability of the study was tested using Cronbach's Alpha method. Since the questionnaire was split into five sections, the reliability tests were carried out per section (or factor). The results of the tests gave an aggregate Cronbach Alpha of 0.714. Drost (2011) indicates that the standard level of reliability should be .70 or higher. Reliability is also considered further proof of validity.

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All the questionnaires were issued to the respondents at the beginning of the shift to avoid a situation where some of the responses would have been compromised by respondent's fatigue. The objective was to standardize the conditions under which the research was taken as recommended by Kothari (2004). The reliability of the study was further enhanced by broadening the sample of the study to 51.72% of the target population which was expected to produce more consistent responses.

3.9 Data Analysis and Presentation

The current study had both quantitative and qualitative data. Quantitative data was analyzed by use of Microsoft Excel. Descriptive statistics were used in the analysis of the data collected. The descriptive statistics applied included mean, mode and standard deviation as measures of central tendency. The data was also analyzed to produce frequencies and percentages which were presented in the form of tables, pie charts and graphs. This was done with the aim of bringing out the characteristics of the data to facilitate description, interpretation and generalization.

Qualitative data was summarized in Microsoft Word in order to identify common and recurring themes. The analysis process was done in three stages. The first stage involved the consideration of the respondents' actual feedback in order to identify key words or phrases. This stage was meant to collate the meanings and viewpoints of the respondents. A deductive approach was applied using the research questions to group the data. The second stage involved sorting the data in order to identify patterns by focusing on similarities and differences in the responses. The third stage involved bringing similar data categories together to establish broader themes.

3.10 Ethical Considerations

Research ethics are the moral principles that guide research from its inception to its completion and publication of results (Oladipo *et al.,* 2015). The people affected by this process include the researcher, research assistants, research institution, respondents and consumers of the research results.

In the current research, ethical considerations were taken care of by acquiring approvals for the research – from St. Paul's University and GlaxoSmithKline Limited. An application was also made for a research permit to the National Commission for Science, Technology and Innovation. The questionnaires were also designed to ensure that no information of a personal nature was

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collected with an exception of general information which did not identify the respondents and thereby affect their privacy. The researcher personally distributed and collected the questionnaires in order to ensure that the process was well-managed and that questionnaire completeness was taken care of. The research results will be for academic purposes only and will not be shared with any other institution. A copy of the results will be shared with GlaxoSmithKline Limited as a manifestation of openness.

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CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter deals with the analysis, presentation and interpretation of the data collected. Microsoft Excel was used in the analysis of the data to calculate the mean, mode and standard deviation. It was also used for the creation of tables, pie charts, graphs and the calculation of percentages for ease of interpretation.

4.2 Demographic Characteristics of the Study Population

4.2.1 Response Rate

A total of sixty (60) questionnaires were distributed to selected respondents in the SLT, Finance, Supply and Logistics, Quality Assurance, Production, Procurement, Technical, Human Resources, Facilities, EHS and Engineering. Fifty respondents filled the questionnaires and submitted them back. Ten respondents did not return the questionnaires. This represents a response rate of 83.33% as shown in Table 4.1.

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Table 4.1

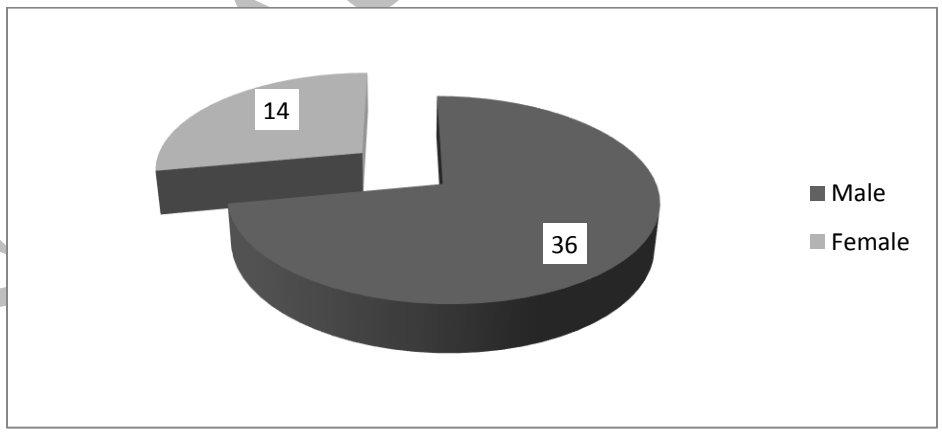
Function	Questionnaires Issued	Questionnaires Returned	Percentage (%)
SLT	5	5	100.00
Finance	1	1	100.00
Supply & Logistics	9	9	100.00
Quality Assurance	8	6	75.00
Production Supervision	6	5	83.33
Production Technicians	20	14	70.00
Procurement	1	1	100.00
Technical	2	2	100.00
Human Resources	1	1	100.00
Facilities	1	1	100.00
EHS	2	2	100.00
Engineering	4	3	75.00
Total	**60**	**50**	**83.33**

(Source: Author, 2017)

4.2.2 Distribution of Respondents by Gender

Out of the fifty respondents, thirty six (36) were male whilst fourteen (14) were female as shown in Figure 4.1.

Figure 4.1



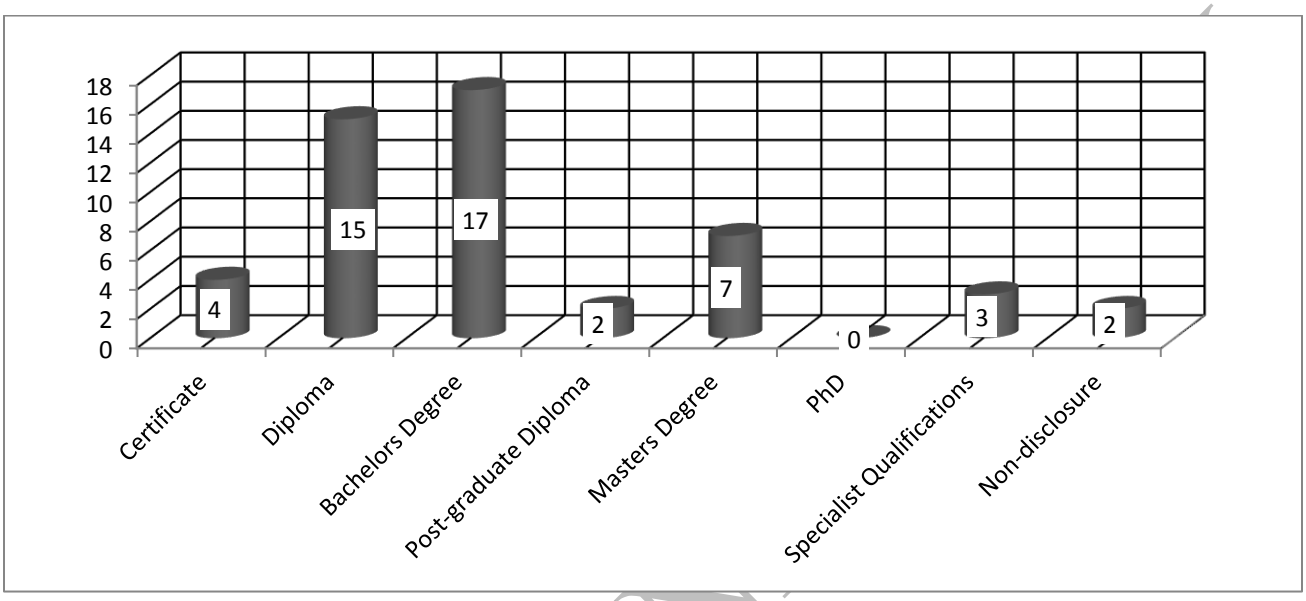
(Source: Author, 2017)

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4.2.3 Distribution of Respondents by Educational Qualifications

Figure 4.2 shows the distribution of the respondents by educational qualifications.

Figure 4.2



(Source: Author, 2017)

From the figure above, it was established that majority of the respondents were Diploma and Degree holders, who, combined represented 64%. There was no PhD holder among the respondents and two respondents failed to disclose their educational qualifications. There were three respondents who held specialist qualifications in Project Management, Engineering and Finance. This was indicative of a team capable of responding well to the issues under investigation in the research.

4.2.4 Distribution of Respondents by Number of Years Worked at GSK

The respondents to the study had worked for GSK for different periods as shown in Table 4.2.

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Table 4.2

Ser. No.	Category	No. of Respondents	Percentage (%)
1.	Less than 5 years	8	16
2.	5 – 10 years	19	38
3.	11 – 15 years	5	10
4.	16 – 20 years	11	22
5.	Over 20 years	6	12
6.	Non-disclosure	1	2
	Total	**50**	**100**

(Source: Author, 2017)

From the information contained in the table above, it was noted that the category that had the highest number of respondents was the one that had worked for GSK for between five and ten years which represented 38%. This was followed by the group that had worked for the company for between sixteen to twenty years which represented 22%. One person did not disclose the number of years they had worked for GSK. From the information gathered, it was evident that the respondents were capable of adequately assessing the influence of the outsourcing of operational functions to GSK's product manufacturing performance.

4.3 Product Manufacturing Performance

From the conceptual framework, this was the dependent variable and the research sought to establish how it was being influenced by the outsourcing of operational functions at GSK. The table below shows the descriptive statistics of the responses from the respondents:

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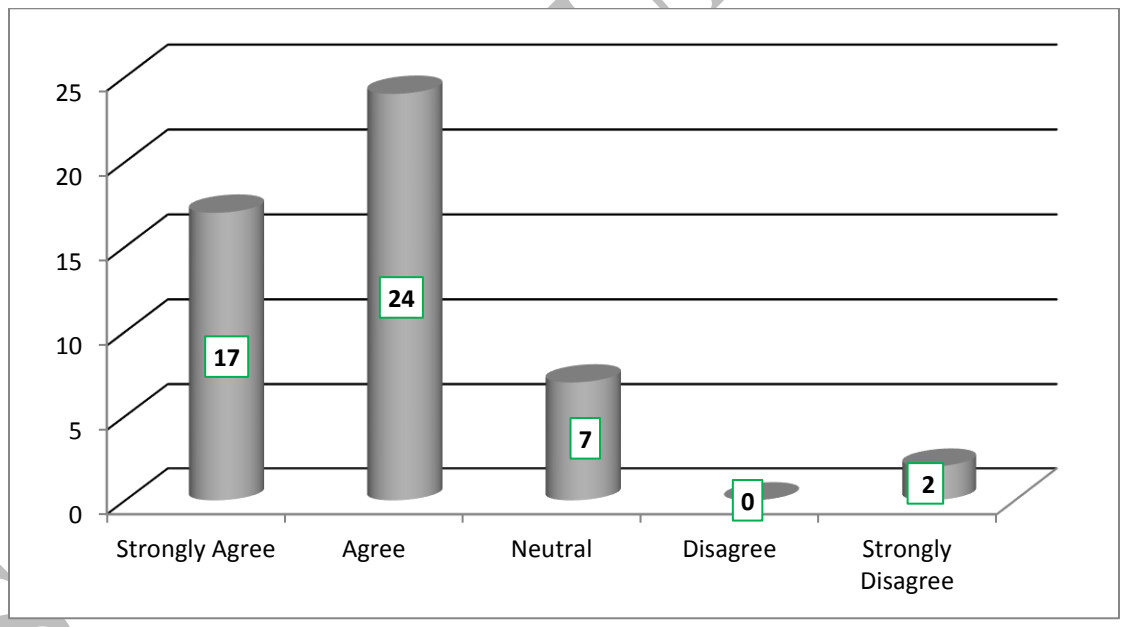
Table 4.3

Item	No.	Sum	Mean	Mode	Std. Dev.
Question 1	50	96	1.92	2	0.92
Question 2	50	111	2.22	2	1.04
Question 3	50	197	3.94	4	0.89
Question 4	50	201	4.02	4	0.80
Question 5	50	200	4.00	4	1.03
Question 6	50	194	3.88	5	1.14
Question 7	50	211	4.22	5	1.00
Question 8	50	190	3.80	4	1.12
Question 9	50	182	3.96	4	0.97

(Source: Author, 2017)

Fourty-one (82%) respondents agreed that GSK deploys contracted employees in its production plant. With a mean of 1.92, a mode of 2 and standard deviation of 0.92, this was a clear indication that the respondents agreed that GSK deploys outsourced staff in its production plant. This information is captured in Figure 4.3.

