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**THE EFFECTS OF BUSINESS PROCESS OUTSOURCING PRACTICES ON THE
OPERATIONAL PERFORMANCE OF LOCAL MANUFACTURING COMPANIES IN
NAIROBI COUNTY**

JULIA MULLI

MCOM/089482



**SUBMITTED IN FULFILMENT OF THE REQUIREMENTS OF THE AWARD OF MASTER
OF COMMERCE DEGREE**



STRATHMORE UNIVERSITY BUSINESS SCHOOL

July 2021

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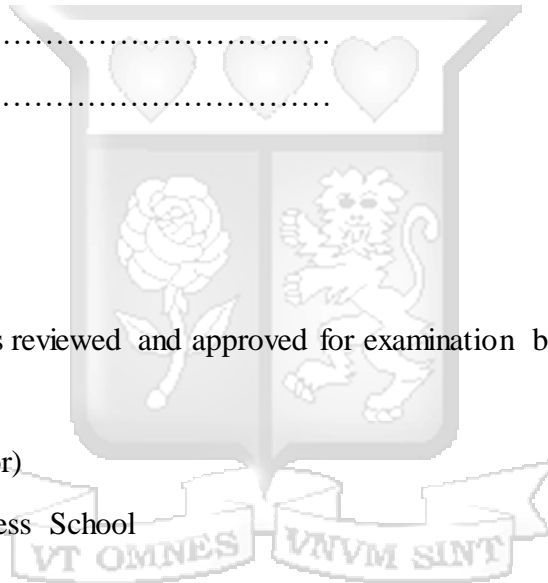
Approval

The thesis of Julia Mulli was reviewed and approved for examination by the following:

Dr. Hellen Otieno (Supervisor)
Strathmore University Business School

Dr. George Njenga
Executive Dean
Strathmore University Business School.

Dr. Bernard Shibwabo
Director, Office of Graduate Studies



ABSTRACT

Given the operational performance challenges faced by manufacturing firms in Kenya, there was a need for a study to evaluate whether business process outsourcing practices can aid in enhancing operational performance of manufacturing firms. The study therefore sought to determine the effect of business process outsourcing practices on the operational performance of local manufacturing companies in Nairobi. The study was based on the transaction cost theory, the resource-based view theory and the core competency theory. The philosophical framework underpinning the study was the positivism approach. Descriptive survey design was adopted in the research. The population of the study was local manufacturing companies in Nairobi County. There are 341 local manufacturing companies in Nairobi (KAM,2016).The sample size was 184 and the study adopted simple random sampling to pick the 184 companies that took part in the study. The study used primary data that was obtained through a self-administered questionnaire. The questionnaire comprised of closed-ended questions. After the field survey, the raw data was coded and then entered into an MS Excel spreadsheet. Then the complete data were keyed into statistical package for the social sciences software for descriptive, correlation analysis and regression analysis were performed. The study established that primary activities were outsourced as evidenced by an average mean score tending towards agreement. Accounting and finance activities outsourcing was less practiced by local manufacturing companies with a few firms preparing not to outsource their accounting and finance activities as evidenced by average score tending towards disagreement. The study also established that back-office activities were highly outsourced as evidenced by average score tending towards agreement with statements. In addition, ANOVA showed that, first, primary activities outsourcing has a statistically insignificant effect on operational performance of local manufacturing companies in Nairobi County as given by p-value greater than 0.05 level of significance. Secondly, that accounting and finance activities outsourcing has a statistically significant effect on the operational performance of local manufacturing companies in Nairobi County as given by p-value less than 0.05 level of significance. Lastly, back-office activities outsourcing had a statistically significant effect on the operational performance of local manufacturing companies in Nairobi as given by p-value less than 0.05 level of significance. Finally, regarding the joint effect of primary, accounting & finance and back-office activities outsourcing on operational performance, R^2 revealed that primary, accounting & finance and back-office activities outsourcing explained thirty four point five percent of variation on operational performance of local manufacturing companies in Nairobi County. In addition, the ANOVA showed that primary, accounting & finance and back-office activities outsourcing on the operational performance of local manufacturing companies in Nairobi was statistically significant given by p-value less than 0.05 level of significance. The study concluded that business process outsourcing practices have a major influence on the operational performance of local manufacturing companies in Nairobi and recommend that top management of manufacturing firms in Nairobi to continue outsourcing company activities to improve operational performance and especially should outsourcing of back-office activities given its strong impact on operational performance. The research was based on local manufacturing companies in Nairobi County and the findings may not be applicable to other manufacturing firms outside Nairobi. Finally, the study focused on only three business process outsourcing practices, namely primary activities outsourcing, accounting and finance activities outsourcing, and back-office activities outsourcing. There are more than three business process outsourcing practices.

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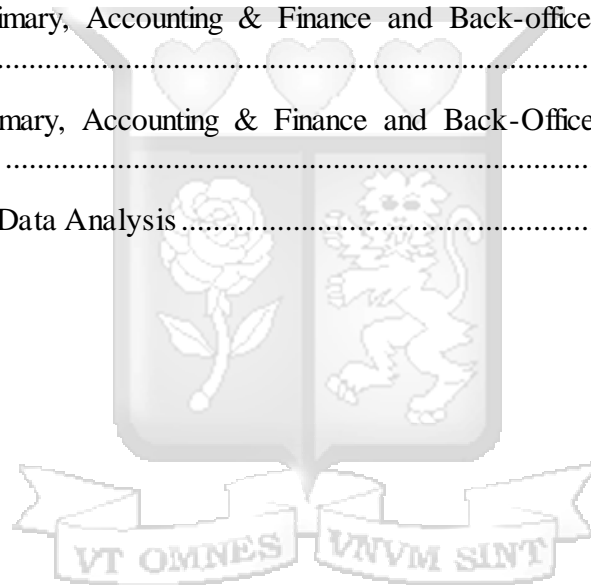
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ACKNOWLEDGEMENT

My sincere gratitude to my supervisor, Dr. Hellen Otieno for her constant guidance and supervision as well as for imparting her knowledge and expertise in this study. I am very thankful for her patience throughout the whole period of the study.

Much appreciation to my family as well for their never-ending encouragement and confidence in me as I did the study. They were my greatest cheerleader



DEDICATION

To GOD for HIS grace, favour and many blessings.

To my parents for their unending love, support and prayers

To my husband, for being there for me through it all



INTRODUCTION

1.1 Background of Study

Outsourcing was initially a preferred option for small businesses but in the recent years it has become a solution for medium and large firms. The outsourcing process has an elaborate structure and comprises of diverse operations and sub-operations (Agburu, Anza & Iyortsuun, 2017). Outsourcing has been approached by different theories to help the scholars grasp the type of activities under outsourcing, and to help companies undertake the processes successfully (Kamal, 2019). Diverse writers have noted several theories that try to interpret the outsourcing concept (Gottschalk & Solli-Sæther, 2005). Some of the theories include transaction cost economics theory, resource-based theory, relational view theory, core competency theory, knowledge-based theory, agency theory all to try to explain the outsourcing phenomenon (Meixell, Kenyon & Westfall, 2014).

As many as there are theories explaining the outsourcing concept, so are there various definitions of outsourcing by various authors. Hence, to avoid confusion, the study looked at outsourcing as defined by various authors and finally, the definition adopted in this study. Hand field (2006) defined outsourcing as the key application of external resources to carry out functions initially performed by internal employees (Hand field, 2006). Sharpe (1997) defined outsourcing as handing over to a supplier those activities outside the organization's chosen core competencies. Kotler (2003) defined outsourcing as a business strategy whereby a company hires an independent party outside the company to do some of its non-core company work. According to Overby 2007, outsourcing is contracting out a process, such as product design or manufacturing, to an external service provider. This entails transferring control and/or everyday handling of a whole or part of a business function to an external service provider. Raiborn, Janet and Marc (2009) describe business process outsourcing as handing over of functions previously performed in-house to an external firm. This involves transferring of planning, administration, and development of functions to an independent external party. Espino-Rodríguez and Padrón-Robaina (2006) on the other hand defined business process outsourcing as: "A strategic decision that entails the external contracting of certain non-strategic activities or business processes necessary for producing goods or the provision of

services, through agreements or contracts with higher capability firms so that they may undertake those activities or business processes to improve competitive advantage.” From the various definitions discussed, there is a consensus among the various authors that outsourcing can be described as the transfer of activities that were previously conducted in house to a third party. This is the definition to be adopted in this study as it captures the primary concept of outsourcing.

The motivation to outsource is majorly driven by the company’s need to focus on its core competencies. Companies can re-direct scarce resources on product development (Woodall, Gourlay & Short, 2002). The business areas most probable to be outsourced are support functions, or back-office activities, which, while essential for operational purposes, may not be of significant concern to clients (Hale, 2006). By outsourcing, organizations are motivated by a desire to secure direct benefits, indirect benefits, or a combination of these. Direct benefits are realized where outsourcing companies provide the same or better service for the same or less cost than could be achieved if the process was done in-house. If this is not possible, then services would be retained in-house unless significant indirect benefits are obtained. These indirect benefits arise if opportunity benefits can be achieved by reapplying scarce resources liberated by outsourcing to more productive or competitive functions retained by the firm (Autor, 2003).

Kotabe Mol, Murray and Parente (2012) noted a shift towards external cooperation and networking outside the company. This has become vital to be competitive locally and internationally. One of the practices is to apply their resources on core competencies and delegate their support functions to outside suppliers or to outsource them. Business process outsourcing is one strategy to help in reducing costs as well as improving organization performance (Smith, Vozikis & Varaksina, 2006). Managers deciding whether to make or buy will start with the end products and look upstream to the efficiencies of the supply chain and downstream towards distribution and customers. Managers then chose the process to outsource from the upstream processes as well as from the downstream processes. An evaluation of the supplier’s competencies is, according to the core competencies theory, the paramount factor that ascertains the success of the outsourcing arrangement. This theory further asserts that after

companies outsource their non-core activities to specialist organizations, they may better use the released resources to strengthen their most value-creating activities and consequently improve their operational performance (Prahalad & Hamel, 1990).

Bustinza, Arias and Gutierrez (2010) argue that business process outsourcing allows companies to concentrate on their primary competencies by moving limited resources to reinforce their core products or services and to strategically use external parties to undertake tasks and duties that initially were performed internally. Firms normally have three processes: core processes; these give a strategic advantage, critical non-core processes; they are essential but not competitive differentiators and non-core non-critical processes, they are required to make the business operating environment work. Positive attributes only accrue to a well-organized, applied, and managed outsourcing plan. Most companies are unaware of the dedication and discipline it takes to achieve significant gains from outsourcing. Companies do not realize the effects on their processes, tools, people and methods as they opt for outsourcing. This consequently results in outsourcing that are unproductive rather than beneficial experiences. Some organizations have outsourced application development, legacy systems maintenance and business processes for a long time and still struggle to evaluate reduction costs, service levels and customer satisfaction (Power, M. (2006).

Outsourcing could pose various challenges to the organizations. This could be loss of control of the outsourced services, dependence on suppliers, loss of confidentiality of important information which may land in the hands of competitors, poor quality of certain products such as spare parts and outsourcing service providers company' problems spilling over to the outsourcing company for example cases of staff strikes (Maku & Iravo, 2013). It is, however, an effective business strategy that involves a paradigm shift in the way global business is carried out. When implemented properly, outsourcing delivers advantages such as cost savings, the ability to concentrate on core competencies, increased quality, and enhanced expertise, reduce time to market (Maku & Iravo, 2013).

A company normally chooses to keep control over processes that are paramount and essential and outsource those that are crucial but secondary. In Kenya, many companies choose to adopt

outsourcing of goods and services to external partners due to the advantages realized from this like reduced costs to the companies, customer satisfaction and above all because outsourcing releases management to handle more critical issues by handing over the secondary duties to external service providers (Peterson, Michael & Oliver, 2013). The Government of Kenya, in its Vision 2030, attached recognition to business process outsourcing (BPO) by identifying it as one of the critical six sectors of the economic pillar. The Vision categorizes BPO among the economic development programs through which the government intends to explore to increase its Gross Domestic Product (GDP). To make Kenya a leading BPO destination, the government pledges to create a conducive and enabling environment whereby stand-alone operations or joint ventures will thrive hence make the country more attractive to investors (Jane, Aosa, Awino & Njihia, 2018).

1.1.1 Business Process Outsourcing Practices

Business process outsourcing practices can be categorized according to the location or by the types of services being outsourced. The researcher's primary area of focus was the outsourcing of various business activities in the local manufacturing companies in Nairobi County. Gilley and Rasheed (2000) categorized outsourcing as peripheral activities (less strategically relevant activities) and core activities. By peeling off layers of peripheral tasks and shifting their production to higher focused, specialist organizations, firms can see the enhanced performance (Ortigoza & Monroy, 2012). Reducing peripheral activities allows companies to concentrate on those operations they do best. This increased emphasis on core competencies could substantially increase a company's performance as the company becomes more innovative and agile in its core domain. Outsourcing of secondary activities may also substantially enhance the quality of those activities (Chongvilaivan, & Riyanto, 2009).

Core outsourcing, on the other hand, may lead to declining innovation (Kotabe, 1990) and eventual competition from suppliers (Bettis et al., 1992; Prahalad & Hamel, 1990; Quinn, 1992) resulting in reduced firm performance. Core activities are the vital, defining functions of a company. If the company handed over those functions to contractors, it would be creating a competitor or dissolving itself. Therefore, it is proposed that firms outsourcing activities near

strategic core will achieve lower levels of performance relative to firms that retain tight control over these activities (Gilley & Rasheed, 2000).

Leavy (2004) took a different approach and explored four different types of business process outsourcing practices, namely, first, scale without mass; where an organization decides to outsource a significant portion, for example, of production. Leavy (2004) argued that this approach aids to decrease the number of employees hence cutting costs without disrupting the company's drive in the marketplace. Secondly, Leavy (2004) looked at disruptive innovation. This is where a company creates an entirely new unit or product below the prevailing market prices and dominates the markets as the new unit or product expands. This way, the company can achieve a lower price point through outsourcing as it reduces costs. Thirdly, Leavy (2004) looked at focus. This is where companies hire 'best in class' companies to perform routine business functions (peripheral activities) and then focus corporate resources on key/core activities in their value chain; and lastly, strategic repositioning. This is the process of changing of functions within an institution to positively affect how a company serves and competes in its markets. An organization can choose strategic repositioning to get a competitive advantage in the industry.

More relevant to this study is the business process outsourcing practices as identified by Anders and Bjorn (2015). They examined business process outsourcing activities among small manufacturing firms in Sweden (less than 50 employees). They found they have four basic business process outsourcing activities, namely primary activities, accounting activities, back-office activities and support activities. The researcher heavily relied on the categorization as mentioned above of business process outsourcing activities to come up with the categorization for this study, namely primary activities outsourcing, accounting and finance activities outsourcing and back-office activities outsourcing. This is because the researcher was keen to establish whether the local manufacturing companies in Nairobi County outsourced their core activities or their non-core activities. Primary activities represent the core activities whereas the accounting, finance and back-office activities represent the non-core activities. Hence the Anders and Bjorn (2015) categorization supported the researcher's intention.

The decision or motivation to adopt any of the above-mentioned business outsourcing practice or practices is based on what the organization seeks to achieve during outsourcing and after the outsourcing process or arrangement. Kroes and Ghosh (2010) developed a set of outsourcing decision factors and categorized them into cost-related outsourcing drivers, flexibility related outsourcing drivers, innovative related outsourcing drivers, quality-related outsourcing drivers and time-related outsourcing drivers. Burdon and Bhalla (2015) categorized the outsourcing decision factors into *primary* benefits (reducing costs, enhancing reliability, and improving quality), *secondary* benefits (flexibility to changes, focus on core competencies and achieving innovation) and *nice-to-have* benefits (understanding of business objectives, improving customer relations, improving labor relations and increasing speed to market).

1.1.2 Operational Performance

Performance can be defined a set of financial and non-financial measures, which provide information on the level of achievement of objectives and results (Kaplan & Norton, 1992). Organizational performance, according to Cho & Dansereau (2010), is the performance of an organization in comparison to its targets and goals. Also, Tomal & Jones (2015) define organizational performance as the definite outcomes or results of a company as evaluated against the firm's expected targets. Venkatraman and Ramanujam (1986) argued that business performance can be analyzed as financial performance and operational performance. The financial performance examines indicators such as growth of sales, earnings per share, profitability (shown by the return on investment, return on sale and return on equity ratios) etc. Operational performance examines indicators such as market penetration, marketing effectiveness, product innovation, marketing effectiveness, product quality, technological efficiency, and technological efficiency, etc.

Companies in the past focussed on the use of financial performance measures as a base of performance measurement and evaluation purposes. However, accounting researchers (Nielsen, Mitchell & Nørreklit (2015) criticized the sole reliance on financial performance measures. Consequently, firms began to incorporate key non-financial measures within their performance measurement systems to provide management with the appropriate information about the

overall firm position (Speckbacher, Bischof & Pfeiffer 2003). Venkatraman and Ramanujam (1986) advocate for the adoption of operational performance indicators by companies (e.g., product quality and market share). They argue that the inclusion of operational performance ensures companies to move beyond the 'black box' approach that is characterized by the exclusive use of financial indicators and concentrates on those critical operational success elements that might lead to financial performance.

Kaplan and Norton (1992) argued that the traditional measures of financial performance are not applicable in today's business environment and instead, operational dimensions of management are required when dealing with internal processes, customer satisfaction and tasks aimed at growth and innovation in the company, which lead to future financial gains. Priem and Butler (2001) add on to this by arguing that evaluating is much better than quantifying as it includes qualitative as well as quantitative measures.

A clear-cut structure of operational performance measures is a strong way of prioritizing company goals and will assist in accomplishing the organization's targets (Karani, 2018). Indicators of efficient operational performance include lead-time performance, customer loyalty, improved financial performance, improved responsiveness, innovation, improvements in product/process design, quality products and reduction in excess inventory levels (Croom & Johnson, 2003). Operational performance is the arrangement of various business units within a company to ensure the units are help the company to achieve a centralized set of goals. This is done by reviewing and optimizing the operations of the business. Efficient and effective operational performance is expected to improve a companies' competitive advantage through cost, price, inventory levels, quality, time to market, delivery dependability, product innovation, customer lead times, delivery time and inventory levels (Ngatia, 2013).

Five primary operational performance objectives are believed to be applicable and relevant to all types of operations (Slack, Jones, and Johnson, 2013). These all-pervasive operational performance goals are quality, speed, dependability, flexibility, and cost. These performance indicators mean different things to different operations. The researcher chose to pick from these operational performance objectives as they apply to all types of operations across various

companies (Slack, Jones, and Johnson, 2013) and the manufacturing companies can easily evaluate their operations against these performance indicators.

In this research, the measures of operational performance are cost efficiency, flexibility, and innovation. According to Quinn (1992), outsourcing of non-core activities increases the leadership's focus and resource distribution to primary activities. The freed-up resources could be directed towards innovation efforts to strengthen the company's core activities. In the outsourcing relationship, the supplier resources may lead in product or process innovation that may be critical for the future survival of the company (Gotttschalk & Solli-Sæther, 2005) through enabling the client to gain access to emerging technologies, obtain expertise, skills and innovative ideas. It is based on this that innovation has been selected as an operational performance indicator in this study. Croom & Johnson (2003) also listed down innovation as an indicator of efficient operational performance. Closer home, high costs, competition from imports and rigid process are some of the issues highlighted as hindering the achievement of one of the Big 4 2020 agendas (enhancing manufacturing, food security and nutrition, universal health coverage and affordable housing) that feed to the rest, namely enhancing manufacturing. It is based on this that the researcher zeroed in on cost efficiency (high costs), innovation (competition from imports) and flexibility (rigid processes) as the operational performance indicators for this study.

1.1.3 Business Process Outsourcing and Operational Performance

Outsourcing is enticing to a company as it enhances some dimensions of a company's performance (Lilly, Gray & Virick, 2005). Outsourcing is becoming popular and delivering results. Companies now more than ever are outsourcing with no indication that growth will slow down. Results confirm that outsourcing has matured beyond cost savings to become a way for organizations to better access talent and capabilities, gain more flexibility, reinvent their business model and drive innovation and this leads to improvement of operational performance (PWC report, outsourcing comes of age, 2008). Nazeri, Gholami, and Rashidi (2012) support this by arguing their study found that outsourcing could not only lead to a reduction of cost but improved quality, increased flexibility, better financial and non-financial performance and services. These benefits do not however just happen as argued by Bolat, and

Yılmaz (2009). They established that managing the vendor relationship in an outsourcing arrangement is a crucial determinant in the outsourcing process success. When well-managed, outsourcing leads to meaningful improvement in an organization's effectiveness, profitability, continuous improvement, quality, productivity, continuous improvement, social responsibility levels and quality of work-life.

Díaz-Mora (2008) from his study, established a positive link between outsourcing and flexibility as well as in cost reduction. He argues that outsourcing is an approach that enables large companies to reduce their rigidity by gaining flexibility. In a competitive environment where clients expect more and more customized product characteristics, companies have to attain the flexibility to adapt to changes in customer preferences. Hence outsourcing the manufacturing of specific parts or duties is one of the ways to achieve it. On cost efficiency, Carmen found that although the market transaction costs relating with outsourcing production are probably higher when an organization decides on outsourcing, in due time, some of the costs reduce. Consequently, the advantages of producing in-house are dropped.

Glass and Saggi (2001) found that through outsourcing a business can reduce its marginal cost of production, enhance its profitability and produce more significant incentives for innovation. Innovation has an impact on operational performance, as determined by. He found that innovation capability is significant and is positively related to operational performance (productivity, quality). Bosire (2011), who studied the impact of logistics outsourcing on lead-time and customer service among supermarkets in Nairobi, established that outsourcing of logistics services in supermarkets has a direct impact on the turnaround time of delivery of products. The supermarkets that have outsourced logistics services to third parties agreed that the length of time taken to for their products to reach their warehouses has significantly reduced.