Figure 4.3



(Source: Author, 2017)

Thirty-five respondents (70%) agreed that GSK has a higher ratio of contracted employees working in production as compared to its permanent staff. Table 4.3 above shows that the mean from the response data was 2.22, the mode 2 and the standard deviation 1.04. This is an

indication that the company heavily relies on the outsourced staff in its production activities. This is a situation leaning towards supplier dependency as argued by Wachira *et al.* (2016). It is also likely to lead to loss of control since the GSK permanent staff are not responsible for many of the production activities. This further reflects the arguments of Festel *et al.* (2014) and Boulaksil and Fransoo (2008).

Thirty-five respondents or 70% disagreed that contracted employees have in the past contributed to the company failing to achieve DSRFT as a key performance indicator. Another thirty-nine respondents or 78% disagreed with the contention that the company had not achieved the CTP as a result of using outsourced employees in production. Additionally, thirty-six respondents or 72% disagreed that the company had faced an OOS situation arising from the use of contracted employees in production. In the descriptive statistics presented in Table 4.3 above, the three items had means of 3.94, 4.02 and 4.00 respectively. All the three items had a mode of 4 and standard deviations of 0.89, 0.80 and 1.03 respectively. This was a clear indication that the respondents were in agreement that the outsourced employees had not negatively influenced product manufacturing performance in terms of DSRFT, CTP and OOS. This is an expression of efficiency sustained by the vendors' core competencies as argued by Srivastava (2005) and Tayauova (2012).

Fourty-three respondents (86%) noted that there was no time production was stopped owing to the contracted employees' failure to observe GMP rules which govern the quality of production. Similarly thirty-three (66%) of the respondents noted that there were no reported injuries or stoppage of production occasioned by the outsourced employees' failure to observe safety rules. The descriptive statistics in Table 4.3 above indicate that the mean and mode for GMP compliance were 4.22 and 5 respectively. The associated standard deviation for this response was 1.00 clearly indicating that the respondents felt that the third party employees observed the requisite GMP standards. With regards to compliance with safety regulations, the descriptive statistics indicate a mean and mode of 3.80 and 4 respectively. The standard deviation for this particular aspect was 1.12. From these observations, compliance with GMP and safety regulations by the third party employees have ensured continuous production thereby enhancing manufacturing performance. This status differs with the arguments of Festel *et al.* (2014) that outsourcing leads to loss of control in terms of quality and compliance.

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4.4 Materials Management

The study also sought to establish the influence of outsourcing materials management to product manufacturing performance. Table 4.4 shows the descriptive statistics analyzed from the respondents' feedback.

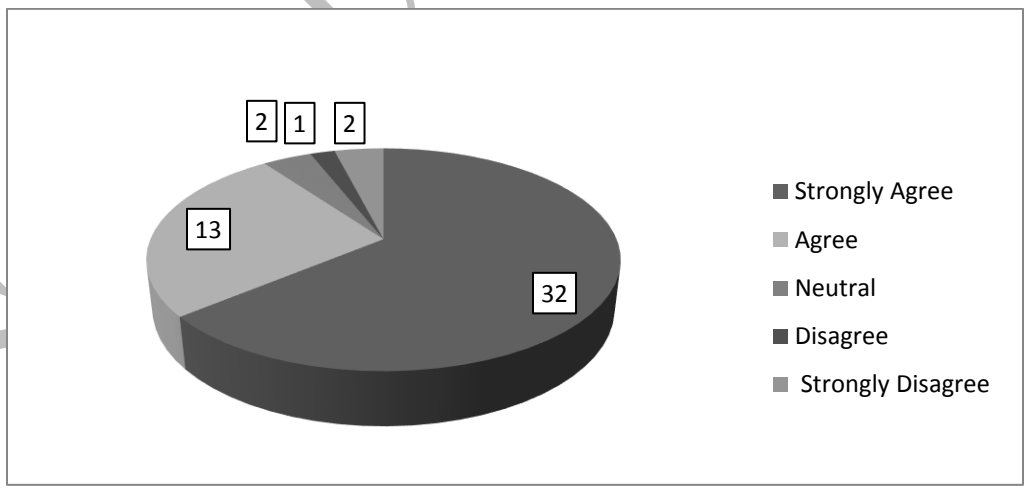
Table 4.4

Description	No.	Sum	Mean	Mode	Std. Dev.
Question 1	50	77	1.57	1	0.98
Question 2	50	116	2.32	2	0.89
Question 3	50	95	1.90	1	1.13
Question 4	50	119	2.38	2	1.10
Question 5	50	140	2.80	3	1.11
Question 6	50	161	3.22	4	1.15
Question 7	50	145	2.90	3	1.05
Question 8	50	161	3.22	3	0.95
Question 9	50	140	2.86	3	1.06
Question 10	50	155	3.10	3	1.05

(Source: Author, 2017)

Fourty-five respondents (90%) indicated they agreed that GSK had outsourced materials management to third parties. From Table 4.4 above, the mean and mode for this response were 1.57 and 1 respectively. The standard deviation was 0.98, clearly indicating that the company outsources materials management. This information is graphically captured in Figure 4.4.

Figure 4.4



(Source: Author, 2017)

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Twenty-nine (29) respondents agreed with the statement that GSK has frequently experienced delays in the delivery of raw materials being delivered by third party transport providers. This represented 58% against three (3) respondents who disagreed with this contention. The mean and mode for this response were 2.32 and 2 respectively with a standard deviation of 0.89. This is tabulated in Table 4.5.

Table 4.5

Response	No. of Respondents	Percentage
Strongly Agree	9	18
Agree	20	40
Neutral	18	36
Disagree	2	4
Strongly Disagree	1	2
Total	**50**	**100**

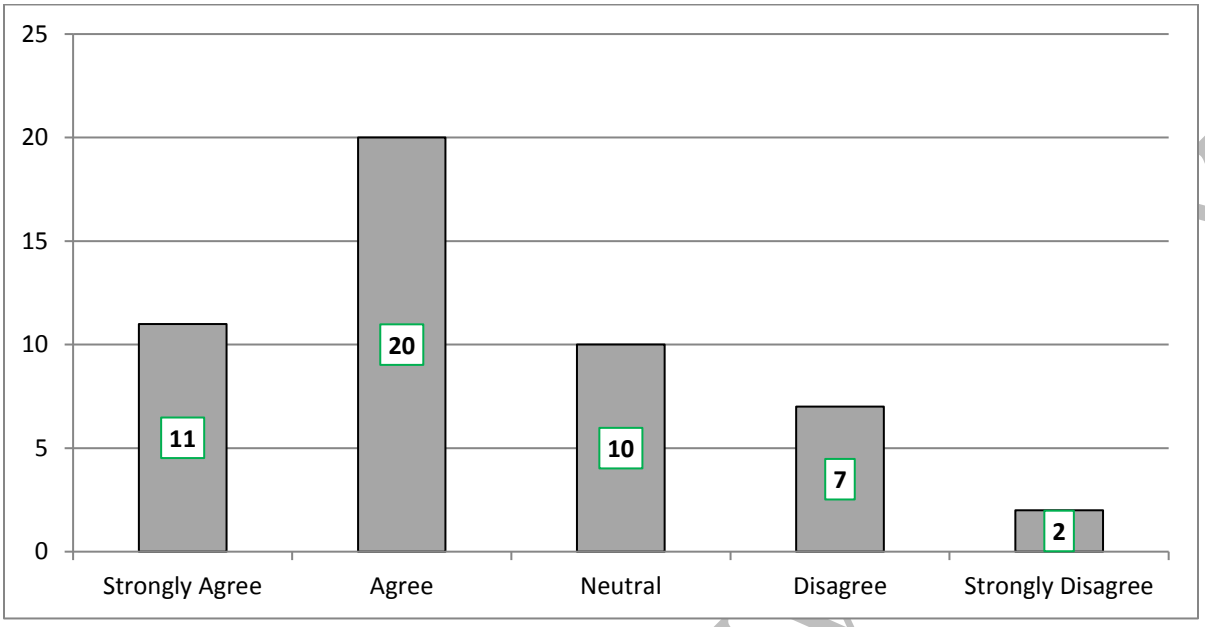
(Source: Author, 2017)

The situation described above agrees with the postulations of Mubarik *et al.* (2012) who indicated that the outsourcing of materials management leads to a declining on-time delivery of raw materials.

Additionally, thirty-seven respondents indicated that GSK solely relies on third party transport agents for the delivery of its raw materials. This represented 74% of the total number of respondents. The mean and mode for this response were 1.90 and 1 respectively with a standard deviation of 1.13. In the same vein, thirty-one respondents or 62% of the respondents indicated that there are periods when production stopped on owing to the failure by transportation agents to deliver raw materials in time. The associated mean and mode were 2.38 and 2 respectively with a standard deviation of 1.10. The latter responses are illustrated Figure 4.5.

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Figure 4.5



(Source: Author, 2017)

These findings a clear indication that the outsourcing of materials management has had a negative influence on product manufacturing performance since delays in the delivery of raw materials has led to stoppage in production. This has served to water down the benefits of outsourcing materials management cited by Roy *et al.* (2015).

Damages to raw materials were reported by 40% of the respondents. They indicated that there were times when production had to stop because raw materials had been damaged en-route or whilst in storage by contracted transporters. The mean for these responses was 2.80, the mode 3 with a standard deviation of 1.11. This clearly indicated that the damage of raw materials en-route to the company had a negative influence on product manufacturing performance. This is in line with the arguments of Mubarik *et al.*, (2012).

Nineteen (19) respondents (38%) further indicated that GSK raw materials have been contaminated whilst being transported or stored by third part agents. The mean for this question was 2.86 with a standard deviation of 1.06. Considering that most of the raw materials are imported as indicated by the EPZA (2005), this is an indication that contamination of raw materials has had a negative influence on product manufacturing in the plant.

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Fifteen respondents or 30% indicated that there were increased lead times in the delivery of raw materials since the process was outsourced to third party transport providers. The mean for this question was 3.10, a mode of 3 and a standard deviation of 1.05. An increase in raw materials delivery lead times has therefore negatively influenced product manufacturing performance in line with the postulations of Achuora *et al.* (2012) who indicate that deliveries in the pharmaceutical industry must be done speedily to enhance better performance. However, the influence here was not at a significant level.

4.5 Human Capital

Table 4.6 shows the descriptive statistics obtained from the responses on this human capital outsourcing.