On quality, Asiamah (2013) found that there is a statistically significant correlation between outsourcing and quality. His findings show a positive relationship between outsourcing and product or service quality. Meaning that changes in outsourcing will correlate with changes in quality, that is, an increase or decrease in outsourcing significantly influences an increase or

decrease in quality. According to Gilley and Rasheed (2000), although outsourcing might affect the individual functional area in which it occurs, for example, a firm's manufacturing operations may experience cost reductions as a result of outsourcing, or a firm may improve its customer service by shifting it to an outside specialist organization, no business-level performance impact was detected. Meaning there was no effect on the overall performance of the company.

Barthelemy (2003) found that there is an overly optimistic view of outsourcing derived from the fact that most articles about outsourcing are written during the so-called "honeymoon" period (i.e., just before or after the contract is signed). At that time, the reported benefits are not actual but only projected. This leads to a bandwagon phenomenon, where firms outsource to mimic competitors, they expect will be successful with outsourcing. He adds that, while firms may now have the opportunity to outsource, outsourcing initiatives do not necessarily fulfill all their expectations. Jerome further adds that literature on outsourcing has often sought to draw lessons from highly visible companies that have been successful in outsourcing; however, failed outsourcing endeavors are rarely reported because firms are reluctant to publicize them. Firms do not like to report their failures because such information can damage their reputation.

Jiang, Frazier and Prater (2006) add their voice to Jerome's point of view through their study's findings that apart from cost reduction, there was no evidence that outsourcing improves a firm's productivity. They were investigating the impact on outsourcing on operational performance with productivity as one of their measures. The findings from their study suggested that a company's asset productivity is not majorly impacted by outsourcing as presented in extant anecdotal and conceptual research that broadly supports that outsourcing significantly influences a firm's productivity. Tayauova (2012) in his study found that outsourcing could lead a company losing control of outsourced operations, there is a possible threat to security and privacy of information, there could be quality problems of the goods/services outsourced, hidden costs that could lead to increased costs rather than a reduction in costs as anticipated.

1.1.4 Manufacturing Sector in Kenya

Kenya's manufacturing sector mainly consists of food and consumer goods processing companies. Meat and fruit canning, maize and wheat milling, and sugar refining are notable sub-sectors. Kenya manufactures a range of goods namely: chemicals, textiles, ceramics, shoes, beer and soft drinks, cigarettes, soap, machinery, metal products, batteries, plastics, cement, aluminium, steel, glass, rubber, wood, cork, furniture, and leather goods. Real growth in the manufacturing sector averaged 4.1% p.a during 2006-2013, lower than the average annual growth in overall real GDP of 4.6%. Hence, the manufacturing sector's share in output has declined in recent years. The US Department of State asserts that this has exposed a gap in the country's possibility to attain a fully industrialized economy by 2020 (KPMG report, 2014).

According to the Economic survey (2015), Kenya's manufacturing sector contribution to Gross Domestic Product (GDP) has stalled at an average of 10 percent for more than ten years. However, one of the Big 4 development agendas by the National government is to enhance the manufacturing sector and seek to raise the GDP from 10 percent to 20 percent by 2020. Achieving this goal requires addressing some underlying constraints that hinder faster growth. These include high input cost, a decline in an investment portfolio for some activities, transport infrastructure, high cost of credit and stiff competition from imports. The Kenya Economic Update, 2014, compiled by the World Bank Group, points out that manufacturing performance between 2007 and 2014 has been disappointing, with manufacturing growth (3.1 %) significantly lagging overall economic growth (5.0 percent). The sector's contribution to value-added and merchandise exports decreased or stagnated relative to other sectors. There are indications that firms are operating below their capacity and that employment growth is far below potential. Moreover, the relative size of Kenya's manufacturing sector has been stagnant, the sector has lost international competitiveness, and it is struggling with low structural inefficiencies.

Haron and Arul (2012) found that small-sized manufacturing firms in Kenya are the best-performing companies in terms of relative efficiency (83 percent, followed by large-size

manufacturing firms (69 percent) and medium-sized manufacturing firms (68 percent) in that order. Their study aimed at providing a useful reference for manufacturing firms in Kenya in terms of reviewing their efficiency levels, as this would help them to achieve competitiveness and sustainable performance. One of the ways to achieve higher efficiency levels and sustainable performance would be to adopt the outsourcing strategy.

M' mbone (2002), on his extensive survey on outsourcing among manufacturing companies in Nairobi, was able to establish that, indeed, outsourcing is a strategy that is being adopted in the manufacturing industry in Nairobi. He had a sample of 100 and 52 respondents. All the 52 respondents outsourced an activity (ies) / functions in their organizations. He however did not look into the effect of business process outsourcing practices on the operational performance of the organizations. The studies (Magutu, Chirchir & Mulama, 2013; Kinyanjui, 2014) conducted in Kenya on outsourcing in the manufacturing industries have focused on outsourcing the logistics/supply chain or procurement activities. The authors have then looked at how outsourcing the logistics/supply chain improved the specific process and not how it has improved the operational performance of the firm or the overall performance of the firm.

Based on the above studies on the outsourcing concept in manufacturing companies in Kenya and more specifically Nairobi, the studies have not looked at the outsourcing practices adopted by the manufacturing companies, the factors considered while adopting these practices and what impact the adoption of these practices has had on their operational performance. Therefore, the study sought to establish how outsourcing and more specifically the business process outsourcing practices adopted in the manufacturing sector have impacted their operational performance.

1.2 Problem Statement

Outsourcing is more than simply a financial game plan for companies. It has advanced from an efficiency-oriented plan of action to a growth-oriented, value-creating strategy (Rashid, Al-Azad, Mohiuddin & Su, 2014). It allows firms to leverage on third-party service providers and their expertise in the field to perform non-core activities and concentrate on core activities.

Treadway (2002) argues that utilities have no option but to outsource some of their activities as profit margin gets thinner in a challenging business environment. Meixell, Kenyon and Westfall (2014) observed that outsourcing has moved from attending to a single function more efficiently, to reconfiguring a whole process to gain higher shareholder worth across the business. Several firms have taken up outsourcing, while some have not probably because the benefits of adopting the outsourcing strategy may seem too good to be true. Mizra (2012) argues that outsourcing functions have both risk as well as latent requirements hence the outsourcing firms should focus on the needs and requirements of outsourcing such as; the outsourcing practices should encompass with the objectives and goals of the firm along with the outsourcing functioning of firms and so on.

Globally, Strange and Magnani (2017) examined the effect of outsourcing on performance of manufacturing firm. The study revealed mixed findings. On one hand, the study revealed that outsourcing in manufacturing firms could affect financial performance, productivity, efficiency costs, sales, innovations among other. Davis-Sramek et al. (2017) examined the effect of supply chain outsourcing on performance. The study revealed that supply chain-outsourcing effects several aspects of operational performance. Joudaki, Heidari and Geraili (2015) examined the practical implications for those involved in outsourcing investigations in the healthcare sector. The study revealed that the reasons for outsourcing included improved customer service, cost reduction, to ensure healthcare organizations focus on core activities and improved flexibility. The study was a critical review of literature hence there is need to collect data and analyse it. Pradabwong, Braziotis, Tannock and Pawar (2017) evaluated the causal effect link between Business Process Management, Supply Chain Collaboration, collaborative advantages and organisational performance. Findings establishing that business process outsourcing, and supply chain collaboration have joint effect on organisational performance.

Regionally, In Ghana, Sarkodie and Olivia (2020) assessed the causal effect relationship between outsourcing and organisational performance of hotels. The study revealed that outsourcing had led to improved profits, productivity, maintains competitiveness, encourages staff innovation and enables business to concentrate on their core areas. Bestman and Dagogo (2021) evaluated the causal effect relationship between information system outsourcing and productivity of manufacturing companies in Nigeria. The research found out that information

system outsourcing improved productivity of manufacturing companies. Mohammed, Abebe and Wondim (2019) examined university community satisfaction due to outsourcing in selected universities in Ethiopia. Study revealed that outsourcing of non-core led to improved resource management, decreased staff complains, operational and recruitment cost reduced, administrative burden decreased, timely and quality service improved. Ayantoyinbo and Odepidan (2018) evaluated the causal effect relationship between outsourcing of non-core activities on performance of organizations of bottling firms in Nigeria. The results revealed that outsourcing packaging activities, transport activities, reverse logistics and procurement significantly affected the company's performance.

Locally in Kenya, Kisilu and Gatari (2021) evaluated the effect of strategic outsourcing approaches on the performance of manufacturing listed at NSE. The research revealed that strategic business process outsourcing, strategic professional outsourcing and strategic project outsourcing directly affected performance of the manufacturing companies. Kithinji, Gakure and Karanja (2017) investigated the effects of outsourcing on the growth and expansion of SMEs in the dairy sector in Kenya. The research revealed that outsourcing has a positive effect on the growth of the Dairy Enterprises. The aspects of growth impacted by outsourcing included market share, profitability, employment and product base. Chemutai (2019) examined the effect of outsourcing practices on the operational performance of real estate firms in Kenya. The study revealed that outsourcing influences operational performance of real estate firms in terms of costs, quality of work and speed of work. Mwichigi (2015), investigated the association between the key outsourced services, namely finance outsourcing, administrative support outsourcing, technical outsourcing and resourcing outsourcing on operational performance Kenyan Companies in the Energy Sector. The survey concludes that there exists a positive and significant association between financial, resourcing, technical and administration, outsourcing services and operational performance.

Even though there exist a dozen of studies on the association between business outsourcing and performance, knowledge gaps still exist in the literature. First studies done have tended to establish mixed findings with some reporting positive impacts while other reporting negative impacts of outsourcing. Secondly, studies done locally have tended to be based in other sectors including real estate, energy, dairy sector with few studies in manufacturing firms. Finally,

majority of studies have tended not to categorise outsourcing processes into three categories including primary, accounting, finance, and back-office activities. Therefore, this study built on the already existing studies; hence, it sought to establish the impact of business process outsourcing practices on operational performance of local manufacturing companies in Nairobi.

1.3 Research Objectives

The main objective of the study was to determine the impact of business process outsourcing practices on the operational performance of local manufacturing companies in Nairobi. The specific objectives of the study included:

1. To identify the business process outsourcing practices adopted by the local manufacturing companies in Nairobi County.
2. To examine the effects of outsourcing primary activities on the operational performance of local manufacturing companies in Nairobi County.
3. To analyse the effects of outsourcing accounting and finance activities on the operational performance of local manufacturing companies in Nairobi County.
4. To examine the effects of outsourcing back-office activities on the operational performance of local manufacturing companies in Nairobi County.
5. To determine the joint effects of outsourcing primary activities, accounting and finance activities, and back-office activities on the operational performance of local manufacturing companies in Nairobi County.

1.4 Research Questions

To accomplish its objective, the research was guided by the following questions.

1. What business process outsourcing practices do the local manufacturing companies in Nairobi adopt?
2. How does outsourcing of primary activities affect the operational performance of local manufacturing companies in Nairobi County?

3. How does accounting and finance activities outsourcing affect the operational performance of local manufacturing companies in Nairobi County?
4. How does back-office activities outsourcing affect the operational performance of local manufacturing companies in Nairobi County?
5. How does the primary activities outsourcing accounting and finance activities, and back-office activities jointly affect the operational performance of local manufacturing companies in Nairobi County?

1.5 Justification of the study

The benefits of this study will accrue several groups, including policymakers, management, BPO companies and researchers/academia.

Policymakers: the study will be valuable in helping the policymakers make informed decisions as they continue to advocate for business process outsourcing as a means of increasing employment opportunities for the Kenyan ever-increasing workforce as well as opening up Kenyans to global opportunities as the world gradually becomes a global village. **Management of manufacturing companies;** the study will be valuable in helping the management understand the effect of various business process outsourcing practices has on their operational performance. This will enable them to make informed decisions.

Business process outsourcing companies: the study will benefit the BPO companies by providing information on the most and the least preferred business process outsourcing practices by local manufacturing companies in Nairobi County as well as the motivations behind the adoption of practices. The information will be valuable to BPO companies, as it will enable them to look into ways, they can add value to the services that they offer. This information will enable them to know what areas local manufacturing firms in Nairobi County are willing to outsource without reservations. **Researchers/academia:** The study will encourage further exploration in the dynamic field of outsourcing according to the outcome of this study. Additionally, it will add to the existing information on the concept of outsourcing.

1.6 Scope of the Study

The conceptual scope of the study was on effect of business process outsourcing on operational performance. The study focused on three outsourcing categories including primary activities, finance and accounting activities and back-office activities. The geographic scope of the study was local manufacturing companies in Nairobi County in different sectors. The researcher chose the local manufacturing sector as manufacturing stands tall as a key pillar in the big four development agenda by the National Government. The study targeted 341 manufacturing of which 184 were sampled to participate in the study of which one operations manager from each manufacturing firm was selected. The study was carried out over a period of five weeks.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter seeks to explain the theories upon which the study is anchored on and its applicability to the areas upon which the research is focused. It also focuses on previous studies carried out on how business-outsourcing practices influence operational performance. This chapter is presented as follows: section one covers the theories on which the research is anchored upon, part two shows the empirical review based on previous studies and how they are aligned to the study objectives, and the last section covers the conceptual framework, which shows the variables under investigation and their relationships.

2.2 Theoretical Framework

It is widely accepted that any occurrence can be explained through a sequence of theoretical frameworks based upon similar approaches and the outsourcing concept is no exception. Outsourcing comprises of various activities and several structures that are rooted in different theoretical approaches can describe each phenomenon. Some of the theories put across to analyze the outsourcing phenomenon are transaction cost theory, resource-based theory, core competency theory, relational view theory, knowledge-based theory and agency theory. Relevant to this study are the transaction cost theory, the resource-based theory and the core competency theory as explained below.

2.2.1 Transaction Cost Theory

According to transfer costs economics, the foundation of an outsourcing decision is the ability of an organization to ride on the economies of scale while practicing outsourcing (Snieška, Vasiliauskiene 2008). The theory predicts when specific economic tasks can be performed by firms and when they can be performed on the market. Williamson (1979) calls the “in-source” decision the choice of hierarchical governance and the “outsource” decision the choice of market governance. Williamson (1985) recommends that management must weigh the production and transaction costs that come with performing a transaction in their companies

(in-sourcing) against the transaction and production costs related to performing the task in the market (outsourcing).

Williamson (1979) explained two elements that can lead to transaction costs. The first is related to limited rationality, that is, the inability of humans to predict all matters relating to a transaction. The second factor is the risk of opportunism. This is when one party involved in the transaction profits from unexpected changes in circumstances surrounding the trade (including market conditions of supply and demand, technology, and quality) and takes advantage of the situation. The party with the upper hand hence requires contract modifications that brings them an undue advantage.

Analyzing TCE from the point of the decision to “make or buy,” the theory forecasts that management will implement the company’s form that minimizes transaction costs (Van Hoek 2000). This resolve is motivated by economic factors of investments in specialized assets and uncertainties (Williamson, 1996). The higher the capital in specialized assets and the greater the uncertainties surrounding a transaction, the higher the inclination to perform it in-house. In such circumstances, companies choose internal forms of administration with the conviction that they are able to respond to fluctuations in the market more quickly than their suppliers (Williamson, 1985).

The transaction cost theory has, however, been criticized for inadequate definitions of critical terms. There is still no consensus on basic definitions. Derivative issues such as the boundaries of the firm, the nature of ‘hybrids’ and the ‘make-or-buy’ decision are hopelessly clouded by terminological confusion. Even the term ‘transaction cost’ awaits an adequately precise definition. Further theoretical and conceptual work is required (Hodgdon, Hughes & Street, 2011).

The analysis further speculates that individual productive capabilities and amenabilities of individuals are unaffected by any transformation from one form to another. As Mary (1990) mentions, Williamson believes organizations vary, but individuals do not. This leads to a neglect of context-specific processes of individual transformation, development and learning,

as well as an overly narrow focus on presumed invariant human attributes (Hodgdon, Hughes & Street, 2011).

This theory is significant to this study as one of the principal aim of a company seeking to outsource some of its activities is to reduce its costs. The theory argues that the company should outsource those activities for which the sum production and transaction costs are lower if provided by contractor than if performed by the company itself. Where the costs are high, the theory argues that internalizing the transaction within a hierarchy is the appropriate decision. Cost efficiency is one of the measures of operational performance in this study. The researcher referencing to the transaction cost theory sought to establish whether the local manufacturing companies in Nairobi County outsourced low valued transactions and maintained the high valued transactions in-house as argued in the theory and whether the decision taken significantly reduced their costs of operations.

2.2.2 Resource-based theory

The modern resource-based view was developed in 1984 through the work of Wernerfelt (1984). Its central proposition is that if a firm is to achieve a state of sustainable competitive advantage, it must acquire and control valuable, rare, inimitable, and non-substitutable resource and capabilities, plus have the organization in place that can absorb and apply them (Barney, 1991a, 1994) this can be through outsourcing. In Wernerfelt's (1984) assessment, the strategy of a company should be analyzed in terms of placement of its resources and not its products and markets, in contrast to Porter's (1980) evaluation.

The issue of the tasks to be sub-contracted, according to the resource-based theory, has been systematized by Quinn and Hilmer (1994). According to the authors, organizations ought to direct their resources on a set of core competencies in which they have distinct gains over their competitors and offer inimitable value to their clients, hence improving their performance. Also, the writers suggest outsourcing functions that the company has no special competencies in.

The theoretical arguments are anchored on the cooperative experience, related strategies, relational mechanisms for building skills and complementarity of skills. The resource-based

view standpoint on outsourcing permits companies to establish links across boundaries, enabling access to intermediate market skills, that are consequently spread along the company's value chains (Neves, Hamacher & Scavarda, 2014). An organization outsources functions when it is unable to perform in the resources required (Mayer; Salomon, 2006).

Contrarily, some authors perceive the resource-based theory to have some shortcomings. A first critique is that the resource-based view lacks substantial managerial implications or 'operational validity' (Priem & Butler, 2001). It seems to tell managers to develop and obtain valuable, rare, inimitable, and non-substitutable resources and develop an appropriate organization, but it is silent on how this should be done (Connor, 2002). Connor (2002) also maintains that RBV only applies to large companies with substantial market power. He explains, the smaller and nimbler company's sustained competitive advantage cannot be based on their static resources and hence, they fall beyond the bounds of the resource-based view theory.

This theory is relevant to this research as through it, the researcher was able to ascertain if local manufacturing companies in Nairobi County outsource due to lack of necessary resources/expertise to increase its efficiency in operational performance. The researcher found out that some of the local manufacturing companies in Nairobi County would outsource in order to access unique expertise and/or resources that they did not have in-house. The more the essential resources are present, the more the company will attempt to enhance and harness this expertise to obtain a competitive advantage (Prahalad & Hamel, 1990). On the other hand, the lower the strategic value of these resources, the more the company is justified in parting with them and in relying on outsourcing. Organizations rely on outsourcing to access expertise that is lacking in-house, for example, technology, consequently increasing their innovation; innovation is one of the measures of operational performance in this study.

2.2.3 Core Competency Theory

The core competence concept, developed from the resource-based view and is at times known by various names such as organizational competencies, distinctive capabilities or dynamic capabilities, and has been widely studied by researchers (Barney 1986; Itami & Numagami, 1992). This approach suggests that an organization should invest in those activities constituting

core competences and outsource the rest (Prahalad & Hamel 1990; Quinn 1992; Quinn & Hilmer 1994) since the former activities are those providing the organization's growth and direction. In this respect, Prahalad and Hamel (1990) point out that improved performance in a firm can be achieved by focusing on those resources that provide the core competencies. The most effective core competency strategy consists of focusing on a few service operations based on intellect or knowledge in conjunction with essential skills, where the firm can build and maintain the best capabilities and provide a flexible platform for future innovations (Quinn & Hilmer 1994). The core competencies must be strictly linked to the wishes and needs of the customers. Quinn and Hilmer (1994) points out that an organization must not outsource its core competencies and that it must even create systems for their protection.

According to Prahalad and Hamel (1990), an organization's core competencies have three characteristics: they are unique and differentiate an organization from its competitors; they are sustainable and hard to copy, and they may be used in different products and markets. Usually, it is the activities that are defined as non-core that become candidates for outsourcing. There are, however, several problems with this model, at least as it has been used in practice (Berggren and Bengtsson 2004). One problem is to define what is unique and differentiating. A related issue is that the competencies are dynamic. Due to technological and market changes, the core of today may be non-core tomorrow, and vice versa. An additional problem is that the competencies of an organization are systemic by nature, i.e., there is a dependency between the abilities that form the core and those that support the core activities. Meaning that the ability to exploit the core competence further may be damaged if everything outside the core is outsourced. Quinn and Hilmer (1994) argued that the concept of core competencies is problematic because it is difficult to determine a company's short-term and long-term core competencies, and almost impossible to predict what these will be in the future. Jussi and Heikkilä and Cordon (2002) further add that classifying an activity as non-core may lead to serious oversimplification of the complexity of the real business situation.

The present study was anchored on this theory, the core competency theory. This theory complemented the classification of business process outsourcing practices used in this study, that is, primary activities outsourcing, accounting and finance activities outsourcing and back-office activities outsourcing. The researcher was able to establish the activities being

outsourced by the local manufacturing companies in Nairobi County, whether core or non-core and the effect it has had on their operational performance. This theory is applicable to this study as it demonstrates how a firm can improve its operational performance by focusing on what it does best while outsourcing its support activities to third parties. M'mbone's (2002) study on business process outsourcing practices in the manufacturing industry in Nairobi established that most of the companies sampled outsourced their non-core activities. This study, therefore, adds to extant literature by going further to determine whether outsourcing their non-core activities has improved the company's performance, especially their operational performance. The study sought to determine if eighteen years down the line the focus moved from outsourcing non-core activities to outsourcing both core and non-core activities, the business process practices adopted and their impact on a company's operational performance.

2.3 Business Process Outsourcing Practices

There are several types of business process outsourcing practices adopted by different companies, as well as discussed by various researchers and scholars. However in this section, only twenty-four business process outsourcing practices will be reviewed namely: selective outsourcing, total outsourcing (Willcocks & Lacity, 1995); joint venture/strategic alliance outsourcing, multiple supplier outsourcing (Currie & Willcocks, 1998); tactical outsourcing, strategic outsourcing, transformational outsourcing (Embelton & Wright, 1998); individual outsourcing, functional outsourcing, process outsourcing (Greaver & Maurice, 1998); focus, scale without mass, disruptive innovation, strategic repositioning (Leavy, 2004); upstream materials outsourcing, downstream materials outsourcing, service outsourcing (Chongvilaivan, Hur & Riyanto, 2009); offshore outsourcing, onshore outsourcing nearshore outsourcing (Gulamhusein, 2011; King'ori, 2013); back-office activities, primary activities, accounting activities, support activities (Anders & Bjorn, 2015). The practices adopted are dependent on what the company is seeking to achieve.

According to Willcocks and Lacity (1995), firms that contemplate IT sourcing have two fundamental alternatives. They outsource only part of their IT activity, referred to as selective outsourcing, or they can outsource their entire IT activity, referred to as total outsourcing. They empirically found that selective IT outsourcing decisions were more successful (measured as

the achievement of expected cost savings) than total IT outsourcing. More specifically, out of the firms sampled in the US and the UK, 85% of selective outsourcing and 29% of total outsourcing decisions met customers' expected cost savings. The selective and total outsourcing approach can be applied in other functions and not just the IT function. The selective approach is widely recommended as it capitalizes on the strengths of both the client and the vendors.

Currie and Willcocks (1998) identified three kinds of outsourcing practices by a company. They are multiple supplier outsourcing, joint venture/strategic alliance outsourcing and total outsourcing. Total outsourcing is where a company establishes an association with a provider of a service that is identified by the company as a non-core function. The service provider takes full responsibility of delivering the service to the organization. The company then concentrates its energies on its primary business, hence avoids being sidetracked. Multiple supplier outsourcing is where a company uses several suppliers to perform different tasks and duties as needed by the company. The tasks and duties are handled by external parties who can provide the service more efficiently than the firm. Joint venture outsourcing is a close partnership between the company and the external service provider. The company and the outsourcing vendor may choose to have an either a formal or informal partnership. The primary aim is the development of new expertise for the company. There is also emphasis on shared risks and rewards.

Embleton and Wright (1998) classified outsourcing practices into three categories, namely, Tactical outsourcing; this is where a firm gets better service for less investment and management time from an outsourced vendor. The company focuses on constructing the right contract and making the vendors adhere to that contract. The reasons a firm opts for tactical outsourcing are, for example, immediate cost savings. Often, the firm is already not doing well and uses tactical outsourcing as a direct way to address problems. Strategic Outsourcing: this is where a particular department of a company is outsourced to be able to focus on core businesses. Transformational outsourcing is where a company chooses to outsource everything it does not do well, including core businesses. Therefore, the purpose of outsourcing is to redefine the business.

According to Greaver and Maurice (1998), outsourcing practices can be categorized into three activity levels. First, individual outsourcing (outsourcing of specific positions in an organization, e.g., web designer); Secondly, functional outsourcing (this is outsourcing a particular operational area /cost center, e.g., accounts payable); and finally, process outsourcing (this is hiring a service provider to manage an entire business process, not just isolated activities or functions, e.g., IT). Leavy (2004) discusses four types of practices, namely, First, focus (where companies hire ‘best in class’ companies to perform routine business functions and then focus corporate resources on key activities in their value chain). Secondly, scale without mass (this is where an organization decides to outsource a significant portion, for example, of production to help slow the growth in the number of employees without impeding the company’s momentum in the marketplace). Thirdly, disruptive innovation (where companies build a new section at a price below the bottom of the current market and then dominates this section as it expands. They can achieve a lower price point through outsourcing as it reduces costs); and finally, strategic repositioning (how a company serves and competes in its markets).

Outsourcing practices can also be pegged on the specialization of a company’s activities on the chain of production. Companies may undertake in numerous businesses along the chain, extending from upstream production (intermediate inputs) to downstream production (final goods). In contrast, other companies may choose to specialize in either upstream or downstream production. Organizations that specialize in downstream production may choose to outsource their upstream materials, while organizations that specialize in upstream production outsource their downstream materials. Both types of firms may also outsource their support functions, for example, financial services, repair and maintenance services for machinery, information technology services and communication services to concentrate on their primary functions. This can be summarized as upstream materials outsourcing, downstream materials outsourcing and service outsourcing. (Chongvilaivan, Hur & Riyanto, 2009). Outsourcing practices may also be classified as either offshore or onshore or nearshore (Gulamhusein 2011; King’ori 2013). Offshore outsourcing is when the external service provider performs the tasks and duties from another country. Onshore outsourcing is where the

external service provider is based in the same country or city as the client. On the other hand, nearshore outsourcing is when the external contractor(s) are based in a neighbouring country. Lastly, Anders & Bjorn (2015) examined outsourcing practices among small (that is less than 50 employees) manufacturing companies in Sweden and found that they use four outsourcing practices: back-office activities, primary activities, accounting activities, and support activities.

The various studies on outsourcing in the manufacturing sector in Nairobi (M'mbone 2002, Magutu, Chirchir & Mulama, 2013; Kinyanjui, 2014,) do not include a classification of the types of business process outsourcing practices adopted by the manufacturing companies. The researcher wanted to establish the types of business outsourcing practices adopted in the local manufacturing companies in Nairobi. It adopted Anders & Bjorn's (2015) classification of business process outsourcing practices, namely back-office activities, primary activities, accounting and finance activities and support activities. However, the researcher of the current study merged back-office and support activities as one category and hence had three classifications of business process outsourcing practices, namely, primary activities outsourcing, accounting and finance activities outsourcing and back-office activities outsourcing. It is because back-office activities are also support activities and vice versa. The researcher of the current study adopted this categorization since from the data collected, it was easier to differentiate the core/essential activities from the non-essential activities.

2.3.1 Primary activities outsourcing and operational performance.

Firms opt to outsource primary activities within their production chains to external service providers, not due to relative capability considerations, but so that they can maximize their resources to appropriate the rents from the chain while reducing their asset base. The ability to leverage its resources enables the company to have control over its functions, even without equity participation in the subordinate suppliers (Chauhan, Kumar & Sharma, 2015). Nike, the footwear manufacturer is known not own any manufacturing facilities but contracts out the manufacture of its goods to external vendors (Donaghu & Barff, 1990).

Manufacturing companies outsource production activities not only to reduce costs below in-house production but also to improve operational performance in one or more operational areas such as first-pass yield rates, equipment utilization, equipment availability, cycle times, lead-

times, timely delivery rate (Meixell, Kenyon & Westfall, 2014), innovation: outsourcing may aid a company's innovation process and provide the firm with opportunities to tap to outside ideas (Chesbrough & Crowther 2006) and flexibility; Jennings (2002) argue that outsourcing enables companies to avoid the constraints of their own production capacity in meeting changes in the volume of scales.

On the other hand, outsourcing of primary activities (production outsourcing) has adverse implications on the operational performance of companies (Meixell et al., 2014). There isn't any assurances that anticipated reduction in costs will be obtained. There is more and more proof that the cost reductions hoped from outsourcing have been overrated and at times the costs end up increasing after outsourcing (Bryce & Useem, 1998; Cole-Gomolski, 1998; Vining & Globerman, 1999). In addition to the unrealized costs that initially motivated the outsourcing decision, there are also additional indirect and social costs that may be incurred (Gillett, 1994), (Maltz & Ellram, 1997). These indirect costs for example may be transition costs, contract monitoring and oversight, intangibles and contract generation and procurement. On flexibility, where the supplier has purchased special production equipment for the outsourcing company, the positive impact of outsourcing on flexibility may be reduced since there is no longer an opportunity to seek out other suppliers readily. Also, according to Quinn and Hilmer (1994), at times outsourcing a critical component of the company may lead to the loss of strategic flexibility, as the company loses its flexibility to introduce new products or, and processes.

Ortigoza (2012) found that while firms may consider outsourcing innovation, they were not entirely be convinced that another party would be able to capture the complete detailed specifications of a new product accurately. They, therefore, prefer to maintain a broader level of the innovation support internally so as to create new products or procedures to their expected standard and desired specification. Kotabe (1990) argue that outsourcing can lead to reduced innovation by the outsourcer. Outsourcing leads to a loss of long-term research and development. Companies that outsource are likely to lose track of new technological advancements that provide chances for product and process innovations. Additionally, external parties obtain expertise of the product being manufactured and could use the know-how to market the product on their own (Prahalad & Hamel, 1990). Majority of studies examining the

effect of primary activities on performance concentrated on innovation performance with few studies examining other aspects of operational performance, including flexibility and cost efficiency. The current study sought to bridge the gap in the literature by examining other features of operational performance, including flexibility and cost performance, in addition to innovation performance.

2.3.2 Accounting & finance activities outsourcing and operational performance.

Accounting and finance outsourcing is where a company transfers part of its accounting and finance tasks to external vendors or fully owned affiliates to cut costs, to access rare expertise or obtain a competitive advantage over its competitors. Accounting and finance outsourcing includes numerous processes, from highly transactional activities such as, accounts receivable, payroll and accounts payable, to processes that involve more complex degrees of knowledge and analysis such as tax strategy, financial planning and analysis and treasury (Krell, 2007).

According to Reddy and Ramachandran (2008), roughly 30-35 percent of the time in accounting activities is spent in low-end transactional activities. Outsourcing of such monotonous and non-value adding activities allows companies to focus on more strategic activities like financial planning. Also, it provides benefits such as economies of scale, process expertise, access to capital, and access to expensive technology. By outsourcing the accounting activities, the companies can avoid significant investments in human resources, equipment, software, infrastructure, employees' payment, which are involved by an in-house department hence a reduction in costs and major savings. Outsourced accountants can be mentors and advisers on how further to improve strategies and processes leading to beneficial innovations in the accounting and finance processes.

However, there are challenges associated with the outsourcing of accounting and finance activities. A firm may choose to outsource its internal audit function. However, an outside auditing firm for internal audits is significantly more costly than in-house staff since the cost per hour of this service includes the very significant overhead of the firm, as well as the profit margin (Mulat, 2007). Hence, the benefit of cost reduction meant to be derived from the outsourcing of such services is not realized.

Another risk associated with outsourcing of accounting services is that over-dependence on external vendors may lead the erosion of the companies' internal expertise and skills. For example, a firm that is too reliant on external service providers cannot adequately emphasize on domestic capabilities and knowledge development. Consequently, this results to decreased expertise and skills within the firm and the development of unsuitable skill sets (Quinn & Hilmer, 1994). This hinders the company's capacity and ability to innovate. When a firm becomes hugely reliant on a specific service provider, it becomes challenging to go back to insourcing and especially for accounting and finance activities since the performance of such accounting functions requires particular expertise and firm-specific knowledge (Everaert et al., 2007). This hinders the company's flexibility as they now feel 'stuck' with the service provider who could, at times, be offering substandard services. Majority of empirical studies relating to outsourcing of accounting activities and operational performance have tended to look at the outsourcing of accounting activities and cost efficiency and innovation improvement with very few studies looking at the outsourcing of accounting activities to enhance flexibility performance. The current study, consequently, sought to bridge the gap in the literature by investigating the effect of accounting activities outsourcing on flexibility in addition to cost and innovation performance. In addition, the findings from other studies have tended to be mixed with some studies establishing significant effect while others revealing insignificant impacts of accounting and finance outsourcing on operational performance. The current research conclusively examined the effect of accounting and finance activities outsourcing on operational performance.

2.3.3 Back-office activities outsourcing and operational performance.

Back-office is the support office of every organization. It provides support to the management of the organization in performing its key responsibilities. Back-office activities are those functions that need to be performed competently to ensure the success of the business, but the activities are not categorized as essential operations of the company. The view of outsourcing back-office activities has been widely adopted as a performance enhancement approach for organizational efficiency. The ideology is that companies should refocus their energies on their primary business. Business organizations, both private and public, desire to outsource back-office activities with the belief that more worth is delivered at a lower cost for the firm's

competitiveness. Organizations cannot be a jack of every trade. So, through outsourcing, the firm can reduce costs of staffing, training of employees, health premiums, retirement plans and employment taxes, consequently leading to a reduction and control of operating costs (Kinyua, 2015).

Back-office activities outsourcing is considered as a powerful way to increase a company's efficiency through gaining access to professionals in various fields. Organizations are able to profit from the increasing comparative advantage of specialized suppliers who have knowledge in the areas concerned (Smith et al., 2006; Cooke et al., 2005). Other than this, back-office outsourcing allows firms and external service providers to merge their consultative and strategic roles in designing and implementing programs to enhance a firms' operational performance (Gilley, Greer & Rasheed, 2004). This is achieved through the reduction of costs (where a fast-growing company has inadequate funds to finance all the functions, they could profitability develop, outsourcing some of the activities reduces the investment required), a higher level of flexibility, access to superior technology and infrastructure; access to professionals with domain expertise (other companies have the knowledge to perform some specific functions better). However, Andrabi et al. (2006) suggest that even though an outsourcing company gains flexibility through outsourcing, such activity creates integration challenges for the outsourcing company and its external supplier. Studies relating back-office activities outsourcing to operational performance have tended to focus much on cost performance with few studies examining other aspects of operational performance including flexibility and innovation performance. This research, hence, aimed to bridge the gap in literature by assessing the effect of back-office activities on flexibility and innovation performance in addition to cost efficiency. In addition, studies have tended to establish mixed findings relating back-office outsourcing to operational performance, with some studies proving insignificant effect while others finding a significant impact. The current study, therefore, sought to clear the confusion resulting from inconclusive results.

2.4 Empirical Review

The study examined empirical literature on the causal effect link between business process outsourcing and operational performance In Ghana, Sarkodie and Olivia (2020) assessed the

causal effect relationship between outsourcing and organisational performance of hotels. The research used descriptive survey where forty-eight management employees were sampled for the study using purposive sampling. The study collected primary data using structured questionnaires while secondary data was obtained from tourism authority. The study used both descriptive and inferential statistics. Based on multivariate regression analysis, the study revealed that outsourcing had led to improved profits, productivity, maintains competitiveness, encourages staff innovation and enables business to concentrate on their core areas. The study however established that face the challenge of operational risk that impact on skill development. The study was limited to Ghana hence may not wholesomely be applied in Kenya with different operating environment.

Strange and Magnani (2017) examined the effect of outsourcing on performance of manufacturing firm. The study was a critical review of extant literature on impact of outsourcing on performance. The study revealed mixed findings. On one hand, the study revealed that outsourcing in manufacturing firms could affect financial performance, productivity, efficiency costs, sales, innovations among other. Strange and Magnani (2017) was a critical review, hence there is need for data collection and analyse.

Kisilu and Gatari (2021) evaluated the effect of strategic outsourcing approaches on the performance of manufacturing listed at NSE. The study adopted descriptive survey design to collect and analyse data from seventy-two strategic managers from 9 manufacturing firms. Data was analysed based on multivariate regression analysis. The research revealed that strategic business process outsourcing, strategic professional outsourcing and strategic project outsourcing directly affected performance of the manufacturing companies. Kisilu and Gatari (2021) was limited to listed manufacturing firms only hence a gap exists in other manufacturing firms that are not listed.

Kithinji, Gakure and Karanja (2017) investigated the effects of outsourcing on the growth and expansion of SMEs in the dairy sector in Kenya. A descriptive research design was adopted to collect data based on structured questionnaires from 119 SMEs dairy firms. Multivariate regression was adopted. The research revealed that outsourcing has a positive effect on the growth of the Dairy Enterprises. The aspects of growth impacted by outsourcing included

market share, profitability, employment, and product base. Kithinji, Gakure and Karanja (2017) was limited to manufacturing firms only.

Davis-Sramek et al. (2017) examined the effect of supply chain outsourcing on performance. The study adopted descriptive and inferential statistics. The study revealed that supply chain-outsourcing effects several aspects of operational performance.

Joudaki, Heidari and Geraili (2015) examined the practical implications for those involved in outsourcing investigations in the healthcare sector. The study was a critical review of extant literature. The study revealed that the reasons for outsourcing included improved customer service, cost reduction, to ensure healthcare organizations focus on core activities and improved flexibility. Further, the study revealed that risk of outsourcing included the need to develop new management competencies, capabilities, and decision-making processes. The study was a critical review of literature hence there is need to collect data and analyse it.

Bestman and Dagogo (2021) evaluated the causal effect relationship between information system outsourcing and productivity of manufacturing companies in Nigeria. The research used cross-sectional research survey design to collect and analyse primary data through structured questionnaires that were administered personally. The study population was 36 manufacturing companies. The study adopted Spearman's Rank Order Correlation Statistics to test study hypotheses. The research found out that information system outsourcing improved productivity of manufacturing companies. The study therefore concluded that information system outsourcing influences productivity of manufacturing companies in a major way. Bestman and Dagogo (2021) was limited to IT outsourcing hence a gap exists for other outsourcing activities.

Pradabwong, Braziotis, Tannock and Pawar (2017) evaluated the causal effect link between Business Process Management, Supply Chain Collaboration, collaborative advantages and organisational performance. The research adopted descriptive design to collect data from two hundred and four manufacturing firms in Thailand. The study used Structural Equation Modelling with findings establishing that business process outsourcing, and supply chain collaboration have joint effect on organisational performance. Pradabwong, Braziotis, Tannock and Pawar (2017) was carried out in Thailand that may not have same operating environment as Kenya's.

Chemutai (2019) examined the effect of outsourcing practices on the operational performance of real estate firms in Kenya. Study was adopted census with primary data collected based self-administered structured questionnaire. Descriptive and inferential statistics was adopted in the study with the research revealing that HRM outsourcing, logistics outsourcing and administrative support outsourcing were highly adopted. Further, regression analysis on performance in terms of speed, cost and quality was performed against outsourcing practices including administrative outsourcing, financial services outsourcing, HRM outsourcing and logistics outsourcing. The study revealed that outsourcing influences operational performance of real estate firms in terms of costs, quality of work and speed of work. Chemutai (2019) limited to real estate firms hence a gap exists in manufacturing firms.

Mwichigi (2015), investigated the association between the key outsourced services, namely finance outsourcing, administrative support outsourcing, technical outsourcing, and resourcing outsourcing on operational performance Kenyan Companies in the Energy Sector. Inferential and descriptive statistics was used to analyze the data. The survey concludes that there exists a positive and significant association between financial, resourcing, technical and administration, outsourcing services and operational performance. Mwichigi (2015) limited to energy firms hence a gap in other manufacturing firm.

Ayantoyinbo and Odepidan (2018) evaluated the causal effect relationship between outsourcing of non-core activities on performance of organizations of bottling firms in Nigeria. The research sample size was 359 respondents. The study collected and analysed data based on regression analysis. The results revealed that outsourcing packaging activities, transport activities, reverse logistics and procurement significantly affected the company's performance in terms of operational flexibility, transportation cost, overall quality, investment, competitive advantage, customer loyalty and market share. Ayantoyinbo and Odepidan (2018) was limited to bottling firms besides it was carried out in Nigeria that has different operating environment from Kenya.

Mohammed, Abebe and Wondim (2019) examined university community satisfaction due to outsourcing in selected universities in Ethiopia. The research adopted primary and secondary data with sample population picked from teacher, students, and support staff in 4 universities. The study analysed data with regression analysis revealing that outsourcing of non-core led to

improved resource management, decreased staff complains, operational and recruitment cost reduced, administrative burden decreased, timely and quality service improved. Mohammed, Abebe and Wondim (2019) was limited to universities that has different operating environment form companies.

Liyanagamage and Ranasinghe (2020) evaluated the determinants of adoption of outsourcing logistic functions in Manufacturing and Trading companies in Sri Lanka. The study specifically examined how quality concerns, cost effectiveness, perceived risk, and perceived professionalism of logistics motivated outsourcing of logistics activities. The study adopted primary data collected from sixty manufacturing organizations based on structured questionnaire. Data analysis was based on descriptive and linear regression analysis. The simple regression revealed that each of the motives of outsourcing had significantly explained outsourcing. Liyanagamage and Ranasinghe (2020) the study was based in Sri Lanka with the study focusing on motives for outsourcing.

Aziz, Memon and Ali (2020) evaluated the effect of logistics outsourcing and logistics capability on the performance of manufacturing companies in Pakistan. The study was based on data collected through closed ended questionnaires with target population being 500 employees from one hundred and thirteen manufacturing companies. The research used Confirmatory factor analysis and SEM to examine effect of logistics capability on performance of firms with logistics outsourcing examined as the mediator. The study results revealed that logistics capability had direct effect on the performance and logistics outsourcing had weak effect of performance of manufacturing firms studied. Aziz, Memon and Ali (2020) was limited to logistics outsourcing hence a gap in other outsourcing activities.

Prempeh and Nsiah-Asare (2017) sought to examine the causal effect link between outsourcing strategy and procurement performance of selected Universities in Ghana. The study adopted closed ended questionnaires to collect data with purposive and stratified sampling being adopted to select respondents to be part of the study. Multivariate regression showed that comprehensive outsourcing was a key factor affecting procurement performance.

Kamal (2019) examined the effect of outsourcing on performance of selected pharmaceutical companies in Ghana. Sample of 265 respondents were selected from 860 population from whom primary data was collected. Multivariate regression was adopted to test the hypotheses.

The research established that direct causal effect relationship between outsourcing and sales growth, profitability, productivity, and innovative capacity among pharmaceuticals firms. Further, outsourcing of HRM, quality management, facility management and information and technology functions were regressed against performance. The study revealed outsourcing had direct relationship with performance of pharmaceuticals. Specifically, HRM and quality management functions had the strongest effect. The outsourcing activities significantly affected profitability, sales growth, productivity, and innovative capacity among the pharmaceuticals.