Table 4.6

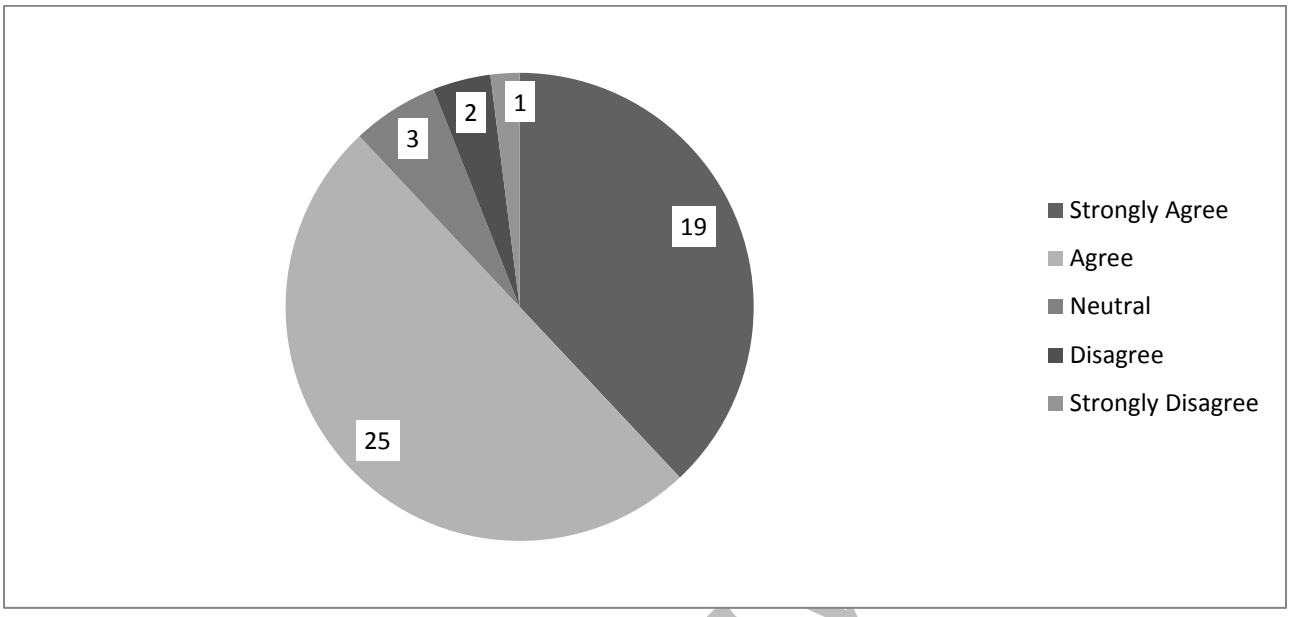
Description	No.	Sum	Mean	Mode	Std. Dev.
Question 1	50	91	1.82	2	0.87
Question 2	50	197	3.94	5	1.25
Question 3	50	192	3.84	4	0.93
Question 4	50	118	2.36	2	0.75
Question 5	50	171	3.42	3	0.86
Question 6	50	164	3.28	4	0.90
Question 7	50	184	3.68	4	0.98
Question 8	50	194	3.88	4	1.17
Question 9	50	200	4.00	4	1.01

(Source: Author, 2017)

Fourty-four respondents (88%) agreed that GSK has outsourced staff in various functions. The mean, mode and standard deviation for this response were 1.82, 2 and 0.87 respectively. The responses are captured in Figure 4.6.

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Figure 4.6



(Source: Author, 2017)

It was, however, noted that thirty-seven respondents (74%) disagreed with the contention that at the initial stages of outsourcing, the strategy led to some permanent staff being converted to temporary or casual staff. Only nine respondents or 18% felt that the outsourcing strategy led to staff conversion from permanent to temporary or casual status. Table 4.7 summarizes the responses.

Table 4.7

Ser. No.	Response	No. of Respondents	Percentage (%)
1.	Strongly Agree	3	6
2.	Agree	6	12
3.	Neutral	4	8
4.	Disagree	15	30
5.	Strongly Disagree	22	44
	Total	**50**	**100**

(Source: Author, 2017)

These findings were contrary to the postulations of Adegbami *et al.* (2014) that outsourcing leads to staff casualization and an attendant poor performance occasioned by demotivation. Thirty-

three respondents (66%) also confirmed that the outsourced staff deployed in production areas had the requisite capacity and skills to effectively discharge their duties in the production lines. This is supported by a mean of 2.36, a mode of 2 and a standard deviation of 0.75 as indicated in Table 4.6. The responses are summarized in Table 4.8.

Table 4.8

Ser. No.	Response	No. of Respondents	Percentage (%)
1.	Strongly Agree	3	6
2.	Agree	30	60
3.	Neutral	14	28
4.	Disagree	2	4
5.	Strongly Disagree	1	2
	Total	**50**	**100**

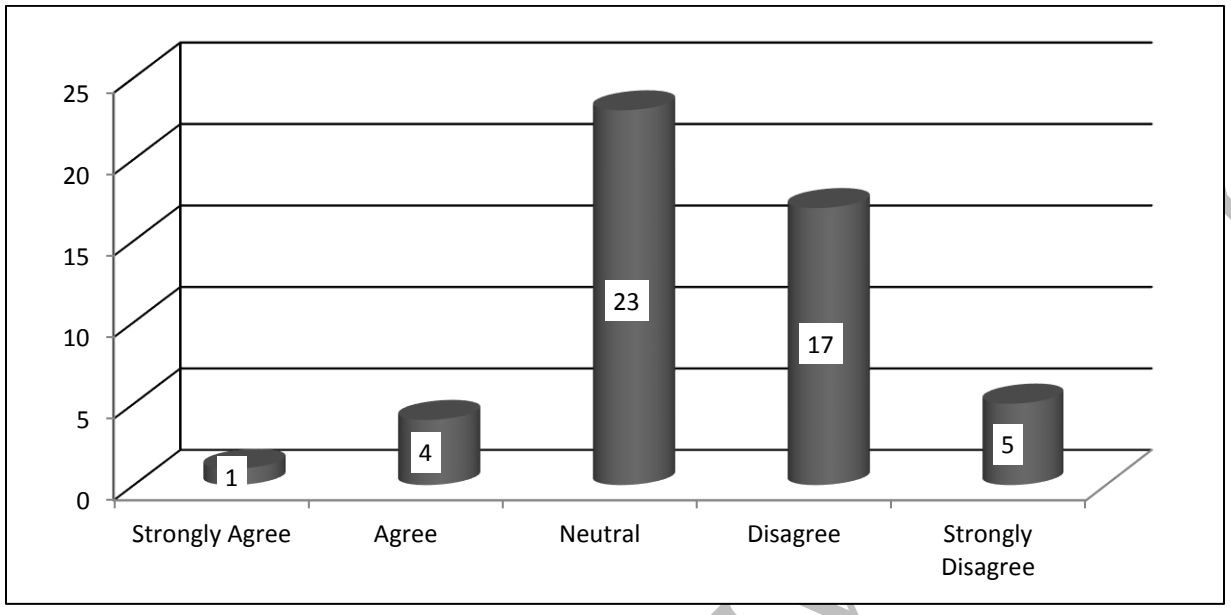
(Source: Author, 2017)

This is a clear indication that GSK had assigned the outsourced product manufacturing activities to vendors with the right core competencies which have served to complement the core competencies of the firm as espoused by Parry and Roehrich (2009). From this perspective, the vendors assigned production manufacturing activities were noted to have capacity to positively influence GSK's manufacturing performance and thereby enhance its competitive advantage.

On the matter of remuneration, twenty-two respondents (44%) indicated that the outsourced employees were not contented with the package they received as captured in Figure 4.7.

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Figure 4.7



(Source: Author, 2017)

The mean for the responses was 3.42 and an associated standard deviation of 0.86 – a clear indication that most of the respondents were in agreement that the third party employees were not contented with remuneration. According to Adegbami *et al.* (2014), human resources are vital tools which need to be "greased, oiled and maintained" in order to sustain productivity. Good remuneration is part of this process. Since this was not happening with the third party employees deployed at GSK, this is likely to influence manufacturing performance as the employees may likely get demoralized by low compensation.

Twenty-three respondents (46%) disagreed with the statement that the outsourced service providers have faced challenges with staff turn-over and absenteeism. However, 18% of the respondents indicated that there was a problem with third party staff absenteeism and turn-over as shown in Table 4.9.

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Table 4.9

Ser. No.	Response	No. of Respondents	Percentage (%)
1.	Strongly Agree	2	4
2.	Agree	7	14
3.	Neutral	18	36
4.	Disagree	21	42
5.	Strongly Disagree	2	4
	Total	**50**	**100**

(Source: Author, 2017)

The mean, mode and standard deviation for this response were 3.28, 4 and 0.90 respectively. This clearly indicated that the respondents agreed that staff turn-over and absenteeism were not a major influence on manufacturing performance at the plant. However, the few cases of staff turn-over and absenteeism reported are indications of an underlying problem and are most likely tied to the remuneration issue discussed above. Adegbami *et al.* (2014) indicate that outsourced staff usually have no access to skills development through training and promotion. In such cases, the staff usually leave the organization in search of greener pastures which is likely to influence manufacturing performance in that their departure will call for replacements. During the initial period when the new staff are being trained, production performance will generally be negatively influenced.

4.6 Vendor Management

Table 4.10 shows that descriptive statistics on the responses related to vendor management:

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Table 4.10

Description	No.	Sum	Mean	Mode	Std. Dev.
Question 1	50	82	1.64	1	0.66
Question 2	50	100	2.04	2	0.82
Question 3	50	119	2.43	2	0.71
Question 4	50	141	2.88	2	0.90
Question 5	50	151	3.08	4	1.02
Question 6	50	96	1.92	2	0.72
Question 7	50	186	3.80	4	1.04
Question 8	50	112	2.24	2	1.06
Question 9	50	134	2.68	2	1.02
Question 10	50	108	2.16	2	0.82
Question 11	50	105	2.10	2	0.76
Question 12	50	105	2.10	2	0.68
Question 13	50	150	3.06	3	0.92
Question 14	50	156	3.18	3	0.88
Question 15	50	133	2.66	3	0.96

(Source: Author, 2017)

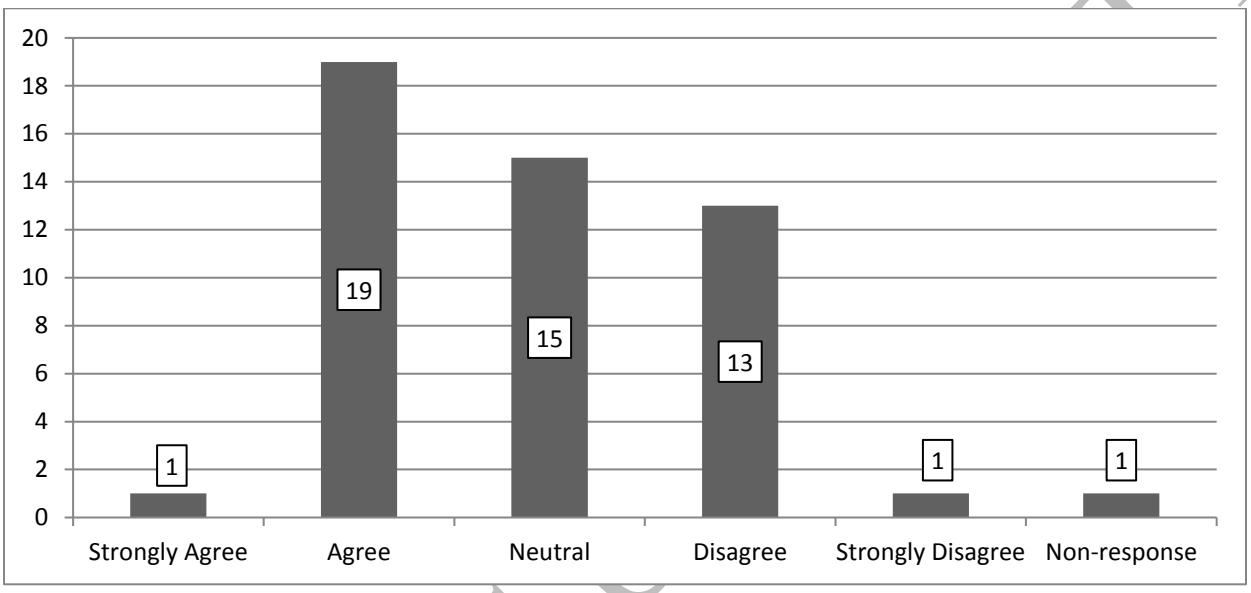
Fourty-five respondents (90%) indicated that GSK carries out a comprehensive due diligence before contracting vendors and signing contracts with them. The response had a mean of 1.64, a mode of 1 and a standard deviation of 0.66. This was a clear indication that GSK conducted proper due diligence for its vendors before assigning them work. The aim of such due diligence is to establish the core competencies of the vendors, their experience and the responsibilities to be assigned to them as recommended by Rodrigo (2016).