Wekullo (2017) examined the contribution of the practice of outsourcing in higher education in achieving effectiveness. The research adopted regression analysis with the study revealing that the effectiveness of outsourcing differs across institutions depending on the activity that has been outsourced. The study also revealed that there is no cost savings due to outsourcing and that even though outsourcing improves quality they make services offered expensive.

Agburu, Anza and Iyortsuun (2017) examined the causal effect relationship between outsourcing strategies and the performance of SMEs in Nigeria. The outsourcing strategies included primary activities, back-office activities, accounting activities and supporting activities. The study was a survey with stratified random sampling technique was used in selecting respondents who participated in filling structured questionnaires. Secondary data was also used from the selected 10 SMEs. The study adopted multivariate regression analysis with the study establishing that outsourcing of back-office activities, outsourcing of primary activities had a major effect on organizational profitability. However, outsourcing of accounting activities had no effect on performance. Agburu, Anza and Iyortsuun (2017) was limited to SMEs hence a gap in large scale manufacturing firms.

2.4 Research Gap

Examination of literature has brought to the front some research gaps. First, most studies researching on the impact of primary activities outsourcing on a company's operational performance concentrated on innovation performance with few studies examining other aspects of operational performance, including flexibility and cost. Secondly, empirical studies relating accounting and finance activities outsourcing and operational performance have linked the outsourcing of accounting and finance activities to cost efficiency and innovation improvement, with very few studies looking at how accounting and finance activities

outsourcing enhances flexibility. In addition, the findings from other studies are mixed with some studies establishing significant effect while others revealing an insignificant impact of accounting and finance activities outsourcing on operational performance. Finally, studies relating back-office activities outsourcing to operational performance have focused much on cost efficiency with few studies examining other aspects of operational performance including flexibility and innovation. Moreover, studies have established mixed findings relating back-office activities outsourcing to operational performance, with some studies proving insignificant effect while others finding a significant impact. Consequently, this research sought to fill the research gap by identifying the business process outsourcing practices adopted by local manufacturing companies in Nairobi County and analyzing how these business process-outsourcing practices impacted operational performance (cost reduction, flexibility, and innovation), that is, whether positively, negatively, or have no impact on the companies. The summary of research gaps is resented in table 2.1.

Table 2.1: Summary Research Gap

Author (s)	Purpose	Methodology	Findings	Research Gap
Sarkodie and Olivia (2020)	Causal effect relationship between outsourcing and organizational performance of hotels	Research used descriptive survey where forty-eight management employees. The study collected primary data using structured questionnaires. The study used both descriptive and inferential statistics.	Outsourcing had led to improved profits, productivity, maintains competitiveness, encourages staff innovation, and enables business to concentrate on their core areas.	The study was limited to hotel businesses hence a gap exists in manufacturing firms
Strange and Magnani (2017)	Effect of outsourcing on performance of manufacturing firm.	The study was a critical review of extant literature on impact of outsourcing on performance.	The study revealed mixed findings. On one hand, the study revealed that outsourcing in manufacturing firms could affect financial performance, productivity,	Study was a critical review, hence there is need for data collection and analyse.

			efficiency costs, sales, innovations among other.	
Kisilu and Gatari (2021)	Effect of strategic outsourcing approaches on the performance of manufacturing listed at NSE	The study adopted descriptive survey design. Seventy-two strategic managers from 9 manufacturing firms. Data was analysed based on multivariate regression analysis.	strategic business process outsourcing, strategic professional outsourcing and strategic project outsourcing directly affected performance	Study limited to listed manufacturing firms only hence a gap exists in other manufacturing firms that are not listed.
Kithinji, Gakure and Karanja (2017)	Effects of outsourcing on the growth and expansion of SMEs in the dairy sector in Kenya.	A descriptive research design was adopted to collect data based on structured questionnaires from 119 SMEs dairy firms. Multivariate regression was adopted	The research revealed that outsourcing has a positive effect on the growth of the Dairy Enterprises	Study limited to manufacturing firms only.
Joudaki, Heidari and Geraili (2015)	Implications for outsourcing i in the healthcare sector	The study was a critical review of extant literature.	Reasons for outsourcing included improved customer service, cost reduction, focus on core activities and improved flexibility.	The study was a critical review of literature hence there is need to collect data and analyse it.
Bestman and Dagogo (2021)	Causal effect relationship between information system outsourcing and productivity of manufacturing companies in Nigeria	The research used cross-sectional research survey. Primary data through structured questionnaires. The study population was 36 manufacturing companies.	Information system outsourcing improved productivity of manufacturing companies.	Research limited to IT outsourcing hence a gap exists for other outsourcing activities.

		Spearman's Rank Correlation Statistics		
Pradabwong, Braziotis, Tannock and Pawar (2017)	Causal effect link between Business Process Management, Supply Chain Collaboration, collaborative advantages and organizational performance.	The research adopted descriptive design to collect data from two hundred and four manufacturing firms in Thailand. The study used Structural Equation Modelling	Business process outsourcing and supply chain collaboration have joint effect on organisational performance	Research carried out in Thailand that may not have same operating environment like Kenya's.
Chemutai (2019)	Effect of outsourcing practices on the operational performance of real estate firms in Kenya.	Study adopted census with primary data collected based self-administered structured questionnaire. Descriptive and inferential statistics	Outsourcing influences operational performance of real estate firms in terms of costs, quality of work and speed of work	Limited to real estate firms hence a gap exists in manufacturing firms.
Mwichigi (2015),	Association between the key outsourced services on operational performance Kenyan companies in energy sector	Inferential and descriptive statistics was used to analyse the data.	Positive and significant association between financial, resourcing, technical and administration, outsourcing services and operational performance.	Limited to energy firms hence a gap in other manufacturing firm.
Ayantoyinbo and Odepidan (2018)	The causal effect relationship between outsourcing of non-core activities on performance of organizations of bottling firms in Nigeria.	The research sample size was 359 respondents. The study collected and analysed data based on regression analysis.	Outsourcing packaging activities, transport activities, reverse logistics and procurement significantly affected the company's performance.	Limited to bottling firms besides it was carried out in Nigeria that has different operating environment from Kenya.

Mohammed, Abebe and Wondim (2019)	University community satisfaction due to outsourcing in selected universities in Ethiopia.	Adopted primary and secondary data with sample population picked from teacher, students, and support staff in 4 universities. The study analysed data with regression	Outsourcing of non-core activities led to improved resource management, operational and recruitment cost reduced, administrative burden decreased, timely and quality service improved.	Was limited to universities that has different operating environment form companies.
Liyanagama and Ranasinghe (2020)	The determinants of adoption of outsourcing logistic functions in Manufacturing and Trading companies in Sri Lanka	The study adopted primary data collected from sixty manufacturing organizations based on structured questionnaire. Descriptive and linear regression analysis	The simple regression revealed that each of the motives of outsourcing had significantly explained outsourcing.	The study was based in Sri Lanka with study focusing on motives for outsourcing.
Aziz, Memon and Ali (2020)	Effect of logistics outsourcing and logistics capability on the performance of manufacturing companies in Pakistan	Data collected through closed ended questionnaires with target population being 500 employees from one hundred and thirteen manufacturing companies. The research used Confirmatory factor analysis and SEM	Logistics capability had direct effect on the performance and logistics outsourcing had weak effect of performance of manufacturing firms studied.	Was limited to logistics outsourcing hence a gap in other outsourcing activities.
Kamal (2019)	Effect of outsourcing on performance of selected pharmaceutical companies in Ghana.	Sample of 265 respondents were selected from 860 population from whom primary data was collected. Multivariate	The study revealed outsourcing had direct relationship with performance of	The study limited to pharmaceutical firms.

		regression was adopted	pharmaceuticals.	
Agburu, Anza and Iyortsuun (2017)	Causal effect relationship between outsourcing strategies and the performance of SMEs in Nigeria	The study was a survey with stratified random sampling technique was used in selecting respondents who participated in filling structured questionnaires. The study adopted multivariate regression	Outsourcing of back-office activities, outsourcing of primary activities had a major effect on organizational profitability. However, outsourcing of accounting activities had no effect on performance.	Study was limited to SMEs hence a gap exists in large scale manufacturing firms.
Donaghu and Barff, 1990).	The effect of primary outsourcing activities on production chains performance	The study adopted the Pearson correlation and OLS regression	Leverage gained through outsourcing enables the company to have control over tasks and duties within the chain.	The study was not carried in manufacturing firms in South East Asia hence may have limited application in Kenyan context
Meixell, Kenyon and Westfall (2014).	The effects of production outsourcing on the factory cost performance in manufacturing firms in the US	The study adopted cross-sectional and longitudinal data drawn from the MPI Census of Manufacturers Survey of US manufacturing plants	The impact of production outsourcing on both the cost of labor and materials is significant, Leading to decreased labor, and increased materials.	Additionally, the study concentrated on primary outsourcing and ignored other outsourcing practices
Welch and Nayak (1992)	Factors affecting make-or-buy decisions	The study adopted a descriptive research design and regression analysis	Cost objective was significantly affecting buy r make decisions	The study concentrated on primary activities outsourcing and ignored other outsourcing practices.

Ortigoza Monroy (2012)	Factors that foster or inhibit the decision to outsource IT development services.	The study adopted qualitative and quantitative design	The study established that outsourcing of IT services was influenced by factors such as flexibility, cost reduction and performance goals.	The study focused on IT outsourcing and ignored other outsourcing like accounting and finance outsourcing; primary activity outsourcing
Reddy and Ramachandran (2008),	The effect of finance and accounting outsourcing on the performance of firms in India	The study adopted causation research design and data was analyzed using Regression analysis	The study determined that accounting and finance outsourcing had a compelling impact on operational performance.	The study was carried out in India that has a different operating environment from Kenya. Besides, the study ignored other outsourcing practices like primary outsourcing.
Mulat (2007).	The current practice of outsourcing, and reasons for outsourcing or not outsourcing among companies in Ethiopia	The study adopted a qualitative design with data collected using an interview schedule.	Organizations readily outsource non-core business functions, such as maintenance, cleaning, security. Conversely, Accounting and Administration outsourcing service providers will face great challenges from Ethiopian organizations to deliver their services.	The study was explorative in nature examining activities outsourced and reasons for outsourcing or not outsourcing. However, the study did not examine the causal effect relationship among study variables.
Magutu, Chirchir and Mulama (2013).	The study examined outsourcing practices in relation to the performance of large manufacturing firms Nairobi, Kenya.	The population of the study in the research were all the large-scale manufacturing companies that are based in Nairobi. A stratified random sampling method was adopted. Regression	Firms mainly outsourced transportation, warehouse, and material handling management. The firms outsourced due to	The study ignored the outsourcing of accounting and finance activities.

		was adopted to investigate the relationship between performance and outsourcing.	advantages and their likely effect on organizational performance as they increase cost efficiency, improved customer satisfaction and on-time delivery.	
Chongvilaivan, & Riyanto, (2009).	Impact of outsourcing on relative wages and the demand for skilled workers.	The researcher used the comparative research design and OLS regression.	The study established that downstream materials and service outsourcing are skill-biased, whereas upstream materials outsourcing is not.	The study concentrated on the effect of outsourcing on wages and demand for skills and ignored the influence of outsourcing on an organization's operational performance.
King'o (2013)	The purpose of the study was to determine the factors that influenced Airtel Kenya's decision to outsource.	The study adopted case study research design and qualitative techniques.	The company experienced advantages such as the ability to concentrate on its core business, to be more customer-focused, access to first-class services from the external vendors. gained business efficiency and they were able to have more control of their costs.	The study was based on non-manufacturing firms. Besides, it was explorative in nature hence could not establish causation.
Anders & Bjorn (2015)	Examined outsourcing practices among small manufacturing firms Sweden	The study adopted a cross-sectional survey study with regression being adopted to examine the causal effect relationship	The study found that manufacturing companies in Sweden have four common outsourcing practices: back-office activities,	The study was based in Sweden hence may not wholesomely be applied in Kenya.

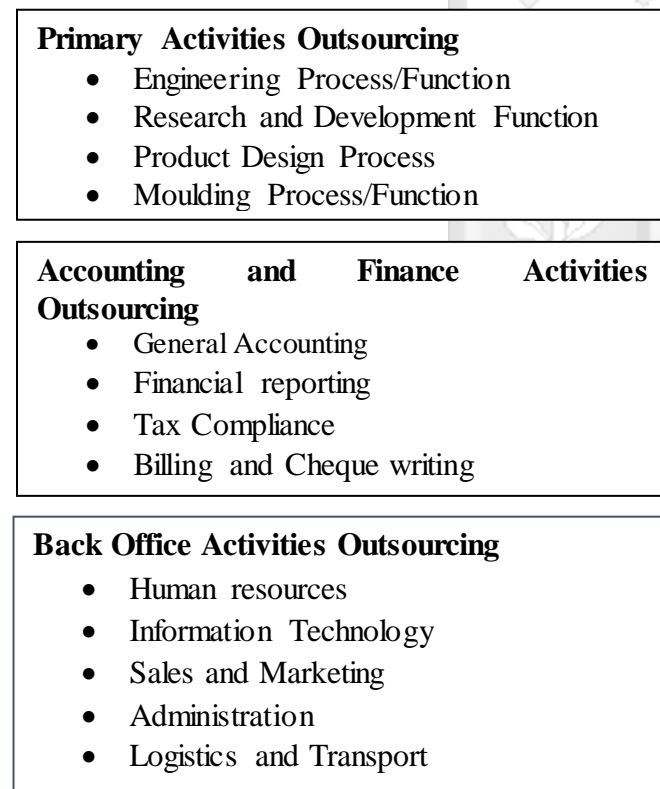
			primary activities, accounting activities, and support activities.	
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2.5 Conceptual Framework

This is a group of broad ideas and principles taken from significant areas of inquiry and used to structure a subsequent presentation (Enz, 2010). The schematic diagrams in figure 2.1 guided the study and showed the interrelationship among the key variables in the study.

Independent Variables

Business Process Outsourcing Practices



Dependent Variables

Operational Performance

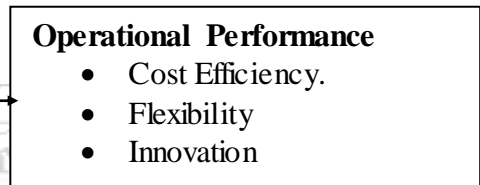


Figure 2. 1: Conceptual Framework

Source: Researcher (2020)

The conceptual framework presents the diagrammatical relationship between study variables. The independent variable is business process outsourcing (primary, accounting and finance and back-office activities) while the dependent variable is operational performance (cost efficiency, flexibility, and innovation). The study aspects a positive relationship between business process outsourcing and operational performance.



2.4.1 Operationalization of Constructs

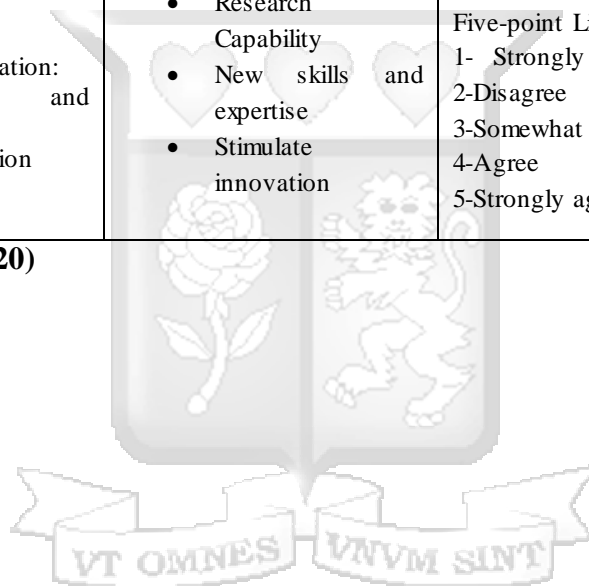
This section summarizes the variables and how each of the variables was measured, alongside with the sources of the various measures.

Table 2.2: Operationalization of constructs

Variables	Constructs	Indicator	Measurement Indicator	Source
Independent variable (Business process outsourcing practices)	1. Primary activities outsourcing	<ul style="list-style-type: none"> • Engineering Process/Function • Research and Development Function • Product Design Process • Molding Process/Function 	Five-point Likert scale 1- Strongly disagree 2-Disagree 3-Somewhat agree 4-Agree 5-Strongly agree	<i>Anders & Bjorn, 2015;</i> <i>Mwichigi,2015;</i> <i>Agburu, Anza and Iyortsuun (2017)</i>
	2. Accounting and Finance activities outsourcing	<ul style="list-style-type: none"> • General Accounting • Financial reporting • Tax Compliance • Billing • Cheque writing 	Five-point Likert scale 1- Strongly disagree 2-Disagree 3-Somewhat agree 4-Agree 5-Strongly agree	
	3.Back-office activities outsourcing	<ul style="list-style-type: none"> • Human resources • Information Technology • Sales and Marketing • Administration • Logistics and Transport 	Five-point Likert scale 1- Strongly disagree 2-Disagree 3-Somewhat agree 4-Agree 5-Strongly agree	

Dependent variable (Operational performance)	1. Cost efficiency	<ul style="list-style-type: none"> • Vendors Cost-Efficient system • Reduction in Payroll Costs • Improved Cashflow 	Five-point Likert scale 1- Strongly disagree 2-Disagree 3-Somewhat agree 4-Agree 5-Strongly agree	<i>Slack, Chambers & Johnson, 2004</i>
	2. Flexibility (in operations and response to market changes)	<ul style="list-style-type: none"> • Reduced bureaucracy. • Workforce fluctuations • Change in productions volumes 	Five-point Likert scale 1- Strongly disagree 2-Disagree 3-Somewhat agree 4-Agree 5-Strongly agree	
	3. Innovation: product and process innovation	<ul style="list-style-type: none"> • Research Capability • New skills and expertise • Stimulate innovation 	Five-point Likert scale 1- Strongly disagree 2-Disagree 3-Somewhat agree 4-Agree 5-Strongly agree	

Source: Researcher (2020)



CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The chapter described various techniques used in obtaining information, the processes adopted in carrying out the research, and the approaches used in data analysis and collection. It is divided into six sections: research philosophy, research design, population and sampling, data collection, data analysis, and ethical considerations.

3.2 Research philosophy

The philosophical framework underpinning the study was the positivism approach. Flowers (2009) explains positivism as an approach based on that of natural science, characterized by the testing of hypothesis created from existing theory (hence deductive or theory testing) through measurement of observable social realities. Positivism is based on values of reason, truth and validity. It focuses purely on facts, collected through direct observation and experience and measured empirically using quantitative techniques – surveys and experiments - and statistical analysis (Saunders, Lewis and Thornhill, 2007; Eriksson and Kovalainen, 2008).

Positivists are of the opinion that reality is constant and can be observed and described from an objective viewpoint (Levin, 1988), i.e., without interfering with the phenomena under study. Friedman (1953) explains that positivism argues that human behaviours may be reduced to the state of generalized laws in which the individual is not of significance. The nature of the methods within this approach are methodical, scientific, have a prior theoretical base, seek to determine the type of relationships, causes and effects, and employ empirical validation and statistical analyses to test and confirm theories, and that is why the researcher adopted the positivism approach.

3.3 Research Design

Descriptive survey design was selected for this research. With such a design, the information obtained is to achieve the objectives of the study. Descriptive survey design primarily uses questionnaires or structured interviews for data collection with the aim of generalizing from a

sample to a population (Creswell, 2003). A descriptive survey was useful in investigating the existing links among the variables that were captured in this study. The design was chosen as it is more specific and exact, and it includes the description of tasks in a thoroughly organized way (Babbie & Mouton, 2002). The design enabled the examination of the causal effect association between business outsourcing practices and the operational performance of manufacturing companies in Nairobi. The data collected was cross-sectional nature since the data was collected once across all the firms that participated in the study.

3.4 Population of the Study

The population of the study was local manufacturing companies in Nairobi County. There are 341 local manufacturing companies in Nairobi (Kenya Association of Manufacturers Directory, 2016). Nairobi was chosen as the area to be covered by the study as it is the business hub of the country, and most manufacturing companies are concentrated in Nairobi and especially in the Industrial Area location.

3.5 Sampling design

Simple random sampling method was selected for this study. This is because it helps remove the risk of unconscious bias by allowing an equal chance of selection and allows unbiased estimates to be created.

The sample size was arrived at through the formulae;

$$n = N / 1 + e^2.N$$

Where n= sample size

N= population

e= measurement error

$$n = 341 / 1 + (0.052 \times 341)$$

$$n = 184$$

The study adopted simple random sampling to pick the 184 companies that took part in the study. All the manufacturing firms operating in Nairobi were numbered, then the firm's numbers corresponding to the numbers on the random table were picked for the study. There was one respondent per company who was the Operations Manager.

3.6 Data Collection

The study used primary data that was obtained through a self-administered questionnaire constructed in a way to evoke specific feedback for qualitative and quantitative analysis respectively, through the drop and pick later method and where not possible via email. According to Kothari (2004), a self-administered questionnaire is the only way to elicit self-report on people's opinions, attitudes, beliefs and values. The questionnaire comprised of closed-ended questions constructed by the researcher. A five-point Likert scale assessing the degree of the respondent's agreement and disagreement with questionnaire statements and multiple-choice questions were used. A questionnaire was used as it is cost-effective and easy to manage.

The questionnaires had three sections. The first section with questions on the biodata of the local manufacturing companies in Nairobi; the second part contained questions on the first objective of this study which is to determine the business process outsourcing practices used by the local manufacturing companies in Nairobi County and the third part of the questionnaire contained questions on the impact of the business process outsourcing practices on the operational performance (cost reduction, flexibility and innovation) of the local manufacturing companies in Nairobi County.

3.7 Data Analysis

After the field survey, the raw data was coded and then entered into an MS Excel spreadsheet, inspected for completeness by identifying, recording and entry errors in terms of unusual value, problematic data elements and extreme values (Kothari, 2004). Then the complete data were keyed into statistical package for the social sciences (SPSS) software for meaningful analysis where descriptive, correlation analysis and regression analysis were performed. Descriptive analysis involved mean and standard deviation (Muganda & Mugenda, 2009). Correlation

analysis was based on Pearson correlation coefficient. Finally, regression analysis was multivariate and univariate models as presented in table 3.1.