Further, fourty respondents (80%) indicated that GSK has methods of measuring and monitoring outsourced contractor performance with only four respondents disagreeing with this state of affairs. This response got a mean of 2.04, a mode of 2 and standard deviation of 0.82 clearly indicating that most of the respondents were in agreement that GSK has a system in place for monitoring vendor performance. This approach has been taken with the arguments of Iqbal and Dad (2013) that the inability to perform by vendors will negatively influence the client's performance in the achievement of competitive advantage. Thus the measures put in place by GSK towards vendor management are geared towards driving an improved manufacturing performance. This is well-demonstrated by the fact that thirty respondents representing 60% indicated that outsourced vendors regularly achieve the KPIs set out for them by GSK.

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Twenty respondents (40%) agreed with the statement that the company has faced some quality, compliance and regulatory challenges occasioned by vendor performance. However, fourteen respondents (28%) disagreed with this statement with fifteen respondents (30%) remaining neutral and one respondent abstaining from answering the question as indicated in Figure 4.8.

Figure 4.8



(Source: Author, 2017)

This response attracted a mean of 2.88, a mode of 2 and a standard deviation of 0.90 which showed a leaning towards acknowledgement of the matter. In addition to the above, sixteen respondents (32%) indicated that GSK had received customer complaints arising from contractor performance. This response had a mean of 3.08, a mode of 4 and a standard deviation of 1.02. It was, however, indicated by thirty-five respondents (70%) that the company had faced cases of product pilferage and theft by contracted service provider employees. Seven respondents (14%) did not agree with this statement and eight respondents remained neutral over the subject as shown in Table 4.11. The mean for this response was 2.24, with a mode of 2 and a standard deviation of 1.06 – clearly indicating that product pilferage was a challenge faced by GSK in manufacturing performance.

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Table 4.11

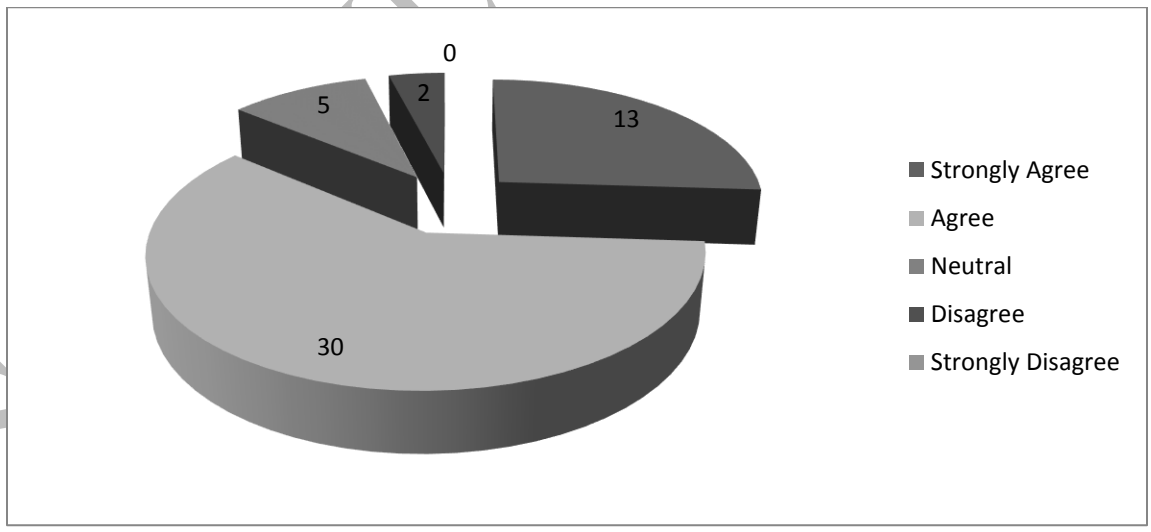
Ser. No.	Response	No. of Respondents	Percentage (%)
1.	Strongly Agree	12	24
2.	Agree	23	46
3.	Neutral	8	16
4.	Disagree	5	10
5.	Strongly Disagree	2	4
	Total	**50**	**100**

(Source: Author, 2017)

The findings supported the argument by Festel *et al.* (2014) that some of the largest pharmaceutical recalls have been associated with inadequate efforts in the selection and monitoring of contractors. They further supported Rodrigo's (2016) recommendation on the importance of selecting trusted suppliers.

As part of the monitoring process, fourty-three respondents (86%) agreed with the statement that GSK regularly audits its third party suppliers whilst only two respondents (4%) disagreed with the statement. Five respondents (10%) were non-committal. This is presented in Figure 4.9.

Figure 4.9



(Source: Author, 2017)

This response had a mean of 1.92, a mode of 2 and a standard deviation of 0.92 – clearly showing that the responses leant towards support of the regular audits. The audits have played a key role for GSK since they are part of the performance risk management process and also enable the firm to guard against enforcement risk as stipulated by Rubin (2007). They have enabled the company to constantly monitor the vendors in terms of their performance in support of manufacturing performance.

Thirty-two respondents (64%) disagreed with the assertion that GSK had lost its flexibility and responsiveness to customer needs after adopting the outsourcing strategy. Only six respondents (12%) agreed with the statement. The mean for this response was 3.80, the mode was 4 whilst the standard deviation was 1.04 – a clear indication that most of the respondents did not agree with the assertion. This is contrary to the arguments by Aksoy and Ozturk (2012) that outsourcing leads to an organization's loss of flexibility.

Twenty-four respondents (48%) indicated that the company had regularly faced manufacturing deviations with eleven respondents (22%) disagreeing. The mean for the response was 2.68, the mode 2 and the standard deviation 1.02. This was a clear indication that the majority of the respondents agreed that the company had faced manufacturing deviations. Such deviations have the potential of negatively influencing manufacturing performance since the output to the market will be affected.

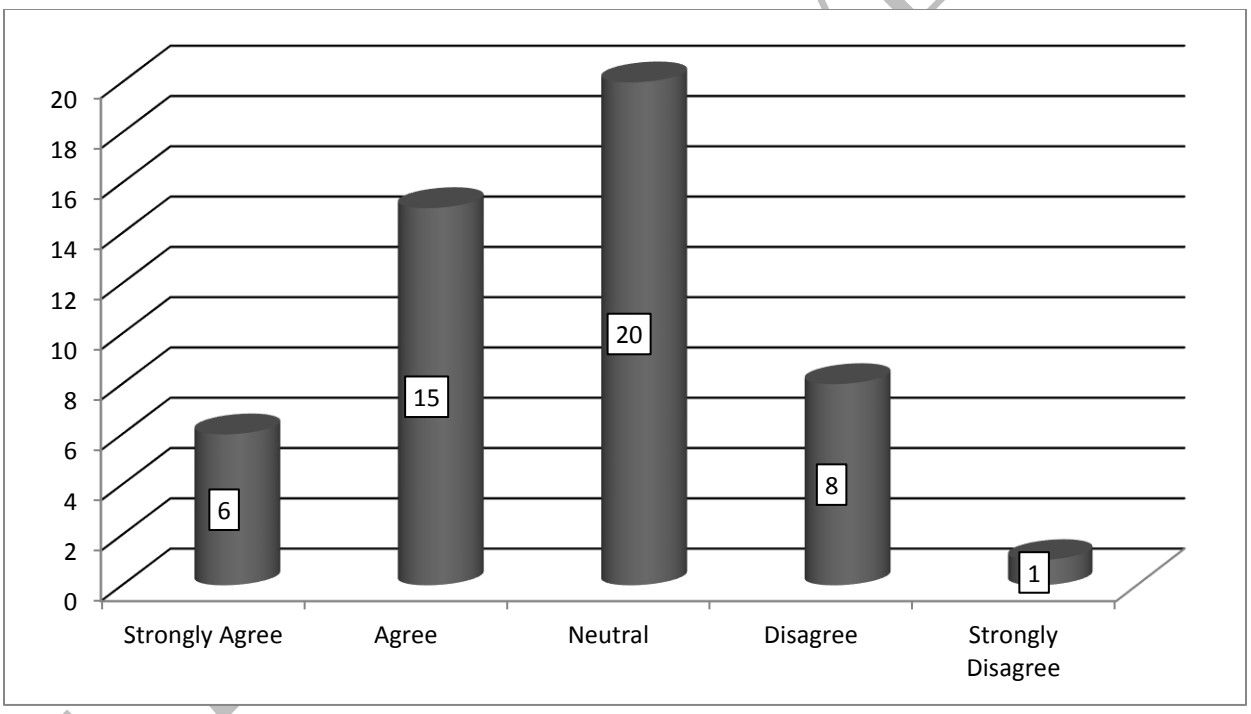
Fourty of the respondents or 80% indicated that GSK regularly holds review meetings with its contracted service providers in order to keep them aligned with GSK requirements. Only two respondents (4%) disagreed with the same. The mean for this response was 2.10, the mode 2 and the standard deviation 0.76. This clearly indicated that most of the respondents agreed that GSK holds review meetings with its vendors. Additionally, fourty-one respondents (82%) reported that there is frequent communication between GSK and its vendors to ensure proper delivery of GSK's production expectations. The mean, mode and standard deviation for the response were 2.10, 2 and 0.68 respectively. This is a clear indication that the majority of the respondents agreed that there was regular communication between GSK and its vendors. The essence of the regular review meetings and communication have enabled the company to keep tags with the performance of the vendors in order to guard against loss of control as indicated by Boulaksil

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and Fransoo (2008). This way, the performance of all vendors supporting manufacturing is closely monitored and any arising issues addressed immediately.

Nine respondents (18%) confirmed that there have been cases of breach of contract by third party agents whilst fifteen respondents (30%) disagreed with the statement. The responses from this question had a mean of 3.06, a mode of 3 and a standard deviation of 0.92. On the other hand, twenty-one respondents (42%) confirmed that some of the contracts for some vendors had been terminated owing to incompetence whilst nine respondents (18%) disagreed with this. The responses reflected a mean of 3.18, a mode of 3 and a standard deviation of 0.88. The responses on the termination of contracts are summarized in Figure 4.10.

Figure 4.10



(Source: Author, 2017)

Using the TCE approach, the regular review meetings and frequent communications between GSK and the vendors in a bid to enhance manufacturing performance are a cost to the business. Soriano-Meier *et al.* (2012) also indicated that the objective of outsourcing is to reduce the overall cost of sustaining or enhancing product quality. As such, the increased level of vendor supervision and monitoring through increased meetings and communication are a cost to the

business – costs which are likely to be transferred to the customer. This, in essence, influences manufacturing performance negatively by way of increased production costs.

4.7 Risks to Production

The study further sought to establish the risks posed by the outsourcing of operational functions to product manufacturing performance at GSK. Table 4.11 shows the descriptive statistics analyzed from the responses.

Table 4.12

Description	No.	Sum	Mean	Mode	Std. Dev.
Question 1	50	195	3.90	4	0.81
Question 2	50	187	3.74	4	1.01
Question 3	50	207	4.14	4	0.73
Question 4	50	200	4.00	4	0.86
Question 5	50	210	4.20	4	0.78
Question 6	50	202	4.04	4	0.88
Question 7	50	173	3.46	4	1.03
Question 8	50	142	2.84	3	1.08
Question 9	50	163	3.26	4	1.07

(Source: Author, 2017)

In the first place, 37 respondents (74%) disagreed with the statement that the selected vendors do not have adequate resources to perform their responsibilities efficiently. The responses had a mean of 3.90, a mode of 4 and a standard deviation of 0.81 clearly indicating that the vendors supporting product manufacturing had adequate resources to efficiently undertake their responsibilities. This is in line with the provisions of RBT and the arguments by Vaxevanou and Konstantopoulos (2014) that the principal firm must assess the capabilities and resources of the agent before entering into an outsourcing relationship.

It was also noted that another thirty-seven respondents (74%) indicated that they did not agree with the statement that GSK has lost its flexibility of responding to customer requirements after contracting third party service providers in its operational functions. The responses to this question had a mean of 3.74, a mode of 4 and a standard deviation of 1.01 indicating that the respondents strongly felt that the statement was not reflective of the prevailing status on product manufacturing performance. This is contrary to the arguments by Lad *et al.* (2012) that the outsourcing of human resources leads to loss of flexibility and responsiveness: without direct

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control of the manufacturing process, the company loses some of its ability to respond to changes in the supply chain like demand fluctuations which are a risk to customer service levels.

Fourty-four respondents (88%) indicated that the quality of product manufacturing had not declined following the adoption of the outsourcing strategy. This response produced a mean of 4.14, a mode of 4 and a standard deviation of 0.73 – clearly indicating that the respondents felt that outsourcing had not led to declining standards in product quality. This is displayed in Table 4.12 below.

Table 4.13

Ser. No.	Response	No. of Respondents	Percentage (%)
1.	Strongly Agree	0	0
2.	Agree	2	4
3.	Neutral	4	8
4.	Disagree	29	58
5.	Strongly Disagree	15	30
	Total	**50**	**100**

(Source: Author, 2017)

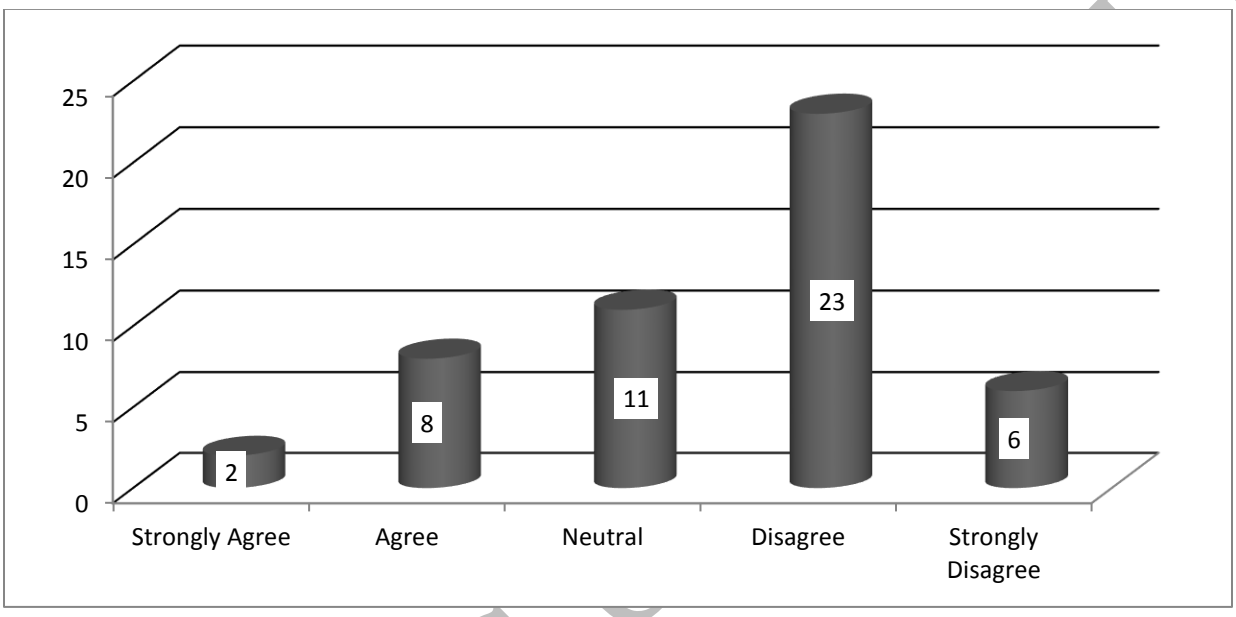
These findings therefore indicate that the performance risk identified by Rubin (2007) was not a prevalent problem at GSK. He had indicated that performance risk affects both the principal and agent in the sense that the principal expects the agent to deliver products of quality and according to specifications within the agreed time-frames.

Thirty-eight respondents (76%) indicated that there were no reported cases of product manufacturing sabotage by third party employees since the introduction of outsourcing whilst three respondents (6%) agreed with the statement. Nine respondents (18%) remained neutral on the issue. These responses had a mean of 4.04, a mode of 4 and a standard deviation of 0.88 – an indication that the respondents did not agree with the assertion of production sabotage by third party staff.

Additionally, twenty-nine respondents (58%) indicated that they disagreed with the statement that some third party employees do not fully understand their responsibilities in relation to

product manufacturing. However, ten respondents (20%) indicated that it was true that some of the third party employees do not fully understand their responsibilities with regards to product manufacturing. A further eleven respondents (22%) neither agreed nor disagreed with the statement. This is presented graphically below.

Figure 4.11



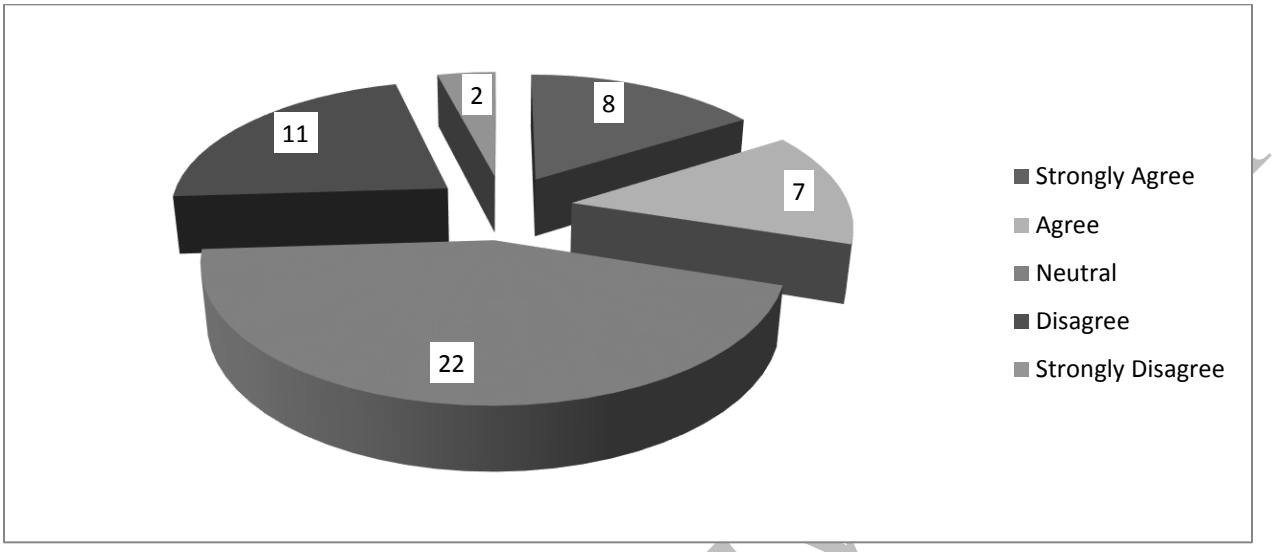
(Source: Author, 2017)

These findings indicate that the vendors supporting product manufacturing at GSK clearly understand their mandate and have supported product manufacturing well. As such, the situation described by Namazi (2013) that problems abide in the agency relationship where the agent's actions are incompatible with the desires of the principal is well-managed at GSK.

Fifteen respondents (30%) indicated that some vendors have not insured the employees deployed at GSK to support product manufacturing. Thirteen respondents (26%) disagreed with this statement. The responses generated a mean of 2.84, a mode of 3 and a standard deviation of 1.08. The responses are summarized in Figure 4.12 below:

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Figure 4.12



(Source: Author, 2017)

The fact that some vendors have not insured some of their employees who work in a factory setting with complicated machinery and equipment poses a risk to the company. It could likely affect manufacturing performance should an incident occur involving any of the uninsured employees by way of lawsuits.

Twelve respondents (24%) agreed with the statement that some vendors have frequently failed to observe medical surveillance of their employees working in GSK's production areas as required by regulation. Twenty-three respondents (46%) did not agree with this statement and a further fifteen respondents (30%) remained neutral regarding the subject as shown in Table 4.13 below. The descriptive statistics – a mean of 3.26, a mode of 4 and a standard deviation of 1.07 – however indicated that this is not a major issue at the plant.

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Table 4.14

Ser. No.	Response	No. of Respondents	Percentage (%)
1.	Strongly Agree	0	0
2.	Agree	2	4
3.	Neutral	4	8
4.	Disagree	29	58
5.	Strongly Disagree	15	30
	Total	**50**	**100**

(Source: Author, 2017)

4.8 Qualitative Data Analysis

The qualitative data collected was analyzed from which themes were drawn as shown in Table 4.14 below:

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Table 4.15

Statements by Respondents	Theme
The third party staff are properly trained before they are deployed to relevant work areas.	Training.
The reduction in percentage of temporary staff compared to permanent staff.	Improvement of product manufacturing performance.
Loss or delays of raw materials to GSK Limited leads to reschedule of plans (production) and working over weekends to meet targets. This becomes expensive to the company.	Influence of materials management to production performance.
Better forecast / It can be made better through improved contractual terms and performance management / KPIs / proper Service Level Agreements (SLAs).	Recommended improvements to materials management.
The outsourced staff have no attachment, demotivated, hence no commitment / cases of negligence leading to customer complaints.	Influence of using contracted staff on product manufacturing performance.
Demotivation / Low staff morale due to poor remuneration / low incomes and lack of commitment / Communication failure / poor working environment.	Causes of outsourced staff absenteeism and turn-over.
Outsourced staff have good skills due to frequent training by GSK staff but this advantage is lowered by high staff turnover.	Outsourced staff competencies.
Some vendors lack the competence levels required by GSK.	Vendor capacity in supporting manufacturing performance.
Inadequate because they are assessed by Procurement function only.	Vendor management processes.
Avoid single-sourcing / database of approved suppliers / minimum two suppliers for essential materials.	Business Continuity Plans (BCP) to guard against supplier dependency
Challenges caused by system issues not outsourced staff.	Product rejection and recalls.
Exposure to quality, safety, security, operation and supply risks if critical manufacturing processes are left unsupervised and unmonitored.	Risks posed by outsourcing to product manufacturing performance.

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4.8.1 Training

Generally, it was noted that most of the respondents felt that the outsourced staff played a key complementary role to the GSK staff with the respondents indicating that GSK had invested a lot in training to ensure that the outsourced staff played their roles effectively. However, some of the respondents indicated that the outsourced staff have no ownership of their jobs, do not understand the operations and processes well and that they do not feel responsible for missed production targets. These findings tie in with the arguments of Adegbami *et al.* (2014) on the influence of a demoralized staff on performance.