Table 3.1: Summary of data Analysis

Objective	Research Question	Analysis Model	Interpretation of Results
<p>Objective 1</p> <p>To identify the business process outsourcing practices adopted by the local manufacturing companies in Nairobi County.</p>	<p>1. What business process outsourcing practices do the local manufacturing companies in Nairobi adopt?</p>	<p>Descriptive statistics</p> <ul style="list-style-type: none"> • Mean • Standard deviation 	<p>Mean greater than 3.0 indicates agreement that business process outsourcing practices have been implemented</p>
<p>Objective 2</p> <p>To establish the effects of outsourcing primary activities on the operational performance of local manufacturing companies in Nairobi County.</p>	<p>2. How does the outsourcing of primary activities affect the operational performance of local manufacturing companies in Nairobi County?</p>	<p>Simple regression analysis</p> $Y_{1i} = \beta_{10} + \beta_{11}PO_i + \epsilon_i$ $Y_{2i} = \beta_{20} + \beta_{21}PO_i + \epsilon_i$ $Y_{3i} = \beta_{30} + \beta_{31}PO_i + \epsilon_i$ $Y_{ji} = \beta_{i0} + \beta_{i1}PO_i + \epsilon_i$ <p>where</p> <p>Y= Dependent variables (Y_{1i} -cost performance, Y_{2i}- flexibility performance, Y_{3i}- innovation performance, Y_{ji}- overall firm performance)</p> <p>β_{i0}, β_{20}, β_{30} and β_{i0} Intercept terms.</p> <p>PO_i=Primary activities</p>	<p>R² is the coefficient of determination indicating the percentage of the total variation in the dependent variable explained by an independent variable.</p> <p>P-value < 0.05 shows a significant effect of the independent variable on the dependent variable.</p>

		outsourcing (PO) $\beta_{11}, \beta_{21}, \beta_{31}$ and β_{j1} are the values of the coefficients of primary activities outsourcing. ϵ_i – Error term	
Objective 3 To establish the effects of outsourcing accounting and finance activities on the operational performance of local manufacturing companies in Nairobi County.	3. How does the outsourcing of accounting and finance activities affect the operational performance of local manufacturing companies in Nairobi County?	Simple regression analysis $Y_{1i} = \beta_{10} + \beta_{12}AO_i + \epsilon_i$ $Y_{2i} = \beta_{20} + \beta_{22}AO_i + \epsilon_i$ $Y_{3i} = \beta_{30} + \beta_{32}AO_i + \epsilon_i$ $Y_{ji} = \beta_{j0} + \beta_{j2}AO_i + \epsilon_i$ where Y= Dependent variables (Y _{1i} -cost performance, Y _{2i} - flexibility performance, Y _{3i} -innovation performance, Y _{ji} - overall firm performance) β_{i0} , β_{20} , β_{30} and β_{j0} Intercept terms. AO _i = Accounting and finance activities outsourcing (AO) β_{12} , β_{22} , β_{32} and β_{j2} are the values of the coefficients of Accounting and finance activities Outsourcing. ϵ_i – Error term	R ² is the coefficient of determination indicating the percentage of the total variation in the dependent variable explained by the independent variable. P-value < 0.05 shows a significant effect of the independent variable on the dependent variable.

<p>Objective 4</p> <p>To establish the effects of outsourcing back-office activities on the operational performance of local manufacturing companies in Nairobi County.</p>	<p>4. How does the outsourcing of back-office activities affect the operational performance of local manufacturing companies in Nairobi County?</p>	<p>Simple regression analysis</p> $Y_{1i} = \beta_{10} + \beta_{13}BO_i + \epsilon_i$ $Y_{2i} = \beta_{20} + \beta_{23}BO_i + \epsilon_i$ $Y_{3i} = \beta_{30} + \beta_{33}BO_i + \epsilon_i$ $Y_{ji} = \beta_{i0} + \beta_{i3}BO_i + \epsilon_i$ <p>where</p> <p>Y= Dependent variables (Y_{1i} -cost performance, Y_{2i}- flexibility performance, Y_{3i}-innovation performance, Y_{ji}- overall firm performance)</p> <p>β_{i0}, β_{20}, β_{30} and β_{i0} Intercept terms.</p> <p>BO_i=Back-office activities outsourcing (BO)</p> <p>$\beta_{13}, \beta_{23}, \beta_{33}$ and β_{j3} are the values of the coefficients of Back office activities outsourcing.</p> <p>ϵ_i – Error term</p>	<p>R² is the coefficient of determination indicating the percentage of the total variation in the dependent variable explained by the independent variable.</p> <p>P-value < 0.05 shows a significant effect of the independent variable on the dependent variable.</p>
<p>Objective 5</p> <p>To establish the joint effects of outsourcing primary activities, accounting and finance activities, and back-office activities on the operational</p>	<p>5. How does the outsourcing of primary activities, accounting and finance activities, and back-office activities jointly affect the operational performance of local</p>	<p>Multiple regression analysis</p> $Y_{1i} = \beta_{10} + \beta_{11}PO_i + \beta_{12}AO_i + \beta_{13}BO_i + \epsilon_i$ $Y_{2i} = \beta_{20} + \beta_{21}PO_i + \beta_{22}AO_i + \beta_{23}BO_i + \epsilon_i$	<p>R² is the coefficient of determination indicating the percentage of the total variation in the dependent variable explained by the independent</p>

<p>performance of local manufacturing companies in Nairobi County.</p>	<p>manufacturing companies in Nairobi County?</p>	<p> $Y_{3i} = \beta_{30} + \beta_{31}PO_i + \beta_{32}AO_i + \beta_{33}BO_i + \epsilon_i$ $Y_{ji} = \beta_{j0} + \beta_{j1}PO_i + \beta_{j2}AO_i + \beta_{j3}BO_i + \epsilon_i$ </p> <p>where</p> <p>Y= Dependent variables (Y_{1i} -cost performance, Y_{2i}- flexibility performance, Y_{3i}-innovation performance, Y_{ji}- overall firm performance)</p> <p>β_{i0}, β₂₀, β₃₀ and β_{i0} Intercept terms.</p> <p>PO_i, AO_i and, BO_i – Are Primary activities outsourcing (PO), Accounting and Finance activities outsourcing (AO), Back-office activities Outsourcing (BO).</p> <p>β_{i1}, β_{i2}, β_{i3} and β_{j1} are the values of the coefficients of Outsourcing activities.</p> <p>ε_i – Error term</p>	<p>variable</p> <p>P-value < 0.05 shows a significant effect of the independent variable on the dependent variable.</p>
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3.8 Research Quality

The study carried out pilot testing in 18 manufacturing firms in Nairobi County where 18 operational managers participated in pilot study. The number chosen was 10% of the sample size as suggested by Mugenda and Mugenda (2009). The firms that participated in the pilot study were not involved in the final study. The information generated in the pilot study was used in examining reliability and validity of the research questionnaire.

3.8.1 Reliability

Reliability is the degree to which an experiment, test or any measuring procedure produces the same outcome on repeated trials; it is the tendency toward consistency found in repeated measurements of the same event. The more consistent the outcomes are given by repeated measurements, the higher the reliability of the measuring procedure on the other hand, the less consistent the results, the lower the reliability. A reliability test was performed using Cronbach's Alpha test. Reliability values close to 1.00 indicate that the investigated factors are measurable. Fraenkel & Wallen (1996) asserted that the reliability item could be accepted if the alpha is between 0.70 and 0.99. Kubiszyn & Borich (2000) suggested that α value within the 0.80 to 0.90 range is acceptable. Whereas in social science, the acceptable α value is 0.60 (Ghazali, 2008), which is also applied by other researchers. Once the reliability test was performed, the researcher was able to know whether the value is above the 0.6 threshold or not. Based on the outcome, the researcher determined that the gathered data can be used to generalize findings on the nature of the link between business process outsourcing practices and operational performance.

3.8.2 Validity

Validity refers to how accurately a measuring instrument measures what it is intended to measure. The measuring instrument itself is not validated. What is validated is the measuring instrument concerning the intent for which it is being used (Carmines & Zeller, 1979). The study examined validity by adopting two methods. First, experts in business process outsourcing interrogated the research instrument with the main expert being the research supervisor. The suggestions of the supervisor and other experts were used to improve the

questionnaire. Additionally, the study carried out a pre-study where the researcher was able to assess the clarity of the research questionnaire. Vague questions and misleading questions were revised before the final questionnaire was developed to be used for the eventual collection of data from the field.

3.9 Ethical Consideration

The following considerations were applied during the data collection process. The process was carried out while ensuring that the social, physical and psychological well-being of the research respondents was not adversely affected by the study. This was done by ensuring the research questions were appropriate and the means of approaching the participants was respectful. The aim and nature of the study; who is undertaking it; why it is being conducted; the possible consequences of the research and how the results were disseminated was communicated to the participants through the letter of introduction that accompanied the questionnaire. The letter allowed for the freedom of consent by the respondents.

The researcher ensured the anonymity and confidentiality of the research respondents was respected and their personal data kept private and protected (Research Ethics; Handbook of Principles and Procedures, 2008). The researcher ensured the anonymity and privacy of the research respondents by not requiring them to write their names or any information that may be directly identified with them on the questionnaire. The data was also coded in a way to ensure that it cannot be traced to any individual who filled in the questionnaire.

CHAPTER FOUR

DATA ANALYSIS AND PRESENTATION

4.1 Introduction

The chapter presents the data analysis and interpretation regarding study variables. Descriptive analysis was first carried out, followed by inferential statistics. The study sought to establish the impact of business process outsourcing practices on the operational performance of local manufacturing industries in Nairobi County. Before proceeding with descriptive analysis, the study examined the questionnaire return rate and reliability of the questionnaires as explained in the following sub-sections.

4.1.1 Response Rate

The researcher sent out 184 questionnaires to each of the 184 sampled local manufacturing companies in Nairobi. Out of the 184 questionnaires that were issued to the firms, 129 filled questionnaires were returned and usable for analysis. The response rate was 70.1 %, which was sufficient for analysis. Mugenda and Mugenda (2003) assert, a response rate of more than 21% ensures accuracy and minimizes bias. A response rate of 70.1% for this study was enough to support the achievement of set objectives.

4.1.2 Reliability Test

A reliability test was performed using Cronbach's Alpha test. The findings are presented in Table 4.1. The Cronbach's Alpha coefficients were calculated for four variables.

Table 4. 1: Cronbach's Alpha Reliability test

Variable	Cronbach's Alpha	Number of items	Conclusion
Primary activities outsourcing	0.801	8	Reliable
Accounting and Finance activities outsourcing	0.792	6	Reliable
Back-office activities outsourcing	0.782	47	Reliable
Operational Performance	0.795	19	Reliable

Source: Survey Data

The results on the reliability test presented in table 4.1 showed that all the variables were reliable with all the Cronbach's Alphas calculated being above 0.7. The study, therefore, concluded that the questionnaire was reliable and could thus be adopted for study analysis. Fraenkel & Wallen (1996) stated that the reliability item could be accepted if the alpha is between 0.70 and 0.99. Kubiszyn & Borich (2000) suggested that α value within the 0.80 to 0.90 range is acceptable.

4.2 Firm Characteristics

The study sought to establish the background details of the firms that filled and returned the questionnaires. The research described the form of ownership, number of employees, sector of the firm and exporting and importing activities. The findings are presented in tables 4.2, 4.3, 4.4 and 4.5.

Table 4.2: Form of Ownership

Variable	Category	Frequency	Percent
Ownership	Sole proprietorship	5	3.9
	Cooperatives	11	8.5
	Partnership	24	18.6
	Companies	38	29.5
	Limited Partnership	51	39.5
	Total	129	100

Source: Survey Data

As presented in table 4.2, the study established that a majority (69%) of the firms were either limited partnerships or companies. These were followed by 18.6% partnerships, 8.5% cooperatives and finally 3.9% sole proprietorships. The findings reveal that majority of manufacturing firms in Nairobi tend to be companies or limited partnerships.

Table 4.3: Number of employees

Variable	Category	Frequency	Percent
Number of employees	<10 employees	1	0.8
	10 to 50 employees	4	3.1
	50 to 99 employees	19	14.7
	100 +employees	105	81.4
	Total	129	100

Source: Survey Data

The study aimed to determine the number of employees from the companies studied. The results show that the majority (81.4%) of the manufacturing firms studied had employed 100 employees and above. Followed by 14.7% of firms having between 50 to 99 employees, then 3.1% of between 10-50 employees and finally, 0.8% of firms had less than 10 employees. Generally, it was evident that the majority of firms had employed 100 employees and above. This large number of employees could be because manufacturing firms are labour-intensive hence engage many employees across different functional areas.

Table 4.4: Sector of the firm

Variable	Category	Frequency	Percent
Sector of the firm	Medical and Pharmaceutical Equipment	4	3.1
	Food, beverage and fresh produce	5	3.9
	Vehicle and motor vehicle accessories	5	3.9
	Leather, textile, footwear and apparel	6	4.7
	Building, Mining and Construction	7	5.4
	Metal and Chemical Allied	16	12.4
	Timber, Wood and Furniture	17	13.2
	Plastic, Rubber, Paper and Board	69	53.5
	Total		129

Source: Survey Data

Table 4.4 shows the distribution of the findings based on sectors of the economy. The results established that the majority (79.1%), i.e. (12.4%+13.2%+53.5%) of firms were in Metal and chemical allied; Timber, wood and furniture; Plastic, rubber, paper and board. With the remaining (20.9%) of firms distributed between Food, beverage and fresh produce; Leather, textile, apparel and footwear; Vehicles and motor vehicle Accessories; Medical and Pharmaceutical Equipment; Building, Mining, and Construction.

Table 4.5: Exporting and Importing Activities

Variable	Category	Frequency	Percent
Exporting produce	Yes	67	51.9
	No	62	48.1

	Total	129	100
Importing products	Yes	43	33.3
	No	86	66.7
	Total	129	100

Source: Survey Data

Table 4.5 shows that the majority (51.9%) of the firms studied were net exporters, as shown by 51.9% exporting activities against 33.3% importing activities. The findings, therefore, conclude that the firms surveyed were net exporters.

4.3 Descriptive Analysis of Business Outsourcing Practices and Operational Performance

The study sought to establish business process outsourcing practices in manufacturing firms in Nairobi County. The study used a 5-point Likert scale to determine the degree of agreement by respondents with various statements about kinds of business process outsourcing practices in use. The practices were grouped into three categories namely, primary activities, accounting & finance activities and back-office activities.

4.3.1 Primary Activities Outsourcing

Firms choose to outsource core activities within their chains of production to external suppliers as they can leverage their resources to appropriate the rents from the chain while reducing their asset base (Stranger, 2009). The study aimed to establish the primary activities outsourced by local manufacturing companies in Nairobi County. The outcomes are as outlined in Table 4.6.

Table 4.6: Primary Activities Outsourcing

Primary Outsourcing Activities	N	Mean	Std. Deviation
Aesthetic Aspects	129	4.3798	.60200
Assembly Function	129	4.3101	.67080
Product Repair Process	129	4.2791	.62471
Moulding Process.	129	4.0000	1.02317
Machining Process	129	3.9690	1.11760
Engineering Process	129	3.9380	.72621
Product Design Process	129	3.8682	1.16846
Research & Development	129	3.7364	1.12860
Overall Mean Score	129	4.0600	.8826

Source: Survey Data

Table 4.6 shows the primary activities outsourcing from the most outsourced to the least outsourced primary activity based on the standard deviation per activity. Aesthetic aspects of primary activities were the most outsourced as depicted by a mean of $\mu_x = 4.379$ and a standard deviation of $\sigma_x = 0.602$. The primary activity which was least outsourced was the research & development function, as shown by a mean and standard deviation of ($\mu_x = 3.7364$ and $\sigma_x = 1.1286$), implying slight outsourcing of research and development. Generally, primary activities outsourcing was averagely practiced by manufacturing firms in Nairobi, with some firms preparing not to outsource their primary activities since those are their core activities, and they are not comfortable delegating to other organizations through outsourcing. The study, therefore, concludes that primary activities were slightly outsourced, as evidenced by the mean and standard deviation ($\mu_x = 4.060075$ and $\sigma_x = 0.88269375$) tending towards just agreement with overall average responses on the statement.

4.3.2 Accounting and Finance activities outsourcing

Accounting outsourcing is the handing over of part of accounting activities to external contractors or fully owned subsidiaries with the intention of cost cutting, accessing rare expertise, or increasing its competitive edge (Krell, 2007). The study sought to establish the outsourcing of accounting and finance activities in local manufacturing firms in Nairobi County.

Table 4.7: Accounting and Finance Activities Outsourcing

Accounting and finance activities outsourcing	N	Mean	Std. Deviation
General accounting.	129	4.4419	.59827
Stock count/take process	129	4.4264	.58330
Cheque writing	129	4.3101	.57007
Tax compliance	129	2.3101	.57007
Billing process	129	2.0698	.45391
Financial reporting	129	1.8915	.31226
Overall Mean Score		2.9083	0.51464

Source: Survey Data

Table 4.7 presents the findings on the accounting and finance activities outsourcing. The activities have been ranked from the most outsourced to the least outsourced. A statement that an organization outsources general accounting, for example, accounts payable, accounts receivables were agreeable to most of the respondents who were of the view that accounting functions like account receivables should be outsourced. This is evidenced by a mean response of $\mu_x= 4.4419$ and a standard deviation of $\sigma_x= 0.59827$. The least outsourced activity was financial reporting (preparation of financial statements), as shown by a mean response of $\mu_x=1.8915$ and a standard deviation of $\sigma_x=0.31226$, implying that firms rarely outsource financial reporting activities.

Generally, accounting and finance activities outsourcing was less practiced by manufacturing firms in Nairobi, with some firms preparing not to outsource their accounting and finance activities since financing activities are central to any organization and they would rather manage their accounting and finance activities than allow other organizations do them through outsourcing. The study, therefore, concludes that accounting and finance activities were almost not outsourced, as evidenced by overall mean and standard deviation of ($\mu_x= 2.9083$ and $\sigma_x =0.51464$) tending towards disagreement with overall with responses on the statements.

4.3.3 Back-Office Activities Outsourcing

Many organizations have embraced the concept of outsourcing back-office activities as an improvement strategy for a firm's performance productivity. The ideology is that organizations ought to shift their focus to core activities (Leblanc et al., 2004). The study sought to establish the back-office activities outsourced by local manufacturing companies in Nairobi County. The back-office activities outsourcing included Human resource management outsourcing, Management and Administration Activities Outsourcing, Sales and Marketing Activities Outsourcing, Logistics and Transportation Activities Outsourcing, Information Technology Activities Outsourcing, and Real Estate and Physical Plant Activities Outsourcing. The back-office activities presented in Table 4.8, 4.9, 4.10, 4.11, 4.12 and 4.13.

Table 4. 8: Human Resource Activities Outsourcing

Human Resource Activities Outsourcing	N	Mean	Std. Dev
Contract employees' management	129	4.5194	.63861
Administration of retirement plans	129	4.4574	.67324

Payroll processing	129	4.3953	.71172
Administration of benefits	129	4.3101	.57007
HR information Systems	129	4.3101	.57007
Employee loans	129	4.2636	.75539
Administration of medical services	129	4.2403	.58330
Relocation	129	4.2171	.49939
Recruitment & staffing	129	3.9690	.39406
Training	129	3.1008	.84636
Overall Mean Score		4.178	0.6242

Source: Survey Data

Table 4.8 presents the findings on human resource activities outsourcing. The human resource outsourcing activities have been ordered from the most outsourced to the least outsourced. The most outsourced human resource activity was the contract employee's management. Most of the firms studied outsource contract employee's management as depicted by means responses of $\mu_x=4.5194$ and standard deviation of $\sigma_x=.63861$, implying that management of contract employees is usually outsourced. The least outsourced human resource activity was the training of employees. Most of the respondents representing their firms reported somewhat agreement with statements that organization outsources training as depicted by a mean and standard deviation of ($\mu_x= 3.1008$ and $\sigma_x= .84636$).

Table 4.9: Information Technology Activities Outsourcing

Information Technology Activities Outsourcing	N	Mean	Std. Dev
Training of IT	129	4.3256	.51785
End-user support	129	4.2558	.75290
Data entry and simple processing	129	4.2558	.72110
Website management	129	4.2326	.88839
Full IT function	129	4.2093	.84479
Application development	129	4.2016	.66591
Maintenance/repairs	129	4.0853	.45123
Computer graphic and design	129	4.0233	1.11429
Desktop System	129	3.3953	.68941
Overall Mean Score		4.1094	.73843

Source: Survey Data

Table 4.9 presents a descriptive analysis of information technology activities outsourcing. The activities have been ordered from the most outsourced to the least outsourced activity. The most outsourced activity was the training of IT staff. A statement that the organization outsources training of IT staff was supported by most respondents as depicted mean and standard deviation ($\mu_x= 4.3256$ and $\sigma_x= .51785$) leaning towards strong agreements with statements. The least outsourced activity was desktop system management. The statement that an organization outsources the desktop system was supported by a few respondents with most respondents disagreeing with statements as depicted by the mean and standard deviation ($\mu_x=3.3953$ and $\sigma_x=.68941$) leaning towards disagreement with statements

Table 4.10: Sales and Marketing Activities Outsourcing

Sales and Marketing Activities Outsourcing	N	Mean	Std. Dev
Advertising	129	4.4574	.67324
Direct Mail	129	4.3643	.64877
Research (Market) & Brand Tracking	129	4.3566	.60980
Market Analysis & Planning	129	4.2868	.60200
Telemarketing	129	4.2791	.52999
Sales Promotions	129	4.2403	.58330
The Field Sales	129	4.1938	.69684
Customer Service	129	2.3876	.61632
Overall Mean Score		4.0707	.620032

Source: Survey Data

Table 4.10 presents the findings on sales and marketing activities outsourcing in local manufacturing firms in Nairobi County. The activities have been arranged from the most outsourced to the least outsourced sales and marketing activities. Advertising was the most outsourced sales and marketing activity. The statement that organizations outsource advertising was highly supported by the majority of respondents implying that the activity of advertising is carried by other firms, as evidenced by a mean and standard deviation of ($\mu_x= 4.4574$ and $\sigma_x= .67324$). The least outsourced sales and marketing activities was customer service. Outsourcing of customer service was supported by few respondents implying customer service function is generally handled by the manufacturing firms themselves as evidenced by a mean and standard deviation of ($\mu_x=2.3876$ and $\sigma_x=.61632$).