4.8.2 Improving Product Manufacturing Performance

The respondents felt that there was a continuous need for on-the-job training, coaching or multi-skilling of the outsourced staff so that all the production lines have competent staff available at all times. They further suggested that experienced outsourced employees should be sponsored for technical education by GSK. Other respondents indicated that the production environment could be improved by aligning production to the availability of packaging and raw materials as well as further collaboration between the planning and the operations teams. Other suggestions that were noted as strategies to improve production performance were motivation which could be achieved through rewarding of good performance by GSK for the contracted staff, empowerment in terms of decision-making authority and improvement of wages. These findings are in tandem with the recommendations by Enyinda *et al.* (2009) and Rodrigo (2016) on the essence of monitoring supplier performance.

4.8.3 Influence of Materials Management to Production Performance

Some of the respondents indicated that the loss and/or delays of raw materials had led to missed production targets, failure to meet CTP and CTS. Another group of respondents indicated that the factor led to lost time in production, change of production plans and loss of man hours. Other respondents noted that loss and/or delays in the delivery of raw materials led to waste as resources remained idle leading to low overall equipment efficiency (OEE). This supports the drift by Mubarik *et al.* (2012) who indicate that outsourcing materials management leads to an ineffective delivery of raw materials. It was also reported that loss or delays of raw materials led to losses in sales thereby contributing to financial losses.

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The financial losses also feature in increased storage and demurrage charges and the lost business opportunities. Other respondents indicated that loss and/or delay of raw materials contributed to an OOS situation and subsequent losses to the business since customers would become dissatisfied and look for alternative products. Some respondents also reported that loss and/or delay in the delivery of raw materials led to increases in the cost of production when scheduled production plans were shelved and performed during weekends as this attracted overtime.

4.8.4 Recommendations to Improve Materials Management

The respondents made a variety of recommendations on how the materials management for GSK could be made better. The recommendations included closer collaboration between GSK and the transport agents, improved contractual terms and performance management, cancellation of transport outsourcing contracts, dedication of some GSK staff to monitor the delivery of raw materials by outsourced agents, improvement of GSK forecasting, introduction of penalties for late deliveries and increasing the number of trucks and/or transport agents.

4.8.5 Influence of Using Outsourced Employees on Product Manufacturing Performance

Respondents gave varied responses regarding the influence of using outsourced employees in product manufacturing. On the one hand, they indicated that outsourced labour was a cost-effective way to manage production labour. However, other respondents indicated that it also had negative influences. The latter indicated that the outsourced staff have little attachment and commitment to their jobs and are also demotivated. Others indicated that the outsourced employees are not easy to motivate, a situation which is a risk to quality and good practices. This therefore necessitated closer supervision by the GSK permanent team. It was also reported that the outsourced employees turn-over negatively influenced product manufacturing performance because GSK caters for training costs with no return on investment (ROI). These findings support the argument by Adegbami *et al*. (2014) on reduced performance by outsourced employees who are demotivated by poor treatment by employers.

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4.8.6 Causes of Outsourced Staff Absenteeism and Turn-over

Those who reported staff turn-over and absenteeism in their areas of jurisdiction attributed the same to low morale, inadequate remuneration, lack of job security / casual status, alcohol abuse and peer pressure as well as the search for greener pastures. Other factors cited were sickness, poor management by employers and excessive work leading to fatigue.

4.8.7 Outsourced Staff Competence

Most of the respondents indicated that they felt that the outsourced employees have the requisite skills to competently perform their duties in support of product manufacturing. They indicated that some of the outsourced employees were diploma and degree holders. However, some of the respondents indicated that the outsourced staff were not competent in supporting product manufacturing which affected performance.

4.8.8 Outsourced Vendor Capacity

Many of the respondents were of the opinion that most of the vendors contracted to support production activities were competent to carry out their work because due diligence was done before the contracts were awarded. They further added that the vendors were awarded contracts depending on their area of expertise and therefore played key roles in assisting GSK to achieve its KPIs. However, some respondents indicated that some of the vendors lacked the competence levels required by GSK and that some of the vendors were unable to meet the stipulated lead times occasioning stoppage of production. Some of such poor performers were noted to have been deregistered. The latter category of respondents further reported that some of the vendors did not disclose all the required information during the due diligence process but only disclosed that information which was favorable to them in winning the contract. This has, in turn, negatively affected product manufacturing performance.

4.8.9 Vendor Management Processes

On the matter of vendor management processes, many of the respondents reported that the processes were adequate. However, others indicated that they are deficient. The former indicated that there were policy guidelines for the selection of vendors which were also supplemented by independent and global audits. Regular review meetings with the service providers were also

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noted to be a key factor in the monitoring process. However, there was a note that even with these guidelines and policies in place, GSK still had some issues with some suppliers. The latter category of respondents reported that vendor assessment was only done by the Procurement team alone without the involvement of SMEs. They also indicated that the due diligence tended to focus more on the vendors' financial capability and ABAC thereby losing key focus on vendor capacity on performance. This has led to some cases where vendors underperform leading to termination of their contracts thereby negatively influencing product manufacturing performance. This proves right the arguments of Rodrigo (2016) that when the principal firm enters into contracts without clarity of mind on the responsibilities of the parties involved leading to a chaotic situation, duplication of roles, waste of money and effort, and poor supplier relationship management.

4.8.10 Business Continuity Plans

The study further sought to find out what business continuity plans (BCP) had been put in place by GSK to guard against supplier dependency. Some of the respondents indicated that the company had put in place a policy to avoid the single-sourcing of products and services. They further indicated that there were at least two registered suppliers for every service or goods required by the site. Other respondents indicated that critical roles in product manufacturing were assigned to GSK permanent employees. These staff were reported to be responsible for manufacturing planning and other key roles. The third party staff are assigned the operational roles only. It was also reported that the company was currently undertaking a multi-skilling project aimed at training the permanent staff in different areas of product manufacturing to reduce dependence on suppliers. A fourth BCP that GSK had undertaken was the use of monitoring audits and frequent engagements with suppliers. Other respondents stated that GSK was also focused on holding sufficient inventory of products to supply to the market in case there were disputes that arose with third party agents which could negatively influence product manufacturing performance.

4.8.11 Product Rejection and Recalls

Some respondents indicated that they were aware of cases of products which were rejected. A variety of reasons were given regarding the causes of rejection. Among them were machine

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failures, microbial failure due to insufficient cleaning of machines and detected product contamination. However, other respondents indicated that they were not aware of any product rejection after manufacturing as there was thorough observation of GMP rules and regular training of outsourced staff. They, however, noted that there had been frequent customer complaints. This ties in well with Festel *et al.* (2014) arguments that some of the largest pharmaceutical product recalls have been due to inadequate efforts when selecting or monitoring contractors.

The study also sought to find out whether there have been any product recalls at the plant and the attendant reasons thereof. Many respondents indicated that they were not aware of any product recalls from the plant. However, some respondents reported that they were aware of some product recalls at the Nairobi plant during their tenure. The respondents stated that the recalls had been occasioned by a variety of reasons: change of raw materials used in the production of one product, presence of moulds on the product, leaks in the bottles, microbial failure and wrong dosage literature included with the product. Such rejection and recalls were also noted to have negatively influenced manufacturing performance.

4.8.12 Risks Posed by Outsourcing to Product Manufacturing Performance

On the matter of perceived risks to product manufacturing performance at the site, respondents indicated that there was a potential of exposure to quality, safety, security, operation and supply risks if critical manufacturing processes were left to the third party employees unsupervised. They further indicated the need for regular re-training of third party employees due to staff turn-over. Other respondents indicated that owing to poor job security, there was no ownership of the manufacturing processes leading to weak accountability in manufacturing performance. This had led to missed production targets. Other respondents indicated that GSK ran a risk of using contracted staff as they had access to sensitive and confidential data. The respondents further indicated that the same situation was likely to lead to theft or sabotage. It was also reported that some of the outsourced transport agents do not understand the storage conditions of materials during transportation which led to damages. This was more pertinent particularly for the cold chain materials which need to be stored under particular temperature conditions. These findings are in tandem with the contentions of Iqbal and dad (2013) as well as Rodrigo (2016) in relation to the risks of outsourcing to manufacturing performance.

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The study was also interested in assessing whether GSK is likely to achieve its ambitious plan of making drugs available to 80% of the population in Africa by the year 2020 whilst using outsourced resources. Majority of the respondents (60%) indicated that the plan was achievable but there must be close monitoring of the outsourced teams. Additionally, the respondents pointed out that there was need to increase the volumes churned out of the Nairobi plant which would bring better returns thereby enabling the management to hire some of the contracted staff and give them permanent jobs. The respondents also indicated that the plan is achievable because outsourcing will enable the GSK management to focus on strategy deployment while the operational work relating to manufacturing was left to third parties. This would make drugs cheaper and affordable to a larger population because of the reduced operational costs. A few respondents, however, indicated that the plan was too ambitious, too close to the deadline and was likely to be missed. The reasons given for this contention were that the business had not localized the business model to match the economic and political set up in Africa. There was a further indication that the Research and Development Team ought to focus more closely on diseases affecting Africa.

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CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter focuses on the summary of the study findings and the conclusions drawn from the findings. Recommendations are also made on the outsourcing of operational functions at GSK, Nairobi and further research on the subject of outsourcing at GSK, Nairobi. This is done from the perspective that the current study only focused on the influence of outsourcing operational functions to product manufacturing performance.

5.2 Summary of Findings

5.2.1 Materials Management Outsourcing and Product Manufacturing Performance

The study established that GSK had outsourced its materials management to third parties as reported by 90% of the respondents. Additionally, it was also found out that GSK solely relies on these third party transport agents for the transportation of its raw materials. As a result of the deployment of outsourcing in this particular area, GSK has experienced delays in the delivery of raw materials. This negatively influenced product manufacturing performance as respondents indicated that there were times when production stopped owing to the failure of transport agents to deliver raw materials in time. Other respondents also indicated that, at times, production was stopped because raw materials had either been lost and/or damaged en-route or whilst under storage by contracted transporters. The study also found out that some GSK raw materials had been contaminated while being transported or under storage by third party agents.

Though it was a relatively small figure, 30% of the respondents reported that the adoption of the outsourcing strategy in materials management had led to increased lead times. As a result of this, most of the respondents reported that the loss and/or delays of raw materials had led to missed production targets and negatively affected related KPIs including CTP and CTS. This clearly manifested a negative influence on manufacturing performance.

5.2.2 Human Capital Outsourcing and Product Manufacturing Performance

The study's findings established that GSK had outsourced several operational functions and that some of the outsourced staff were deployed directly in product manufacturing. It was further

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established that a higher ratio of outsourced staff was deployed in product manufacturing as compared to the permanent staff.

According to the respondents, the outsourced staff played a key complementary role to the GSK staff. It was established that GSK had invested a lot in the training of the contracted teams supporting product manufacturing. This had served to enhance their capacity in effectively playing their roles. As such, most of the respondents felt that the contracted staff had not negatively influenced DSRFT, CTP and OOS as key performance indicators. The training had also served to enhance adherence to GMP.

Though a majority of the respondents (88%) confirmed that the company had outsourced staff in a variety of functions, most did not agree with the contention that outsourcing of human capital had led to staff casualization. The study also established that the outsourcing of human capital did not lead to the loss of technical expertise as expressed by the respondents.

The study, however, established an area of concern with the outsourcing of human capital. Almost half of the respondents indicated that the outsourced employees were not contented with their pay package. However, even with this information, it was established that staff turn-over and absenteeism were not major problems for the firm. The outsourced staff were also noted to have been observing site safety rules as required. These aspects did not, therefore, negatively influence manufacturing performance.