Table 4. 11: Management and Administration Activities Outsourcing

Management and Administration Activities Outsourcing	N	Mean	Std. Devi
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Printing & reprographic	129	4.3643	.63662
Secretarial services	129	4.3443	.73787
Printing & reprographic	129	4.3441	.63662
Mailroom/delivery services	129	4.3411	.64343
Supply/inventory management	129	4.3256	.69780
Tea/refreshment services	129	4.2868	.53318
Records management	129	4.2791	.59918
Cleaning services	129	4.2636	.59318
Reception/telephone services	129	4.1938	.70796
Photocopying services	129	4.1395	.65841
Reception/telephone services	129	3.1938	.70796
Overall mean score		4.18872	.64529

Source: Survey Data

Table 4.11 presents the findings on the management and administration activities outsourcing in local manufacturing firms in Nairobi County. Management and administration activities have been ordered from the most outsourced to the least outsourced activity. The most outsourced activity was printing and reprographics. The statement that organizations outsource printing & reprographic was also highly supported by a majority of respondents, as evidenced by the mean and standard deviation of $\mu = 4.3643$ and $\sigma_x = .63662$, respectively. The least outsourced activity was reception/telephone services with a mean score of $\mu_x = 2.1938$ and a standard deviation of $\sigma_x = 0.70796$.

Table 4.12: Logistics and Transportation Activities Outsourcing

Logistics and Transportation Activities Outsourcing	N	Mean	Std. Dev
Freight audit	129	4.4031	.61896
Fleet management	129	4.3953	.57850
Fleet maintenance	129	4.3023	.62004
Warehousing	129	4.3023	.56740
Fleet operations	129	4.2791	.59918
Customer service	129	4.2791	.63709
Logistics operations network	129	4.0698	.45391
Distribution of our products	129	3.2791	.63709
Overall Mean Score		4.16376	0.589021

Source: Survey Data

Table 4.12 presents the logistics and transportation activities outsourcing practices of local manufacturing firms in Nairobi County. The logistics and transportation activities outsourcing have been arranged from the most outsourced to the least outsourced activity. The most outsourced activity was freight audit services. The majority of organizations outsource freight audit services to independent firms, as shown by mean and standard deviation tending towards a firm agreement with statements ($\mu_x = 4.4031$ and $\sigma_x = .61896$). There were two least logistics and transportation services outsourced. The findings show that few organizations outsource the distribution of products as presented by a mean and standard deviation of $\mu_x = 2.2791$ and $\sigma_x = .63709$, respectively. Also, few manufacturing firms outsource customer service as they prefer to perform the activity themselves as depicted by the mean and standard deviation of ($\mu_x = 2.279$ and $\sigma_x = .63709$).

Table 4.13: Real Estate and Physical Plant Activities Outsourcing

Real Estate and Physical Plant Activities Outsourcing	N	Mean	Std. Dev
Security	129	4.0078	1.02695
Facilities maintenance	129	3.8372	1.15779
Facilities management	129	3.7287	1.13021
Overall Meanscore		3.8579	0.104983

Source: Survey Data

Table 4.13 presents findings on real estate and physical plan activities outsourcing of local manufacturing firms in Nairobi County. The statement that manufacturing firms outsource the facilities management was slightly supported by a majority of respondents as depicted by a mean and standard deviation of ($\mu_x = 3.7287$ and $\sigma_x = 1.13021$). The statement that organizations outsource the facilities maintenance was also supported by a few respondents ($\mu_x = 3.8372$ and $\sigma_x = 1.15779$), implying that manufacturing firms rarely outsource maintenance activities for the plant. Finally, a majority of local manufacturing companies outsource security activities as depicted by a mean of $\mu_x = 4.0078$ and standard deviation of $\sigma_x = 1.02695$).

Table 4.14: Summary of Back Office Activities Outsourcing

Back Office Activities	Mean	Standard Dev
Management and Administration Activities Outsourcing	4.188	.6452
Human Resource Management	4.178	.6242
Logistics and Transportation Activities Outsourcing	4.163	.5890
Information Technology Activities	4.109	.7384
Sales and Marketing Activities Outsourcing	4.070	.6200
Real Estate and Physical Plant Activities Outsourcing	3.857	.1049
Overall Meanscore	4.117	.5536

Source: Survey Data

Table 4.14 presents a summary of the back-office business process outsourcing practices practiced in local manufacturing firms in Nairobi County. The practices have been ordered from the most practice outsourcing to the least practiced outsourcing practice using the mean. The most outsourced back-office activity was management and administration activities Outsourcing as depicted by mean and standard deviation tending to strong agreement ($\mu_x = 4.188$ $\sigma_x = .6452$). The least outsourced back-office activity was real estate and physical plant activities outsourcing with a mean and standard deviation tending towards just agreement ($\mu_x = 3.857$ $\sigma_x = .1049$).

4.3.4 Summary of Business Process Outsourcing Practices

The section presents a summary of the business process outsourcing practices practiced in local manufacturing firms in Nairobi County. The practices have been ordered from the most practice outsourcing to the least practiced outsourcing practice using the mean.

Table 4.15: Summary of Business Process Outsourcing Activities

Business Outsourcing Practices	Mean	Std.dev.
Back-office activities outsourcing	4.1174	0.5536
Primary activities outsourcing	4.0600	0.8826
Accounting and finance activities outsourcing	2.9083	0.51464

Table 4.15 presents a summary of the business process outsourcing practices. The most outsourced practice was back-office activities outsourcing. The combined mean and standard deviation were $\mu_x = 4.1174$ and $\sigma_x = 0.5536$, respectively. The second most outsourced practice was primary activities outsourcing, as evidenced by the mean and standard deviation of ($\mu_x = 4.060075$ and $\sigma_x = 0.88269375$) tending towards just agreement with overall average responses

on the statement. Finally, the least outsourced practice was accounting and finance activities. Accounting and finance activities outsourcing was less practiced by local manufacturing firms in Nairobi County, with some firms choosing not to outsource their accounting and finance activities. This is because financing activities are central to any organization, and they would instead manage their accounting and finance activities in-house than allow other organizations to do them through outsourcing. The study, therefore, concludes that accounting and finance activities were almost not outsourced, as evidenced by an overall mean and standard deviation of ($\mu_x = 2.9083$ and $\sigma_x = 0.51464$) tending towards disagreement with the overall responses on the statements.

4.3.5 Operational Performance

Operational performance is the positioning of various operational units in a company to ensure the units are helping the company to achieve a centralized set of goals. This is done by reviewing and optimizing the operations of the business. Efficient and effective operational performance is anticipated to increase a business's competitive advantage through time to market, delivery dependability, price, quality, cost, inventory levels, delivery time, product innovation and customer lead times (Ngatia, 2013). Operational Performance was categorized in three categories namely cost efficiency, flexibility and innovation.

4.3.5.1 Cost Efficiency.

The research aimed to determine the level of cost efficiency of local manufacturing companies in Nairobi County. The outcomes are presented in Table 4.16.

Table 4. 16: Cost Efficiency

Cost Efficiency	N	Mean	Std. Dev
Outsourcing has enabled us to access the vendor's cost-efficient system hence reducing our overall costs	129	4.4574	.67324
Outsourcing has enabled us to handle varying demand more effectively through economies of scale	129	4.3643	.64877
By focusing on core activities there has been a reduction of invested capital funds in non-core functions	129	4.2868	.60200
There has been an overall reduction of capital expenditure	129	4.2791	.52999

through outsourcing i.e. reduction in investment of assets			
Outsourcing has improved our company's cash-flow	129	4.2403	.58330
There has been a reduction in payroll costs as the company does not need its own employees for the tasks outsourced	129	4.1938	.69684
Overall Mean Score	129	4.3036	.62235

Table 4.16 presents cost efficiency of local manufacturing firms in Nairobi County. The statements about cost efficiency have been ordered from the most cost element reduced using the mean. The most reduced cost was outsourcing has enabled companies to access the vendor's cost-efficient system hence reducing our overall costs as depicted by mean and standard deviation tending to strong agreement ($\mu_x = 4.4574$ $\sigma_x = .67324$). The least reduced cost element were the payroll costs with a mean and standard deviation tending towards just agreement ($\mu_x = 4.1938$ $\sigma_x = .69684$).

4.3.5.2 Flexibility

The study sought to understand the level of flexibility as an element of operational performance of local manufacturing companies in Nairobi County. The outcomes are captured in Table 4.17.

Table 4. 17: Flexibility

Flexibility	N	Mean	Std. Dev
Quickly and timely response to customer preferences	129	4.4341	.73787
Technical resources that have eased the spread of information.	129	4.3256	.69780
Better adjustment to workforce fluctuations.	129	4.2868	.53318
Increased ability to alter production quantities and supply chain activities in response to changing market needs.	129	4.2791	.59918
Decreased bureaucracy in the company and hence decisions are made quickly	129	4.2636	.59318
The company is more dynamic in meeting challenging opportunities.	129	4.1938	.70796
Overall mean score	129	4.2971	.64486

Table 4.17 presents the flexibility of local manufacturing firms in Nairobi County. The statements about flexibility performance have been ordered from the most flexibility achieved

to the least flexibility achieved using the mean. Flexibility achieved mostly when it came to responses to customer preferences as depicted by mean and standard deviation tending to strong agreement ($\mu_x= 4.4341$ $\sigma_x= .73787$). The least flexibility was observed when it came to the company being more dynamic in meeting challenging opportunities with a mean and standard deviation tending towards just agreement ($\mu_x= 4.1938$ $\sigma_x= .70796$).

4.3.5.3 Innovation

The study sought to determine the level of innovation as an element of operational performance in local manufacturing firms in Nairobi County. The outcomes are summarized in Table 4.18.

Table 4.18: Innovation Performance

Innovation Performance	N	Mean	Std. Dev
We have been able to gain access to new products, services and technologies	129	4.364	.63662
We have been able to access new ideas, skills and expertise	129	4.364	.67243
Outsourcing has provided us with sufficient research capability.	129	4.341	.64343
Outsourcing has enabled us to respond quickly to the customer's needs.	129	4.248	.63776
Outsourcing has stimulated innovation among our personnel.	129	4.201	.52111
Outsourcing has enabled us to obtain technologies not available in-house.	129	3.992	.98818
Through outsourcing, we no longer need patent for the needed technology.	129	3.992	.93120
Overall mean score	129	4.2148	.71867

Table 4.18 presents innovation of local manufacturing firms in Nairobi County. The statements about innovation have been ordered from the area where most innovation have achieved to the area where least innovation have been achieved using the mean. The most innovation have

been achieved in accessing new products, services and technologies as depicted by mean and standard deviation tending to strong agreement ($\mu_x = 4.364$ $\sigma_x = .6366$). Least innovation have been achieved in patenting as presented by a mean and standard deviation tending towards just agreement ($\mu_x = 3.992$ $\sigma_x = .93120$).

4.3.5.4 Operational Performance

The study aimed to determine the descriptive statistics of the overall operational performance based on mean and standard deviation. The outcomes are captured in Table 4.19.

Table 4. 19: Overall Operational Performance

Operational Performance	Mean	Standard Deviation
Cost Efficiency	4.3036	.62235
Flexibility	4.2971	.64486
Innovation	4.2148	.71867

Table 4.19 presents overall operational performance of local manufacturing firms in Nairobi County. Operational performance has been ordered from the most performed area to the least performed area based on the mean. The most performed area was cost efficiency as depicted by mean and standard deviation tending to strong agreement ($\mu_x = 4.3036$ $\sigma_x = .62235$). The second performed area was flexibility as shown by mean and standard deviation of ($\mu_x = 4.2971$ $\sigma_x = .64486$). The least performed area was innovation as shown by a mean and standard deviation of ($\mu_x = 4.2148$ $\sigma_x = .71867$).

4.4 Correlation Analysis

The study also sought to establish the correlation between the independent and dependent variables. The study used Pearson correlation coefficient to analyse the link between business process outsourcing activities and operational performance of the local manufacturing companies operating in Nairobi County. The results are presented on table 4.20.

Table 4. 20: Bivariate Pearson Correlation

		PAO	AFAO	BOAO	OP
PAO	Pearson Correlation	1	.056	.141	-.019
	Sig. (2-tailed)		.527	.111	.832
	N	129	129	129	129

AFAO	Pearson Correlation	.056	1	.334**	.320**
	Sig. (2-tailed)	.527		.000	.000
	N	129	129	129	129
BOAO	Pearson Correlation	.141	.334**	1	.561**
	Sig. (2-tailed)	.111	.000		.000
	N	129	129	129	129
OP	Pearson Correlation	-.019	.320**	.561**	1
	Sig. (2-tailed)	.832	.000	.000	
	N	129	129	129	129

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

PAO= Primary Activities Outsourcing, **AFAO**= Accounting and Finance Activities Outsourcing, **BOAO**= Back Office Activities Outsourcing and **OP** = Operational Performance

Table 4.20 presents the bivariate correlation coefficient. The correlation between primary activities outsourcing and operational performance was weak and inverse ($r = -.019$, $p\text{-value} = .832 > \alpha = .05$). The negative correlation implies that increased primary activities outsourcing is associated with falling operational performance. The correlation between accounting & finance activities outsourcing and operational performance was weak and positive ($r = .320$, $p\text{-value} = .000 < \alpha = .05$). The positive association between accounting & finance outsourcing activities and operational performance implies that increased accounting and finance activities outsourcing is associated with improved operational performance. The correlation between back office activities and operational performance was moderate and positive ($r = .561$, $p\text{-value} = .000 < \alpha = .05$). The positive association implies that increased back-office activities outsourcing is accompanied by improved operational performance.

4.5 Regression Analysis

The study aimed to find out the effect of business process outsourcing practices on the operational performance of local manufacturing companies in Nairobi County. The research adopted a regression analysis to determine the impact of business process outsourcing practices on the operational performance of local manufacturing companies in Nairobi County.

4.5.1 Effect of Primary Activities Outsourcing on Operational Performance

The study sought to establish the effect of primary activities outsourcing on the operational performance of local manufacturing firms in Nairobi County. The study adopted a regression

analysis to establish the effect of primary activities outsourcing on the operational performance of local manufacturing firms in Nairobi County.

4.5.1.1 Effect of Primary Activities Outsourcing Practices on Cost efficiency

The effect of primary activities outsourcing on cost efficiency was established using a univariate analysis regression analysis as captured in table 4.21.

Table 4.21: Effect of Primary Activities Outsourcing Practices on Cost Efficiency

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.051 ^a	0.003	-0.005			0.34415
a. Predictors: (Constant), Primary activities						
ANOVA ^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	0.039	1	0.039	0.327	.568 ^b
	Residual	15.042	127	0.118		
	Total	15.081	128			
a. Dependent Variable: Cost efficiency						
b. Predictors: (Constant), Primary activities						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.184	0.212		19.769	0
	Primary activities	0.03	0.052	0.051	0.572	0.568
a. Dependent Variable: Cost efficiency						

Source: Survey Data

Table 4.21 demonstrates that primary activities outsourcing explains .03% of the variation to the cost efficiency of local manufacturing organizations in Nairobi County, as shown by the coefficient of determination (R²) of .003. The remaining variation in cost efficiency of 99.7% is explained by other variables not studied. Further, the ANOVA shows that primary activities outsourcing has a statistically insignificant effect on the cost efficiency of local manufacturing firms in Nairobi County as given by p-value (0.568) greater than 0.05 level of significance ($p = .568 < 0.05$). The study, therefore, concludes that primary activities outsourcing has an

insignificant effect on the cost efficiency of the local manufacturing firms in Nairobi County. The study implies that outsourcing of primary activities might help much in cost reduction efforts with its contribution being insignificant. Table 4.15 also shows the coefficients of primary activities outsourcing, the values of p and values of t. The model was estimated as shown in the equation below.

$$\text{Cost efficiency} = 4.184 + .030 \text{ Primary Activities Outsourcing}$$

The estimated model equation simplifies the causal effect relationship between primary activities outsourcing and the cost efficiency of local manufacturing firms in Nairobi County. The value 4.184 is the intercept term of the model showing the level of cost efficiency when the primary activities outsourcing in the model is held constant at zero. The effect of primary activities outsourcing on cost efficiency was positive and not statistically significant (p-value = .568 > .05).

4.5.1.2 Effect of Primary Activities Outsourcing on Flexibility

The effect of primary activities outsourcing on flexibility was established using univariate regression analysis. The findings are as outlined on table 4.22.

Table 4.22: Effect of Primary Activities Outsourcing on Flexibility

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.169 ^a	0.029	0.021			0.35939
a. Predictors: (Constant), Primary activities						
ANOVA ^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	0.483	1	0.483	3.74	.055 ^b
	Residual	16.404	127	0.129		
	Total	16.887	128			
a. Dependent Variable: Flexibility						
b. Predictors: (Constant), Primary activities						
Coefficients ^a						

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.72	0.221		21.357	0
	Primary activities	-0.104	0.054	-0.169	-1.934	0.055

a. Dependent Variable: Flexibility

Source: Survey Data

Table 4.22 shows that primary activities outsourcing explains 2.9 % of the variation on the flexibility of local manufacturing companies in Nairobi County, as shown by the coefficient of determination (R²) of .029. The remaining variation in flexibility of 97.1% is explained by other variables not studied. The ANOVA shows that primary activities outsourcing has a statistically insignificant effect on the flexibility of local manufacturing firms in Nairobi County as given by p-value greater than 0.05 level of significance ($p = .055 < 0.05$). The study, therefore, concludes that primary activities outsourcing has a weaker effect on the flexibility of local manufacturing companies in Nairobi County. Further, the research concludes that the effect of primary outsourcing activities on flexibility performance weaker and negative implying that outsourcing of primary activities leads to reduced flexibility performance since the firms that outsource primary activities become dependent on the firms that they have outsourced. Table 4.16 further presents the coefficients of primary activities outsourcing. The model was thus estimated as shown in the equation below.

Flexibility = 4.720 - .104 Primary Activities Outsourcing

The estimated model equation represents the causal effect relationship between primary activities outsourcing and flexibility of local manufacturing companies in Nairobi County. The value 4.720 is the intercept term of the model showing the extent of flexibility when the independent variables in the model are held constant at zero. The effect of primary activities outsourcing on flexibility was negative and statistically insignificant ($p\text{-value} = .055 < .05$).

4.5.1.3 Effect of Primary Activities Outsourcing on Innovation

The effect of primary activities outsourcing on innovation was established using univariate-regression analysis as presented in table 4.23

Table 4.23: Effect of Primary Activities Outsourcing Practices on Innovation

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.066 ^a	0.004	-0.003			0.39723
a. Predictors: (Constant), Primary activities						
ANOVA ^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	0.088	1	0.088	0.557	.457 ^b
	Residual	20.04	127	0.158		
	Total	20.128	128			
a. Dependent Variable: innovation						
b. Predictors: (Constant), Primary activities						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.034	0.244		16.516	0
	Primary activities	0.044	0.06	0.066	0.746	0.457
a. Dependent Variable: Innovation						

Source: Survey Data

Table 4.23 shows that primary activities outsourcing explains only 0.4% of the variation on the innovation of local manufacturing companies in Nairobi County, as presented by the coefficient of determination (R²) of .004. The remaining variation in innovation of 99.6% is explained by other variables not studied. The ANOVA shows that primary activities outsourcing has a statistically insignificant influence on the innovation of local manufacturing firms in Nairobi County as given by p-value greater than 0.05 level of significance ($p = .457 > 0.05$). The study, therefore, concludes that primary activities outsourcing has a minor influence on the innovation of local manufacturing companies in Nairobi County. The results imply that outsourcing of primary activities does not contribute to innovation among manufacturing firms since the primary activity of the firms is manufacturing. Outsourcing of primary activities

means the firm cannot even innovate product development by relying on outside providers. Table 4.23 further presents the coefficients of primary activities outsourcing. The model was thus estimated, as shown in the equation below.

$$\text{Innovation} = 4.034 + .044 \text{ Primary Activities Outsourcing}$$

The estimated model equation represents the causal effect relationship between primary activities outsourcing and innovation of local manufacturing firms in Nairobi County. The value 4.034 is the intercept term of the model showing the level of innovation when primary activities outsourcing is held constant at zero. The effect of primary activities outsourcing on innovation was positive but statistically insignificant ($p\text{-value} = .457 > .05$).

4.5.1.4 Effect of Primary Activities Outsourcing on Overall Operational Performance

The impact of primary activities outsourcing on operational performance was established using univariate regression analysis in Table 4.24.