5.2.3 Vendor Management and Product Manufacturing Performance

It was established that there is a comprehensive due diligence process that is done for new vendors before they are contracted as reported by most of the respondents. Additionally, it was found out that GSK has policies in place of ensuring that vendor performance and monitoring is strictly adhered to. Part of the monitoring process required that the vendors be regularly audited by GSK as indicated by the respondents. Another method used in the monitoring of vendors was regular review meetings. These meetings were aimed at keeping the vendors aligned with GSK production requirements. There was also frequent communication between GSK and its vendors in order to ensure that the two remained in the same trajectory with regards to product manufacturing. This aspect had therefore positively influenced manufacturing performance by keeping vendors aligned with GSK manufacturing requirements.

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5.2.4 Outsourcing Risks and Product Manufacturing Performance

Some of the respondents reported that GSK has faced some quality, compliance and regulatory challenges occasioned by contractor performance while others indicated that the company had received regular customer complaints. Though the number of respondents who reported this were relatively small, these issues cannot be ignored in the highly regulated pharmaceutical industry. The quality of product manufacturing had, however, not degenerated as reported by most of the respondents. Other respondents indicated that there were no reported cases of product manufacturing sabotage by third party employees since the adoption of the outsourcing strategy. On the other hand, 70% of the respondents indicated that the company had faced cases of product pilferage and theft by contracted service provider employees while there were reports that the company had faced manufacturing deviations. These issues had adversely affected product manufacturing performance.

The study further established that outsourcing has had no major influence on the company's flexibility and responsiveness to customer needs after the adoption of the strategy as supported by 64% of the respondents. It was also found out that there had been no major cases of breach of contract as only nine respondents indicated that they were aware of some cases of breach of contract by vendors. It was also established that there were no vendors who had been adjudged bankrupt thereby rendering themselves incapable of performing their part of the contract with GSK. Only eight respondents reported such cases of bankruptcy which had negatively influenced vendor's contracts with GSK. Other respondents (42%) indicated that they were aware of some third party agents whose contracts with GSK had been terminated due to incompetence. These were factors with the potential to negatively influence production performance in the plant. However, with all these facts in mind, 74% of the respondents indicated that the vendors had adequate resources to perform their responsibilities efficiently. Another 64% of the respondents felt that the vendor management processes deployed at GSK were adequate.

The study also established that there were some vendors who had not insured their staff while others had frequently failed to adhere to medical surveillance for their staff working in GSK's production areas as required by regulation. There were also reported cases of product rejection after manufacturing. Among the reasons adduced for the rejection were microbial failure associated with insufficient cleaning of machines and detected product contamination. It is

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important to note at this juncture that the cleaning process is one of the outsourced functions. Other respondents indicated that they were aware of product recalls from the Nairobi plant during their tenure of working at GSK but none of the reasons adduced could be directly linked to outsourced employees.

Finally, the study noted that the GSK employees were very optimistic that the company would achieve its plan of making drugs available to 80% of the African region by the year 2020 whilst at the same time using outsourcing as a strategy. This was supported by 60% of the respondents who indicated that there must be close monitoring of third parties engaged to support product manufacturing. They indicated that outsourcing would enable GSK produce cheaper drugs since the operating costs would be reduced by outsourcing of operational functions. However, three respondents (6%) indicated that the political climate in Africa may not favour such an ambitious plan.

5.3 Conclusions

5.3.1 Materials Management and Product Manufacturing Performance

The study's findings indicated that GSK solely relies on third party agents to transport its raw materials. This has led to supplier dependency with a resultant negative influence on product manufacturing performance. There were reported cases of delays and damages of raw materials whilst en-route or under the storage of third party agents. This, in turn, has negatively affected production plans, has led to increased demurrage charges and over-time costs as production plans are deferred to weekends necessitating the payment of overtime to the contracted employees. It is therefore concluded that the study's findings established that the outsourcing of materials management has negatively influenced product manufacturing performance at the GSK plant in Nairobi.

5.3.2 Human Capital Outsourcing and Product Manufacturing Performance

It is quite evident from the study's findings that GSK has outsourced operational functions to support of product manufacturing. This has enabled the company to concentrate its focus on its core business in line with the postulations of the Core Competencies Theory. However, it was also noted that GSK has a higher ratio of contracted employees compared to the permanent staff

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working in production areas. This is an area of risk as it may drive the company towards supplier dependence in terms of manufacturing performance. Such a risk may lead to loss of control.

It was also established that in order to improve the competence of the contracted employees working in the production areas, GSK has resorted to carrying out training of the said staff. This is an additional cost to the business as espoused in the TCE Theory. The pharmaceutical industry is one that is highly regulated and contracted staff must meet specific training standards before being approved to work in product manufacturing areas. As per the findings of the study, most new employees have not met these standards and GSK has had to incur costs to carry out the trainings internally. The situation is compounded by staff turn-over and absenteeism. Replacement of such staff will also come with a cost as the staff cannot be deployed without the requisite training standards being met. It can therefore be concluded that the outsourcing of human capital has negatively influenced product manufacturing performance in terms of increased training costs to meet the required standards.

The study established that the outsourced staff were not contented with the terms of remuneration. This has led to a situation of low morale, lack of commitment and poor process ownership which may negatively influence manufacturing performance. From this point of view, it was concluded that the outsourcing of contract employees may serve to negatively influence product manufacturing performance at GSK, Nairobi.

5.3.3 Vendor Management and Product Manufacturing Performance

The use of contracted employees to support product manufacturing was not noted to have a major negative influence as it did not negatively influence the achievement of major KPIs – CTP, CTS, DSRFT and OOS. Indeed the strategy has helped the company reduce its operational costs. It can therefore be concluded that vendor management processes have not negatively influenced product manufacturing performance in terms of the achievement of KPIs – CTP, CTS, DSRFT and OOS.

It can further be concluded that GSK has a robust vendor management system which starts with due diligence, followed by monitoring audits and frequent review meetings to keep the vendors aligned with GSK requirements. This has served to build strong relationships with the vendors.

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The matter of information asymmetry propagated by the Agency Theory was also noted to be well-managed in the GSK situation owing to the constant engagement to align with the company requirement in terms of product manufacturing performance.

5.3.4 Risks of Outsourcing and Product Manufacturing Performance

From the study's findings, it can also be concluded that the outsourcing of human capital has introduced an element of risk to GSK. 40% of the respondents indicated that the company had faced some quality, compliance and regulatory challenges associated with contractor performance. 70% of the respondents further indicated that the company had experienced product pilferage and theft. It was also established that some of the vendors had not insured their employees seconded to GSK where product manufacturing is done on sophisticated equipment. Others vendors were also reported to have failed to observe medical surveillance for their employees. These have the potential to negatively influence product manufacturing performance in case of an injury incident involving the uninsured third party employees or product contamination as a result of failure to observe medical surveillance. The company may therefore be staring at lawsuits in the face if this gap is not addressed.

Finally, 60% of the respondents indicated that they were optimistic that GSK would achieve its ambitious plan of attaining 80% reach in terms of supply of drugs to Africa and the LDCs by the year 2020. The major hope behind this optimism is that outsourcing is enabling the company to reduce operational costs which will, in turn, make drugs cheaper thereby enabling the company to reach more patients. However, some noted that the company needs to become cognizant of the African political environment which has remained turbulent in some parts. This may hinder the full attainment of the plan by year 2020 as envisioned.

5.4 Recommendations

Based on the findings of the study and the conclusions arrived at, the following recommendations are made.

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5.4.1 Materials Management

First and foremost, it is recommended that GSK puts in place a strong business continuity plan to ensure that raw materials management is taken care of in case of failure by the outsourced service providers or in case of disputes with the agents. The study established that GSK entirely depends on outsourced transport agents for the transportation of its raw materials which is a major risk to its product manufacturing processes, performance and service delivery to its customers. Other players in the pharmaceutical industry should also adopt a similar approach.

5.4.2 Human Capital

It is recommended that GSK puts in place a plan to reduce the permanent to outsourced staff ratio. The outsourced staff are more than the permanent staff at the production plant. An organization's human capital is part of its core competences which should be leveraged to achieve competitive advantage. Other pharmaceutical firms can also adopt a similar approach.

Secondly, it is recommended that an official training programme be embedded in contracts with outsourced suppliers before they are signed. The study established that GSK undertakes to train most of the outsourced staff in order to ensure the training standards required to deliver credible manufacturing performance whilst observing quality and GMP. The vendors should take up the training costs which are aimed at ensuring that their employees gain the level of competence required to work in GSK's manufacturing areas. Additionally, GSK should also seek to negotiate the terms and conditions of service for the contracted employees and ensure that they are embedded in the contracts of service. Insurance for the contracted staff should also be included in these negotiations. This will guard against the exploitation of contracted staff by their employers leading to a situation where the third party staff are demoralized and perform poorly. The government and other regulatory authorities should also ensure that the outsourced employees are given a fair wage and insured as per the regulatory requirements.

5.3.3 Vendor Management

It is recommended that a multi-functional team be set up to carry out vendor due diligence. The study established that this is currently the jurisdiction of the procurement team. The envisaged due diligence should be expanded to include subject matter experts (SMEs) in various functions.

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These are experts with the capacity to assess the vendor technical capacity and level of expertise before any contract is signed. This is a strategy that should be adopted across the pharmaceutical industry as a whole.

It is further recommended that the due diligence done on the vendors be extended to the contracted staff deployed at GSK before they start working. Background checks on the past performance of outsourced staff will be able to identify any prospective contract employees with criminal backgrounds and protect the company's assets. This is in view of the study findings that 70% of the respondents were aware of cases of product pilferage and theft by contracted employees. Other companies can similarly adopt this strategy.

The Government should also ensure that all employees working in the production facilities are insured and that they undergo regular medical surveillance as per the requirements of the Occupational Safety and Health Act of 2007. This should be replicated for all manufacturing firms and not just the pharmaceutical industry.

5.5 Recommendations for Further Research

This study only focused on the influence of the outsourcing of operational functions to product manufacturing performance at GSK, Nairobi, Kenya. Outsourcing is a wide area of study. Further research is therefore recommended on the influence of outsourcing on other areas – both at GSK and other pharmaceutical firms. This will generate further knowledge which will widen the understanding of outsourcing as an area of study. Further research by academicians is also recommended in other factors that influence product manufacturing performance at GSK other than outsourcing in order for GSK and other companies to fully comprehend the potential threats related to the deployment of outsourcing as a strategy.

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APPENDIX I: ST. PAULS' UNIVERSITY – LETTER OF AUTHORITY

ST. PAUL'S UNIVERSITY

Private Bag 00217 LIMURU, KENYA
Email: bps@spu.ac.ke
Website: www.spu.ac.ke

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(0) 728- 062420
(0) 736- 424440

BOARD OF POSTGRADUATE STUDIES

21st February 2017
National Commission for Science and Technology,
P.O. BOX 30623-00100,
Nairobi.

Dear Sir/Madam,

Re: Recommendation for Bernard Matheka to conduct a Masters of Business Administration (MBA) research.

This letter confirms the above named person is a second (final) year student of the MBA Programme at St. Paul's University.

The final year consists of a major research work leading to a dissertation comprising 20,000 words. The student's selected topic is '*Influence of outsourcing operational functions on product manufacturing; a case of GlaxosmithKline Limited*'.

The research will take place in Nairobi County from February 2017 to May 2017.

Kindly grant this student the required permit.

Yours Faithfully,

Dr. Sammy Githuku
Director, Postgraduate Studies

APPENDIX II: RESEARCH PERMIT FROM NACOSTI



NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone: +254-20-2213471,
2241349,3310571,2219420
Fax: +254-20-318245,318249
Email:dg@nacosti.go.ke
Website: www.nacosti.go.ke
when replying please quote

9th Floor, Utalii House
Uhuru Highway
P.O. Box 30623-00100
NAIROBI-KENYA

Ref: No. **NACOSTI/P/17/92078/16082** Date: **20th April, 2017**

Bernard Kioko Matheka
St. Pauls University
P.O. Private Bag - 00217
LIMURU.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Influence of outsourcing operational functions on product manufacturing: A case of Glaxosmithkline Limited, Nairobi, Kenya,"*** I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **20th April, 2018.**

You are advised to report to **the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

BONIFACE WANYAMA
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nairobi County.

COUNTY COMMISSIONER
NAIROBI COUNTY
P. O. Box 30124-00100, NBI
TEL: 341666

The County Director of Education
Nairobi County.

National Commission for Science, Technology and Innovation is ISO 9001: 2008 Certified

APPENDIX III: LETTER OF REQUEST FOR AUTHORITY TO CARRY OUT RESEARCH AT GSK

Bernard K. Matheka
P.O. Box 571 – 90100
Machakos.
Cell phone: 0724 836 279

Date: _____

The Site Director
GlaxoSmithKline Limited
P.O. Box 78392 – 00507
Nairobi.

Dear Sir,

RE: AUTHORITY TO CARRY OUT RESEARCH AT GLAXOSMITHKLINE LIMITED

I wish to inform you that the Board of Postgraduate Studies at St. Paul's University, Kenya has approved my dissertation proposal whose theme is outlined here-in-below:

"Influence of Outsourcing Operational Functions on Product Manufacturing Performance: A Case of GlaxoSmithKline Limited, Nairobi, Kenya."

In view of the foregoing, I kindly seek your written authority to undertake the research to facilitate the dissertation – which is a partial requirement for the award of a Masters of Business Administration (Strategic Management and Leadership) Degree.

Attached herewith, please find the letter of approval from St. Paul's University.

Thank you in advance.

Yours sincerely,

Bernard K. Matheka

ST. PAUL'S UNIVERSITY

APPENDIX IV: GLAXOSMITHKLINE LIMITED – LETTER OF AUTHORITY

GlaxoSmithKline Limited
Likoni Road
P. O. Box 78392 - 00507
Nairobi, Kenya

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F +254 20 6933 385
M +254 722 830 291/ 733 619 371
www.gsk.com

17th January 2017

Bernard K. Matheka
P.O. Box 571 – 90100
Machakos
Kenya.

Dear Bernard,

REQUEST OF AUTHORITY TO CARRY OUT RESEARCH AT GLAXOSMITHKLINE LIMITED

Your letter dated 17th January 2017 refers.

Authority is hereby granted to allow you to proceed with the research work as per your request. Research title is **"Influence of Outsourcing Operational Functions on Product Manufacturing: A Case of GlaxoSmithKline Limited, Nairobi, Kenya."**

Please share with us the findings of your research upon completion.

Yours sincerely,

Brighton Ochieng

Site Director

CC: Director
Postgraduate Studies
St. Paul's University

Directors:

Brighton Ochieng
George Onyango
Vikash Prasad (Indian)

APPENDIX V: LETTER OF TRANSMITTAL FOR QUESTIONNAIRES

Bernard K. Matheka
P.O. Box 571 – 90100
Machakos.
Cell phone: 0724 836 279

Date: _____

Dear Respondent,

RE: RESEARCH QUESTIONNAIRE

I am a student at St. Paul's University undertaking a research entitled **"The influence of outsourcing operational functions on product manufacturing performance: A case of GlaxoSmithKline Limited, Nairobi, Kenya."** This research has been approved by the GSK management as per the attached letter of authority.

I humbly request that you take some of your valuable time to go through the questionnaire and fill it as truthfully as possible. Please rest assured that all the information gathered by way of this research will be used for academic purposes only and that none of it will be shared with other parties. Your honest feedback is therefore highly anticipated for the purposes of risk analysis.

Any clarifications can be sought from the undersigned through the contacts given here-in-above.

Yours sincerely,

Bernard K. Matheka

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APPENDIX VI: QUESTIONNAIRE

The information gathered through this questionnaire is meant for academic purposes only. It will be treated with utmost confidentiality and will not be distributed to any parties whatsoever.

Please use a tick (√) to indicate the most relevant response to the questions below:

SECTION A: GENERAL INFORMATION

1. Please select category which relates to your position (choose only one) :

SLT	☐	Technical	☐	Technical	☐
Production	☐	Supply & Logistics	☐	Security	☐
Procurement	☐	Technical	☐	Human Resources	☐
Quality Assurance	☐	Facilities and Maintenance	☐		
Environment, Health and Safety	☐	Engineering	☐		

2. Gender: Male ☐ Female ☐

3. Number of years working for GSK

Less than 5	☐	Between 5 – 10	☐
Between 11 – 15	☐	Between 16 – 20	☐
Over 20	☐		

4. Please indicate the level of education attained;

Certificate	☐	Diploma	☐
Bachelor's Degree	☐	Postgraduate Diploma	☐
Masters Degree	☐	PhD.	☐

Other (please specify)_____

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SECTION B: PRODUCT MANUFACTURING PERFORMANCE

5. In the following sections, choose the response that best describes your perception. Use the following key:

   1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree

Description	**1**	**2**	**3**	**4**	**5**
GSK has outsourced employees working in its production plant.					
GSK has a higher ratio of contracted employees than its employees working in production.					
Outsourced employees have in the past contributed to the company not achieving the Domestic Shipment Right First Time (DSRFT) key performance indicator.					
The Conformance to Plan (CTP) in production has regularly not been achieved owing to inadequate support from outsourced employees.					
The company has faced an out of stock situation (OOS) occasioned by use of outsourced employees.					
There are times when production is stopped because contracted employees fail to observe Good Manufacturing Practices (GMP).					
The company has faced an Out of Stock (OOS) situation severally owing to poor performance by contracted teams.					
Contracted employees sometimes do not observe safety regulations leading to injuries and stoppage of production.					
Sometimes production targets not have been met owing to poor understanding of production instructions on the part of contracted employees.					

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6. Would you say that third party employees have effectively played their role in achieving production targets? Please explain your answer.

_____
_____
_____
_____
_____

7. In the spirit of a continuous improvement framework, what measure do you think should be implemented to make the production situation better?

_____
_____
_____
_____
_____

SECTION C: MATERIALS MANAGEMENT

8. In the following sections, choose the response that best describes your perception. Use the following key:

1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree

Description	**1**	**2**	**3**	**4**	**5**
GSK has outsourced the transportation of its raw materials and finished products to third parties.					
GSK has also frequently experienced delays in delivery of raw materials being delivered by third party transport providers.					
GSK solely relies on third party logistics service providers for the delivery of its raw materials.					
There are periods when production cannot go on owing to					

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failure of transportation agents to deliver raw materials in time.					
At times, production is stopped since raw materials have been damaged en-route or whilst in storage by contracted vendors.					
Transport vendors sometimes do not deliver the right quantity of raw materials thereby affecting production plans.					
There is inadequate supervision of the employees of transport vendors leading to complacency.					
Raw materials have been lost during transportation or whilst in storage by contracted employees.					
There are times when raw materials have been contaminated whilst being transported or stored by third party agents.					
There have been increased lead times in the delivery of raw materials since the process was outsourced to third party logistics suppliers.					

9. Please describe the influence of loss and/or delays of raw materials to GlaxoSmithKline Limited.

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10. In your own opinion, do you think the transportation management of GSK raw materials and products could be made better? Please explain your answer.

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SECTION D: HUMAN CAPITAL

11. In the following sections, choose the response that best describes your perception. Use the following key:

    1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree

Description	**1**	**2**	**3**	**4**	**5**
GSK has outsourced employees working in various functions at the site.					
At the initial stages, the outsourcing strategy led to some GSK permanent staff being converted to temporary or casual staff (staff casualization).					
The casualization of staff led to GSK losing technical skills / expertise.					
The outsourced staff deployed in production areas have the requisite capacity and skills to manage production lines.					
The outsourced staff are well remunerated and content with the package.					
The outsourced service providers have faced challenges with staff turn-over and absenteeism.					
Contracted staff have caused safety incidents at the site owing to inadequate training and safety awareness.					
There are no scheduled training programmes for the outsourced staff organized by their employers.					
Poor working conditions of the outsourced staff have contributed to low staff morale.					

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12. Please describe in your own words the influences of using contracted staff in the production lines.

13. If you have noted cases of absenteeism and staff turn-over among the outsourced employees, what would you say are the underlying causes?

14. Do you believe that the outsourced staff working for GSK to support production activities have the requisite skills to competently perform their duties?

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SECTION E: VENDOR MANAGEMENT

15. In the following sections, choose the response that best describes your perception. Use the following key:

    1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree

Description	**1**	**2**	**3**	**4**	**5**
GSK undertakes comprehensive due diligence before contracting third party service providers.					
GSK has methods of measuring and monitoring outsourced contractor performance.					
Contracted service providers regularly achieve the Key Performance Indicators (KPIs) set out for them.					
The company has faced some quality, compliance and regulatory challenges owing to contractor performance.					
The company has regularly faced customer complaints resulting from contractor performance.					
GSK regularly audits its third party suppliers					
GSK no longer has the flexibility and responsiveness to customer needs it had before the outsourcing process.					
There have been cases of product pilferage and theft by contracted service provider employees.					
The company has regularly faced manufacturing deviations.					
All third party service providers observe Good Manufacturing Practices (GMP) in the production areas.					
GSK holds regular review meetings with third party suppliers in order to keep them aligned with GSK requirements.					
There is frequent communication between GSK and the third party suppliers to ensure proper delivery of GSK production targets.					
There have been cases of breach of contract by third party					

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suppliers.					
Some vendors have been adjudged bankrupt and have withdrawn from the contracts with GSK.					
The contracts for some vendors have been terminated owing to incompetence.					

16. In your own assessment, do you believe that all the vendors contracted by GSK to support production are competent enough in the responsibilities assigned to them?

17. Would you say that the vendor management processes used by GSK in the production areas are adequate? Please explain your answer.

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SECTION E: RISKS TO PRODUCTION

18. In the following sections, choose the response that best describes your perception. Use the following key:

    1. Strongly agree 2. Agree 3. Neutral 4. Disagree 5. Strongly disagree

Description	**1**	**2**	**3**	**4**	**5**
The selected vendors supporting production do not have adequate resources to undertake their responsibilities efficiently					
GSK has lost its flexibility in customer service after contracting third party service providers.					
The quality of product manufacturing has gone down with the introduction of third party employees in production.					
The third party employees have frequently failed to adhere by safety rules at the workplace.					
GSK has faced lawsuits occasioned by workplace injuries since the introduction of third party service providers.					
There have been cases of production sabotage by third party employees.					
Some contractor employees do not fully understand their responsibilities in relation to product manufacturing.					
Some vendors have not insured their employees deployed in GSK Production areas.					
Some vendors have frequently failed to observe medical surveillance of their employees working in GSK's production areas as required by law.					

19. Please highlight the business continuity measures that GSK has put in place to guard against supplier dependency.

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20. Has the company ever faced a situation where products were declared unfit for human consumption after production? Please explain the underlying circumstances.

21. Have there been any product recalls from the Nairobi plant? Kindly explain the cause, if there have been any recalls?

22. Please make any additional comments on your perception of the risks posed by the outsourcing of functions to product manufacturing at the GSK site in Nairobi.

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23. In your opinion, would you say that GSK will achieve its plan of making drugs available to 80% of the population in Africa by the year 2020 whilst using outsourced teams as the case in GSK Nairobi? Please give reasons for your answer.

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Thank you much for taking your precious time to fill out this questionnaire and be part of the research. This is highly appreciated.

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