Table 4.24: Effect of Primary Activities Outsourcing on Operational Performance

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.019 ^a	.0	-0.008			0.22561
a. Predictors: (Constant), Primary activities						
ANOVA ^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	0.002	1	0.002	0.045	.832 ^b
	Residual	6.464	127	0.051		
	Total	6.467	128			
a. Dependent Variable: overall operational performance						
b. Predictors: (Constant), Primary activities						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	4.298	0.139		30.98	.0
	Primary activities	-0.007	0.034	-0.019	-0.213	0.832
a. Dependent Variable: overall operational performance						

Source: Survey Data

Table 4.24 presents that primary activities outsourcing explains only 0.0361% of the variation on the operational performance of local manufacturing companies in Nairobi County, as evidenced by the coefficient of determination (R^2) of 0.000361. The remaining variation in the operational performance of 99.9% is explained by other variables not studied. The ANOVA shows that primary activities outsourcing has a statistically insignificant effect on the operational performance of local manufacturing companies in Nairobi County as given by p-value greater than 0.05 level of significance ($p = .832 > 0.05$). The research, therefore, concludes that primary activities outsourcing has a minor effect on the operational performance of local manufacturing companies in Nairobi County. The model was thus estimated, as shown in the equation below.

$$\text{Overall Operational Performance} = 4.298 - .007 \text{ Primary Activities Outsourcing}$$

The estimated model equation represents the causal effect relationship between primary activities outsourcing and the operational performance of local manufacturing firms in Nairobi County. The value 4.298 is the intercept term of the model showing the level of operational performance when primary activities outsourcing in the model is held constant at zero. The effect of primary activities outsourcing on operational performance was negative and statistically insignificant ($p\text{-value} = .8328 > .05$). The results imply that the outsourcing of primary activities may not be productive for manufacturing firms. The primary activities are the manufacturing firms are the key activities that should be retained when activities are being outsourced. Outsourcing of primary activities makes the firm dependent on service providers hence they cannot innovate as required; their flexibility is also affected since they have to rely on certain processes to be performed outside the firms. Finally, the firm continues incurring fixed costs like plan depreciation and maintenance even after outsourcing certain primary activities.

4.5.2 Effect of Accounting and Finance Activities Outsourcing on Operational Performance

The study aimed to determine the impact of accounting and finance activities outsourcing on the operational performance of local manufacturing organizations in Nairobi County. The

study adopted regression analysis to establish the effect of accounting and finance activities outsourcing on the operational performance of local manufacturing companies in Nairobi County.

4.5.2.1 Effect of Accounting and Finance Activities Outsourcing on Cost efficiency

The effect of accounting and finance activities outsourcing on cost efficiency was established using univariate regression analysis, as shown in tables 4.25. The table contains the model summary, the summary of variances and regression coefficients.

Table 4.25: Effect of Accounting and Finance Activities Outsourcing on Cost efficiency

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.311 ^a	0.097	0.09			0.32752
a. Predictors: (Constant), accounting and finance activities						
ANOVA ^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	1.457	1	1.457	13.587	.000 ^b
	Residual	13.623	127	0.107		
	Total	15.081	128			
a. Dependent Variable: Cost efficiency						
b. Predictors: (Constant), accounting and finance activities						
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.706	0.434		6.228	0
	Accounting and finance activities	0.409	0.111	0.311	3.686	0
a. Dependent Variable: Cost efficiency						

Source: Survey Data

Table 4.25 shows that accounting and finance activities outsourcing explains .9.7% of the variation of cost efficiency of local manufacturing firms in Nairobi County, as evidenced by the coefficient of determination (R²) of .097. The remaining variation in cost efficiency of 90.3% is explained by other variables not studied. The ANOVA shows that accounting and finance activities outsourcing has a statistically significant influence on the cost efficiency of

the local manufacturing firms in Nairobi County as given by p-value (0.000) less than 0.05 level of significance ($p = .000 < 0.05$). The study, therefore, concludes that accounting and finance activities outsourcing has a significant influence on the cost efficiency of local manufacturing firms in Nairobi County. Table 4.25 further shows the coefficients of accounting and finance activities outsourcing, the values of p and values of t. The model was estimated, as presented in the equation below.

$$\text{Cost efficiency} = 2.706 + .409 \text{ Accounting and Finance Activities Outsourcing}$$

The estimated model equation simplifies the causal effect relationship between accounting and finance activities outsourcing and the cost efficiency of local manufacturing companies in Nairobi County. The value 2.706 is the intercept term of the model showing the level of cost efficiency when the accounting and finance activities outsourcing in the model are held constant at zero. The effect of accounting and finance activities outsourcing on cost efficiency was positive and statistically significant ($p\text{-value} = .000 < .05$). The findings imply that the effect of accounting and finance activities outsourcing is very critical on cost efficiency. Manufacturing firms can enhance their cost efficiency through the outsourcing of accounting and finance activities. Functions like auditing and bookkeeping can be outsourced by firms to enhance their cost performance.

4.5.2.2 Effect of Accounting and Finance Activities Outsourcing on Flexibility

The effect of accounting and finance activities outsourcing on flexibility was established using multi-regression analysis. The results are summarized in Table 4.26. Table 4.26 shows that accounting and finance activities outsourcing explains 1.9 % of the variation in the flexibility of local manufacturing companies in Nairobi County, as shown by the coefficient of determination (R^2) of .029. The remaining variation in flexibility of 98.1% is explained by other variables not studied. The ANOVA shows that accounting and finance activities outsourcing has a statistically insignificant effect on the flexibility of local manufacturing firms in Nairobi County as given by p-value greater than 0.05 level of significance ($p = .117 > 0.05$). The study, therefore, concludes that accounting and finance activities outsourcing has a weaker

impact on the flexibility of manufacturing companies in Nairobi. Table 4.26 further presents the coefficients of accounting and finance activities outsourcing.

Table 4. 26: Effect of Accounting and Finance Activities Outsourcing on Flexibility

Model	R	R Square	Adjusted Square	R		Std. Error of the Estimate
1	.139 ^a	0.019		0.012		0.36112
a. Predictors: (Constant), Accounting and finance activities outsourcing						
ANOVA^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	0.325	1	0.325	2.491	.117 ^b
	Residual	16.562	127	0.13		
	Total	16.887	128			
a. Dependent Variable: Flexibility						
b. Predictors: (Constant), accounting and finance activities outsourcing						
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.543	0.479		7.396	0
	Accounting and finance activities	0.193	0.122	0.139	1.578	0.117
a. Dependent Variable: Flexibility						

Source: Survey Data

The model was thus estimated as shown in the equation below.

$$\text{Flexibility} = 3.543 + .193 \text{ Accounting and Finance Activities Outsourcing}$$

The estimated model equation simplifies the causal effect relationship between accounting and finance activities outsourcing and flexibility of local manufacturing companies in Nairobi County. The value 3.543 is the intercept term of the model showing the level of flexibility when the independent variables in the model are held constant at zero. The effect of accounting and finance activities outsourcing on flexibility was positive and but not statistically significant (p-value = .117 > .05). The results imply that accounting and finance activities do not contribute

much to flexibility performance. The flexibility of manufacturing firms may therefore not be achieved through the outsourcing of accounting and finance activities. Firms should therefore not outsource accounting activities to enhance their flexibility.

4.5.2.3 Effect of Accounting and Finance Activities Outsourcing on Innovation

The effect of accounting and finance activities outsourcing on innovation was established using univariate regression analysis as shown in Tables 4.27.

Table 4.27: Effect of Accounting and Finance Activities Outsourcing on Innovation

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.152 ^a	0.023	0.016			0.39345
a. Predictors: (Constant), accounting and finance activities outsourcing						
ANOVA ^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	0.467	1	0.467	3.018	.085 ^b
	Residual	19.66	127	0.155		
	Total	20.128	128			
a. Dependent Variable: innovation						
b. Predictors: (Constant), accounting and finance activities outsourcing						
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.31	0.522		6.343	0
	accounting and finance activities	0.231	0.133	0.152	1.737	0.085
a. Dependent Variable: Innovation						

Source: Survey Data

Table 4.27 shows that accounting and finance activities outsourcing explains only 2.3% of the variation on the innovation of local manufacturing companies in Nairobi County, as shown by the coefficient of determination (R²) of .023. The remaining variation in the innovation of 97.7% is explained by other variables not studied. The ANOVA shows that accounting and

finance activities outsourcing has a statistically insignificant effect on innovation of local manufacturing firms in Nairobi County as given by p-value greater than 0.05 level of significance ($p = .085 > 0.05$). The study, therefore, concludes that accounting and finance activities outsourcing has a minor effect on the innovation of local manufacturing firms in Nairobi County. The model was thus estimated as shown in the equation below.

$$\text{Innovation} = 3.310 + .231 \text{ Accounting and Finance Activities Outsourcing}$$

The estimated model equation simplifies the causal effect relationship between accounting and finance activities outsourcing and the innovation of local manufacturing companies in Nairobi County. The value 3.310 is the intercept term of the model that shows the level of innovation when accounting and finance activities outsourcing is held constant at zero. The effect of accounting and finance activities outsourcing on innovation was positive but statistically insignificant ($p\text{-value} = .085 > .05$). The study results imply that outsourcing of accounting and finance activities may not contribute to the innovation of the manufacturing firms. Manufacturing firms should therefore not outsource accounting and finance activities to enhance their innovations.

4.5.2.4 Effect of Accounting and Finance Activities Outsourcing on Operational Performance

The effect of accounting and finance activities outsourcing on the overall operational performance was established using univariate regression analysis Table 4.28

Table 4.28: Effect of Accounting and Finance Activities Outsourcing on Operational Performance

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.320 ^a	0.102	0.095			0.21381
a. Predictors: (Constant), accounting and finance activities outsourcing						
ANOVA ^a						

Model		SS	df	Mean Square	F	Sig.
1	Regression	0.661	1	0.661	14.461	.000 ^b
	Residual	5.806	127	0.046		
	Total	6.467	128			
a. Dependent Variable: overall operational performance						
b. Predictors: (Constant), accounting and finance activities outsourcing						
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.193	0.284		11.258	0
	accounting and finance activities	0.275	0.072	0.32	3.803	0
a. Dependent Variable: overall operational performance						

Source: Survey Data

Table 4.28 indicates that accounting and finance activities outsourcing explains only 10.2% of the variation on the operational performance of local manufacturing companies in Nairobi, County, as shown by the coefficient of determination (R^2) of .102. The remaining variation in operational performance of 89.8% is explained by other variables not studied. The ANOVA shows that accounting and finance activities outsourcing has a statistically significant effect on the operational performance of local manufacturing companies in Nairobi County as given by p-value less than 0.05 level of significance ($p = .000 < 0.05$). The study, therefore, concludes that accounting and finance activities outsourcing has a significant effect on the operational performance of local manufacturing firms in Nairobi County. The model was thus estimated, as shown in the equation below.

$$\text{Operational Performance} = 3.193 + .275 \text{ Accounting and Finance Activities Outsourcing}$$

The estimated model equation simplifies the causal effect relationship between accounting and finance activities outsourcing and the operational performance of local manufacturing companies in Nairobi County. The value 3.193 is the intercept term of the model that shows the level of operational performance when accounting and finance activities outsourcing in the model is held constant at zero. The effect of accounting and finance activities outsourcing on operational performance was positive and statistically significant ($p\text{-value} = .000 < .05$). The study results imply that firms outsourcing accounting and finance activities may experience

improved overall operational performance. Outsourcing of activities such as book-keeping and auditing may free the accounting staff to concentrate on the interpretation of financial reports to give timely advice to the top management of the manufacturing firm.

4.5.3 Effect of Back-Office Activities Outsourcing Practices on Operational Performance

The study sought to establish the effect of back-office activities outsourcing on the operational performance of local manufacturing companies in Nairobi County. The research adopted regression analysis to establish the effect of back-office activities outsourcing on the operational performance of local manufacturing companies in Nairobi County.

4.5.3.1 Effect of Back-Office Activities Outsourcing on Cost Efficiency

The effect of back-office activities outsourcing on cost efficiency was established using univariate regression analysis, as shown in tables 4.29. The table contains the model summary, the analysis of variances and regression coefficients. Table 4.29 shows that back-office activities outsourcing explains 30.7 % of the variation to the cost efficiency of local manufacturing companies in Nairobi County, as evidenced by the coefficient of determination (R^2) of .307. The remaining variation in the cost efficiency of 69.3 % is explained by other variables not studied. The ANOVA shows that back-office activities outsourcing has a statistically significant influence on the cost efficiency of local manufacturing firms in Nairobi County as given by p-value (0.000) less than 0.05 level of significance ($p = .000 < 0.05$). The study, therefore, concludes that back-office activities outsourcing has a major influence on the cost efficiency of local manufacturing firms in Nairobi County.

Table 4.29: Effect of Back-Office Activities Outsourcing Practices on Cost Efficiency

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.554 ^a	0.307	0.302			0.28685
a. Predictors: (Constant), Back-office activities						
ANOVA ^a						
Model		SS	df	Mean	F	Sig.

				Square		
1	Regression	4.631	1	4.631	56.277	.000 ^b
	Residual	10.45	127	0.082		
	Total	15.081	128			
a. Dependent Variable: Cost efficiency						
b. Predictors: (Constant), Back-office activities						
Coefficients^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.452	0.514		0.88	0.381
	Back office	0.91	0.121	0.554	7.502	0
a. Dependent Variable: Cost efficiency						

Source: Survey Data

Table 4.29 further presents the coefficients of back-office activities, the values of p and values of t. The model was estimated and captured as presented in the equation below.

Cost efficiency = .452 + .910 Back-office Activities Outsourcing

The estimated model equation simplifies the causal effect relationship between back-office activities outsourcing and the cost efficiency of local manufacturing companies in Nairobi County. The value .452 is the intercept term of the model and shows the level of cost efficiency when the back-office activities outsourcing in the model is held constant at zero. The effect of back-office activities outsourcing on cost efficiency was positive and statistically significant (p-value = .000 < .05). The results mean that manufacturing firms that were outsourcing their back-office activities also experienced improved cost efficiency. Back-office activities such as human resources management, logistics and transport are not the key activity of manufacturing firms. They can thus be outsourced to enhance the cost efficiency of manufacturing firms. The firms can, therefore, concentrate on primary activities and save on the cost of staff that were primarily performing the activities. The firm can also concentrate on its specialty activity of manufacturing and leave back office to outside experts to perform thus saving on cost.

4.5.3.2 Effect of Back-Office Activities Outsourcing on Flexibility

The effect of back-office activities outsourcing on flexibility was established using univariate regression analysis. The findings are as outlined in table 4.30.

Table 4.30: Effect of Back-Office Activities Outsourcing on Flexibility

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.457 ^a	0.209	0.203			0.32428
a. Predictors: (Constant), Back-office activities						
ANOVA ^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	3.531	1	3.531	33.581	.000 ^b
	Residual	13.355	127	0.105		
	Total	16.887	128			
a. Dependent Variable: Flexibility						
b. Predictors: (Constant), Back-office activities						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.934	0.581		1.607	0.111
	Back office	0.795	0.137	0.457	5.795	0
a. Dependent Variable: Flexibility						

Source: Survey Data

Table 4.30 shows that back-office activities outsourcing explains 20.9% of the variation on the flexibility of local manufacturing companies in Nairobi County, as evidenced by the coefficient of determination (R²) of .209. The remaining variation in flexibility of 79.1% is explained by other variables not studied. The ANOVA shows that back-office activities outsourcing has a statistically significant influence on the flexibility of local manufacturing companies in Nairobi County as given by p-value less than 0.05 level of significance ($p = .000 < 0.05$). The study, therefore, concludes that back-office activities outsourcing has a stronger impact on the flexibility of local manufacturing firms in Nairobi County. Table 4.30 further presents the

coefficients of back-office activities outsourcing. The model was thus estimated, as shown in the equation below.

$$\text{Flexibility} = .934 + .795 \text{ Back-Office Activities}$$

The estimated model equation simplifies the causal effect relationship between the back-office activities outsourcing and the flexibility of local manufacturing companies in Nairobi County. The value .934 is the intercept term of the model that shows the level of flexibility when the independent variables in the model are held constant at zero. The effect of back-office activities outsourcing on flexibility was positive and statistically significant (p-value =.000<.05). The results imply that manufacturing firms can pursue flexibility performance through outsourcing of back-office activities. Back-office activities such as human resources, logistics, warehousing can be outsourced to enhance firm flexibility. The manufacturing firms should allow outside experts to perform the back-office activities to enable the firm to concentrate on its key activity of manufacturing. The firm can thus be flexible since it has adequate time and resources to be directed at its manufacturing activities.

4.5.3.3 Effect of Back-Office Activities Outsourcing Practices on Innovation

The effect of back-office activities outsourcing on innovation was established using univariate regression analysis as presented in table 4.31.

Table 4.31: Effect of Back-Office Activities Outsourcing on Innovation

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.093 ^a	0.009	0.001			0.39636
a. Predictors: (Constant), Back-office activities						
ANOVA ^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	0.176	1	0.176	1.119	.292 ^b
	Residual	19.952	127	0.157		
	Total	20.128	128			
a. Dependent Variable: Innovation						
b. Predictors: (Constant), Back office activities						

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.464	0.71		4.878	0
	Back office	0.177	0.168	0.093	1.058	0.292

a. Dependent Variable: Innovation

Source: Survey Data

Table 4.32 presents that back-office activities outsourcing explains only 0.9% of the variation on the innovation of local manufacturing companies in Nairobi County, as shown by the coefficient of determination (R²) of .009. The remaining variation in the innovation of 99.1% is explained by other variables not studied. The ANOVA shows that back-office activities outsourcing has a statistically insignificant effect on innovation of local manufacturing companies in Nairobi County as given by p-value greater than 0.05 level of significance ($p = .292 > 0.05$). The research, therefore, concludes that back-office activities outsourcing has a minor impact on the innovation of local manufacturing firms in Nairobi County. The model was estimated, as shown in the equation below.

$$\text{Innovation} = 3.464 + .177 \text{ Back-Office Activities Outsourcing}$$

The estimated model equation simplifies the causal effect relationship between back-office activities outsourcing and innovation of local manufacturing companies in Nairobi County. The value 3.464 is the intercept term of the model that shows the level of innovation when back-office activities outsourcing is held constant at zero. The effect of back-office activities outsourcing on innovation was positive but statistically insignificant ($p\text{-value} = .292 > .05$). The study findings show that even though outsourcing of back-office activities contributes to innovation, the contribution was not statistically significant. The results thus imply that manufacturing firms may not achieve much in terms of innovation with the outsourcing of back-office activities.

4.5.3.4 Effect of Back-Office Activities Outsourcing Practices on Operational Performance

The effect of back-office activities outsourcing on operational performance was established using multi-regression analysis in table 4.32.

Table 4. 32: Effect of Back-Office Activities Outsourcing on Operational Performance

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.561 ^a	0.315	0.31			0.18675
a. Predictors: (Constant), Back-office activities						
ANOVA ^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	2.038	1	2.038	58.42	.000 ^b
	Residual	4.429	127	0.035		
	Total	6.467	128			
a. Dependent Variable: Operational performance						
b. Predictors: (Constant), Back-office activities						
Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.714	0.335		5.122	0
	Back office	0.604	0.079	0.561	7.644	0
a. Dependent Variable: Overall operational performance						

Source: Survey Data

Table 4.32 shows that back-office activities outsourcing explains only 31.5% of the variation on the operational performance of local manufacturing companies in Nairobi County, as shown by the coefficient of determination (R^2) of .315. The remaining variation in operational performance of 68.5% is explained by other variables not studied. The ANOVA shows that back-office activities outsourcing has a statistically significant effect on the operational performance of local manufacturing companies in Nairobi County as given by p-value less than 0.05 level of significance ($p = .000 < 0.05$). The study, therefore, concludes that back-office activities outsourcing has a major effect on the operational performance of local manufacturing companies in Nairobi County. The model was thus estimated, as shown in the equation.

Overall Operational Performance = 4.298 -.007 Back-office Activities Outsourcing

The estimated model equation simplifies the causal effect relationship between back-office activities outsourcing and the operational performance of local manufacturing companies in Nairobi County. The value 1.714 is the intercept term of the model and shows the level of operational performance when back-office activities outsourcing in the model is held constant at zero. The effect of back-office activities outsourcing on operational performance was positive and statistically significant ($p\text{-value} = .000 < .05$). The results imply that the outsourcing of back-office activities enhances overall operational performance. Manufacturing firms with the objective of improving their overall operational performance should outsource back-office activities that are consuming their valuable time, effort and resources. The firm can thus concentrate on its key specialty activity of manufacturing products. The manufacturing firms can thus benefit from specialization that is accompanied by reduced operational costs and enhanced output.

4.5.4 Joint Effect of Primary, Accounting & Finance and Back-office Activities Outsourcing on Operational Performance

The research sought to determine the joint impact of Primary, Accounting and Finance Activities and Back-Office activities outsourcing on the operational performance of local manufacturing companies in Nairobi County. The study adopted multiple regression analysis to establish the joint effect of Primary, Accounting and Finance Activities and Back office activities outsourcing on the operational performance of local manufacturing companies in Nairobi County.

4.5.4.1 Effect of Primary, Accounting & Finance and Back-office Activities Outsourcing on Cost Efficiency

The joint effect of Primary, Accounting and Finance Activities and Back-Office Activities Outsourcing on cost efficiency was established using multi-regression analysis as summarized in tables 4.33.

Table 4.33: Effect of Primary, Accounting, Finance, and Back-Office Activities Outsourcing on Cost Efficiency

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.571 ^a	0.326	0.309			0.28522
a. Predictors: (Constant) Primary activities, Accounting and finance activities and Back-Office activities						
ANOVA ^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	4.911	3	1.637	20.124	.000 ^b
	Residual	10.169	125	0.081		
	Total	15.081	128			
a. Dependent Variable: Cost efficiency						
b. Predictors: (Constant), Primary activities, Accounting and finance activities and Back-Office Activities						
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	0.093	0.565		0.165	0.869
	Primary activities	-0.017	0.043	-0.029	-0.395	0.693
	Accounting and finance activities	0.186	0.102	0.142	1.819	0.071
	Back-office activities	0.839	0.129	0.511	6.5	0
a. Dependent Variable: Cost efficiency						

Source: Survey Data

Table 4.33 shows that Primary Activities, Accounting and Finance Activities and Back-Office Activities Outsourcing explains 32.6% of the variation to the cost efficiency of local manufacturing companies in Nairobi County, as shown by the coefficient of determination (R^2) of .326. The remaining variation in cost efficiency of 67.4% is explained by other variables not studied. The ANOVA shows that Primary Activities, Accounting and Finance Activities and Back-Office Activities Outsourcing have a significant effect on the cost efficiency of local manufacturing firms in Nairobi County as given by p-value less than 0.05 level of significance ($p = .000 < 0.05$). The study, therefore, concludes that Primary Activities, Accounting and

Finance Activities and Back-office Activities outsourcing have a significant impact on the cost efficiency of manufacturing firms. The model was thus estimated as shown in the equation below.

$$\text{Cost Efficiency} = .093 - .017 \text{ Primary Activities} + .186 \text{ Accounting and Finance activities} + .839 \text{ Back-Office Activities Outsourcing}$$

The estimated model equation simplifies the causal effect relationship between primary, accounting and finance and back-office activities outsourcing and the cost efficiency of local manufacturing companies in Nairobi County. The value .093 is the intercept term of the model if activities outsourcing in the model are held constant at zero. The study results imply that business process outsourcing practices have a material effect on the cost efficiency of local manufacturing firms. The firm that manages to outsource all non-essential and non-specialty activities can enjoy advantages of cost-cutting and cost leadership.

4.5.4.2 Effect of Primary, Accounting & Finance and Back-office Activities Outsourcing on Flexibility

The joint effect of Primary Activities, Accounting and Finance Activities and Back-Office Activities outsourcing on flexibility was established using multi-regression analysis as shown in tables 4.34.

Table 4.34: Effect of Primary, Accounting & Finance and Back-office Activities Outsourcing on Flexibility

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.515 ^a	0.265	0.247			0.31511
a. Predictors: (Constant) Primary activities, Accounting and finance activities and Back-Office activities						
ANOVA ^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	4.475	3	1.492	15.022	.000 ^b
	Residual	12.412	125	0.099		
	Total	16.887	128			
a. Dependent Variable: Flexibility						
b. Predictors: (Constant), Primary activities, Accounting and finance activities and Back-Office						

activities						
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.323	0.624		2.118	0.036
	Primary activities	-0.147	0.048	-0.238	-3.076	0.003
	Accounting and finance activities	-0.019	0.113	-0.014	-0.166	0.868
	Back-office activities	0.861	0.143	0.495	6.038	0

a. Dependent Variable: Flexibility

Source: Survey Data

Table 4.34 shows that the joint effect of Primary, Accounting and Finance and Back-Office Activities outsourcing explains 26.5% of the variation on the flexibility of local manufacturing companies in Nairobi County, as evidenced by the coefficient of determination (R^2) of .265. The remaining variation in flexibility of 73.5% is explained by other variables not studied. The ANOVA shows that the joint effect of primary, accounting & finance activities and back-office activities outsourcing on flexibility business process outsourcing is having a significant effect on the flexibility of local manufacturing companies in Nairobi as given by p-value less than 0.05 level of significance ($p = .000 < 0.05$). The study, therefore, concludes that primary, accounting and finance activities and back-office activities outsourcing have a significant influence on the operational performance of local manufacturing companies in Nairobi County. The model was estimated as shown in the equation below.

$$\text{Flexibility} = 1.323 - .147 \text{ Primary Activities} - .019 \text{ Accounting and Finance Activities} + .861 \text{ Back-office Activities Outsourcing}$$

The estimated model equation shows the causal effect relationship between primary, accounting and finance and back-office activities outsourcing and flexibility of local manufacturing companies in Nairobi County. The value 1.323 is the intercept term of the model that shows the level of flexibility when primary, accounting and finance and back-office activities outsourcing in the model are held constant at zero. The study results also imply that

outsourcing of primary, accounting & finance and back-office activities leads to improved flexibility performance. The flexibility is realized when the firm lets go of some non-essential operations to be performed by experts outside the firm. The firm can thus have adequate time to concentrate on its key activity of manufacturing hence enjoying the flexibility that comes with outsourcing.

4.5.4.3 Effect of Primary, Accounting & Finance and Back-office Activities Outsourcing on Innovation

The joint effect of primary, accounting & finance activities and back-office activities outsourcing on innovation was established using multi-regression analysis as outlined in table 4.35. Table 4.35 shows that the joint impact of primary, accounting & finance activities and back-office activities outsourcing explains only 2.8% of the variation on the innovation of local manufacturing companies in Nairobi County, as shown by the coefficient of determination (R^2) of .028. The remaining variation in the innovation of 97.2% is explained by other variables not studied. The ANOVA shows that the joint effect of primary, accounting & finance activities and back-office activities outsourcing have a statistically insignificant impact on innovation of local manufacturing firms in Nairobi County as given by p-value greater than 0.05 level of significance ($p = .313 > 0.05$).

Table 4.35: Effect of Primary, Accounting & Finance and Back-office Activities Outsourcing on Innovation

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.167 ^a	0.028	0.005			0.39562
a. Predictors: (Constant) Primary activities, Accounting and finance activities and Back-Office activities						
ANOVA ^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	0.563	3	0.188	1.199	.313 ^b
	Residual	19.564	125	0.157		
	Total	20.128	128			
a. Dependent Variable: Innovation						
b. Predictors: (Constant), Primary activities, Accounting and finance activities and Back-Office						

activities		Coefficients				
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.938	0.784		3.748	0
	Primary activities	0.035	0.06	0.053	0.592	0.555
	Accounting and finance activities	0.206	0.142	0.136	1.452	0.149
	Back-office activities	0.077	0.179	0.041	0.43	0.668

a. Dependent Variable: Innovation

Source: Survey Data

The study, therefore, concludes that primary, accounting & finance and back-office activities outsourcing effect on the innovation of local manufacturing firms in Nairobi County was minor. The model was thus estimated as shown in the equation below.

$$\text{Innovation} = 2.938 + .035 \text{ Primary activities} + .206 \text{ Accounting finance activities} + .077 \text{ Back Office Activities Outsourcing}$$

The estimated model equation simplifies the causal effect relationship between primary, accounting and finance and back-office activities outsourcing and innovation of local manufacturing companies in Nairobi County. The value 2.938 is the intercept term of the model and shows the level of innovation when primary, accounting and finance and back-office activities outsourcing in the model are held constant at zero. The study results imply that firms with a goal of enhancing their innovation should outsource their non-essential activities. Functions such as bookkeeping, human resource, logistics, information technology and customer service can be outsourced by the manufacturing firms. The firms can thus concentrate on their key activity of manufacturing products through innovation and production. The firms that have outsourced non-essential operations will have adequate time and resources to carry out product research that should contribute to innovation.

4.5.4.4 Effect of Primary, Accounting & Finance and Back-Office Activities Outsourcing on Operational Performance

The joint effect of primary, accounting & finance activities and back-office activities outsourcing on operational performance was established using multi-regression analysis as summarized in Tables 4.36.

Table 4.36: Effect of Primary, Accounting & Finance and Back-Office Activities Outsourcing on Operational Performance

Model Summary						
Model	R	R Square	Adjusted R Square			Std. Error of the Estimate
1	.587 ^a	0.345	0.329			0.1841
a. Predictors: (Constant) Primary activities, Accounting and finance activities and Back-Office activities						
ANOVA ^a						
Model		SS	df	Mean Square	F	Sig.
1	Regression	2.23	3	0.743	21.93	.000 ^b
	Residual	4.237	125	0.034		
	Total	6.467	128			
a. Dependent Variable: Operational performance						
b. Predictors: (Constant), Primary activities, Accounting and finance activities and Back-Office activities						
Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.53	0.365		4.193	0
	Primary activities	-0.039	0.028	-0.101	-1.388	0.168
	Accounting and finance activities	0.129	0.066	0.15	1.949	0.054
	Back-office activities	0.565	0.083	0.526	6.784	0
a. Dependent Variable: operational performance						

Source: Survey Data

Table 4.36 joint effect of primary, accounting & finance activities and back-office activities outsourcing explains only 34.5% of the variation on the operational performance of manufacturing companies in Nairobi County as shown by the coefficient of determination (R^2) of .345. The remaining variation in the operational performance of 65.5% is explained by other variables not studied. The ANOVA shows that the joint effect of primary, accounting & finance activities and back-office activities outsourcing on the operational performance of local manufacturing companies in Nairobi County was statistically significant given by p-value less than 0.05 level of significance ($p = .000 < 0.05$). The study, therefore, concludes that business process outsourcing practices have a major effect on the operational performance of local manufacturing companies in Nairobi County. The model was thus estimated as shown in the equation below.

$$\text{Operational Performance} = 1.530 - .039 \text{ Primary Activities} + .129 \text{ Accounting and Finance Activities} + .565 \text{ Back-Office Activities Outsourcing}$$

The estimated model equation simplifies the causal effect relationship between primary, accounting and finance, and back-office activities outsourcing and the operational performance of local manufacturing companies in Nairobi County. The value 1.530 is the intercept of the model and shows the level of operational performance when primary, accounting and finance and back-office activities outsourcing in the model are held constant at zero. The study also implies that outsourcing of non-essential activities leads to overall operational performance. The outsourcing of business processes such as bookkeeping, human resources, warehousing, storage, and logistics enables the firm to save on costs through specialization. The firms also become flexible since they have adequate time and resources to concentrate on their key activity of manufacturing products. Finally, the firms also innovate given that more time and resources will be allocated to the process of turning raw materials into finished goods.

4.6 Summary of effect of Business Process Outsourcing Practices on Operational Performance

Table 4.37: Summary of Data Analysis

Objective	Analysis Model	Interpretation of Results
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<p>Objective 1</p> <p>To identify the business process outsourcing practices adopted by the local manufacturing companies in Nairobi County.</p>	<p>Descriptive statistics</p> <p>the overall mean and standard deviation for</p> <p>Back-office activities ($\mu_x= 4.1174$ and $\sigma_x= 0.5536$)</p> <p>Primary activities ($\mu_x= 4.060$ and $\sigma_x= 0.8826$)</p> <p>Accounting and finance activities ($\sigma_x= 2.908$ $\sigma_x= 0.51464$)</p>	<p>The overall mean for back-office and primary activities outsourcing was greater than 3.0 hence are significantly outsourced.</p> <p>The overall mean for accounting & finance activities was less than 3.0 hence hardly outsourced.</p>
<p>Objective 2</p> <p>To establish the effects of outsourcing primary activities on the operational performance of local manufacturing companies in Nairobi County.</p>	<p>Simple regression analysis</p> <p>$Y_{1i}= 4.184 + .030 PO_i$</p> <p>$Y_{2i}= 4.720 - .104 PO_i$</p> <p>$Y_{3i}= 4.034 + .044 PO_i$</p> <p>$Y_{ji}= 4.298 - .007 PO_i$</p> <p>where</p> <p>Y= Dependent variables (Y_{1i} -cost performance, Y_{2i}- flexibility performance, Y_{3i}- innovation performance, Y_{ji}- overall firm performance)</p> <p>PO_i=Primary activities outsourcing (PO)</p>	<p>$R^2 = 0.0003$ hence primary activities outsourcing explains only 0.03% of the total variation in operational performance.</p> <p>P-value (0.832) was greater than 0.05 hence outsourcing of primary activities does not have a significant influence on the operational performance of local manufacturing companies in Nairobi County.</p>
<p>Objective 3</p> <p>To establish the effects of outsourcing accounting and finance activities on the operational performance of local manufacturing companies in Nairobi County.</p>	<p>Simple regression analysis</p> <p>$Y_{1i}= 2.706 + .409 AO_i$</p> <p>$Y_{2i}= 3.543+ .193 AO_i$</p> <p>$Y_{3i}=3.310 + .231 AO_i$</p> <p>$Y_{ji}= 3.193 + .275 AO_i$</p> <p>where</p> <p>Y= Dependent variables (Y_{1i} -cost performance, Y_{2i}- flexibility performance, Y_{3i}- innovation performance, Y_{ji}- overall firm</p>	<p>$R^2 = 0.32$ hence accounting & and finance outsourcing explains 32% of the variation in operational performance.</p> <p>P-value (0.000) less than 0.05 hence outsourcing of accounting & finance activities has a significant impact on the operational performance of local manufacturing companies in Nairobi County.</p>

	performance) AO _i = Accounting and finance activities outsourcing (AO)	
Objective 4 To establish the effects of outsourcing back-office activities on the operational performance of local manufacturing companies in Nairobi County.	Simple regression analysis Y _{1i} = .452 + .910 BO _i Y _{2i} = .934 + .795 BO _i Y _{3i} = 3.464 + .177 BO _i Y _{ji} = 4.298 -.007 BO _i where = Dependent variables (Y _{1i} -cost performance, Y _{2i} - flexibility performance, Y _{3i} - innovation performance, Y _{ji} - overall firm performance)	R ² = .561 hence back office outsourcing explains 56.1% of the total variation in operational performance. P-value (0.000) less than 0.05 hence outsourcing of back-office activities has a significant effect on the operational performance of local manufacturing companies in Nairobi County.
Objective 5 To establish the joint effects of outsourcing primary activities, accounting and finance activities, and back-office activities on the operational performance of local manufacturing companies in Nairobi County.	Multiple regression analysis Y _{1i} = .093 -.017 PO _i + .186 AO _i + .839 BO _i Y _{2i} = 1.323 -.147 PO _i -.019 AO _i + .861 BO _i Y _{3i} = 2.93 + .035 PO _i + .206AO _i + .077 BO _i Y _{ji} = 1.530 -.039 PO _i + .129AO _i + .565 BO _i where Y= Dependent variables (Y _{1i} -cost performance, Y _{2i} - flexibility performance, Y _{3i} - innovation performance, Y _{ji} - overall firm performance) PO _i , AO _i and, BO _i –Are Primary activities outsourcing (PO), Accounting and Finance activities outsourcing (AO), Back-office activities Outsourcing (BO).	R ² = .587 hence business process outsourcing explains 58.7% of the total variation in operational performance. P-value (0.000) less than 0.05 hence business process outsourcing practices have a significant effect on the operational performance of local manufacturing companies in Nairobi County.

CHAPTER FIVE:

SUMMARY, CONCLUSIONS RECOMMENDATIONS

5.1 Introduction

The chapter presents a summary, conclusions, recommendations and areas of further studies. The preceding sub-sections elaborates on summary, conclusion, recommendations and fields of additional research.

5.2 Discussion of Findings

The summary of findings presents the significant results in relation to study objectives. The summary is organized according to study objectives as shown in preceding discussions.

5.2.1 Business Process Outsourcing Practices

Descriptive analysis revealed business process outsourcing practices grouped into primary activities, accounting and finance activities and back-office activities. Primary activities outsourcing was averagely practiced by manufacturing firms in Nairobi, with some firms choosing not to outsource their primary activities since those are their core activities and they are not comfortable delegating to other organizations through outsourcing. The study, therefore, concludes that primary activities outsourcing ranked second, as evidenced by the mean and standard deviation ($\mu_x = 4.060075$ and $\sigma_x = 0.88269375$) tending towards a strong agreement with overall average responses on the statement. The finding is in congruence with the empirical literature that companies outsource production activities not only to cut costs below in-house production but to also enhance operational performance in one or more operational areas such as first-pass yield rates, equipment utilization, equipment availability, cycle times, lead-times, on-time delivery rate (Meixell, Kenyon & Westfall, 2014). Chesbrough and Kardon 2006) argue that outsourcing of primary activities affords companies the chance to escape the limitations of their own productive capability in adapting to variations in the quantities of sales.

Accounting and finance activities outsourcing was the least practiced by manufacturing firms in Nairobi, with some firms choosing not to outsource their accounting and finance activities since finance activities are central to any organization and they would instead manage their accounting and finance activities than allow other organizations do them through outsourcing. The study, therefore, concludes that accounting and finance activities were almost not outsourced, as evidenced by overall mean and standard deviation of ($\mu_x = 2.9083$ and $\sigma_x = 0.51464$) tending towards disagreement with overall with responses on the statements. The finding is in agreement with the empirical literature. Krell (2007) revealed that accounting outsourcing covers a wide variety of processes, ranging from highly transactional activities such as, accounts payable, accounts receivable, and payroll, to processes that require greater and more complex degrees of knowledge and analysis such as treasury, tax strategy, or financial planning and analysis. According to Reddy and Ramachandran (2008), approximately 30-35 percent of the time in accounting works is spent in low-end transaction processing activities. Outsourcing of such repetitive and non-value adding activities allows firms to focus more on strategic activities like financial planning.

Back-office activities outsourcing was highly practiced by manufacturing firms in Nairobi County with most firms choosing to outsource their back-office activities since such activities are not primary activities and not central to the organization and they would instead rather delegate such actions to other organizations through outsourcing to concentrate on their primary manufacturing function. The study, therefore, concludes that back-office activities were the most outsourced, as evidenced by the overall mean and standard deviation of ($\mu_x = 4.1174$ and $\sigma_x = 0.5536$) tending towards an agreement with statements. Finally, the results of the study are in agreement with the study by Kinyua (2015) who established that business organizations seek to outsource back-office activities believing that better value is provided at a lower cost for the firm's competitiveness. Meixell, Kenyon and Westfall (2014) noted that back-office outsourcing is considered as an effective way to improve efficiency by obtaining access to professionals in various fields. Companies are able to profit from the increasing comparative advantage of specialized service providers who have knowledge in the fields they are interested in.

5.2.2 Effect of Primary Activities Outsourcing on the Operational Performance

The findings revealed that outsourcing of primary activities may not contribute to the operational performance of the companies concerned. Actually, the findings depict that outsourcing of primary activities may lead to reduced operational performance concerning costs, flexibility and innovation. The inverse relationship between outsourcing of primary activities and operational performance is an indication that firms may experience reduced operational performance even after outsourcing their production activities. The coefficient of primary activities outsourcing reveals that for every one-unit enhancement of primary activities outsourcing, the operational performance falls by .007 units. The outcomes are in agreement with the research by Pradabwong, Braziotis, Tannock and Pawar (2017) established that primary activities outsourcing have joint effect on organisational performance. On flexibility, if the supplier has purchased some special production equipment for the outsourcing company, the positive effect of outsourcing on flexibility can be reduced because there is no longer freedom of choice to seek out other suppliers readily. However, Meixell, Kenyon & Westfall (2014) on the other hand showed some manufacturing companies that outsource production activities and have been able to reduce costs below in-house production as well as improve operational performance in one or more operational areas such as first-pass yield rates, equipment utilization, equipment availability, cycle times, lead-times, on-time delivery rate

5.2.3 Effect of the Accounting and Finance Activities Outsourcing on the Operational Performance

The study concluded that accounting and finance activities outsourcing has a significant impact on the operational performance of local manufacturing companies in Nairobi County. The effect of accounting and finance activities outsourcing on operational performance was positive and statistically significant ($p\text{-value} = .000 < .05$). The finding shows that a firm practicing outsourcing of accounting and finance activities may enjoy improved operational performance, as evidenced by a significant value less than the critical point. The positive and significant effect of accounting and finance activities outsourcing on operational performance implies that the firms that have outsourced their accounting and finance activities had a significant

improvement in operational performance. Further, the positive coefficient of accounting and finance activities outsourcing implies that for every unitary improvement in accounting and finance activities outsourcing, the operational performance was enhanced by .275 units. The finding is in agreement with a number of empirical studies. According to Chemutai (2019), outsourcing of mundane and zero-value adding low-end transaction processing activities allows companies to concentrate more on strategic activities like financial planning. Additionally, Mwichigi (2015) provides benefits such as process knowledge/expertise, access to superior technology, economies of scale and accessibility to capital. By outsourcing the accounting and finance activities, the companies can avoid significant investments in human resources, equipment, software, infrastructure, employees' payment, which are involved by an in-house department hence a reduction in costs and consequently major savings. Outsourced accountants can be mentors and advisers on how further to improve strategies and processes, leading to beneficial innovations in the accounting and finance processes (Ayantoyinbo & Odepidan, 2018).

Contrary to the findings of the study, Mulat (2007) noted there are difficulties associated with finance and accounting activities. In case, a firm outsources its internal audit function; an outside auditing firm for internal audits is substantially more expensive than in-house staff since the hourly cost of this service includes the very substantial overhead of the firm, as well as the profit margin. Hence, the benefit of cost reduction meant to be derived from outsourcing such services is not realized. In addition, Domberger (1998) noted that another risk associated with outsourcing of finance and accounting services is that over-reliance on external service providers may lead to wear away the firms' internal expertise and skills. For example, a firm that is excessively reliant on external service providers cannot emphasize sufficiently on internal skills and expertise development. This leads to loss of significant expertise and skills within the firm and the development of inappropriate skill sets that hinders the company's capacity and ability to innovate. Everaert et al., (2007) also stated that when a firm becomes hugely reliant on a specific service provider, it becomes difficult to revert to insourcing. More so for finance and accounting activities since the performance of such accounting functions requires specific expertise and firm-specific knowledge.

5.2.4 Impact of the Back-office activities Outsourcing on the Operational Performance

The study revealed that outsourcing of back-office activities has the strongest impact on operational performance. The positive coefficient reveals that generally, firms that outsource their back-office activities experience improved operational performance. The positive effect may be because back-office activities outsourcing is an effective way to increase efficiency by obtaining access to professionals in various fields. Additionally, companies benefit from the increased comparative advantage of specialized service providers who have in depth knowledge in the various fields concerned. The finding on the significant role that back-office activities outsourcing plays in operational performance improvement is in congruence with a number of empirical studies. Smith et al. (2006) noted that back-office activities outsourcing is a powerful way to increase efficiency by obtaining access to professionals in various fields. Companies are able to benefit from the rising comparative advantage of specialized service providers who have knowledge in the fields concerned.

Mohammed, Abebe and Wondim (2019) in agreement with the outcome of the current research states that back-office activities outsourcing allows companies and external vendors to combine their consultative and strategic roles in designing and implementing programs to enhance companies' operational performance through the reduction of costs, more flexibility, accessibility to state of the art technology and infrastructure and access to professionals with domain expertise. However, Andrabi et al. (2006) revealed contrary findings suggesting that even though an outsourcing company gains flexibility through outsourcing, such activity creates challenges of integration for the outsourcing company and its supplier.

5.3 Conclusion

Based on the first objective, that is, the business process outsourcing practices practiced in local manufacturing firms in Nairobi County, the study found that back-office activities outsourcing was the most practiced followed by primary activities outsourcing and accounting and finance activities outsourcing that was the least practiced. The study was therefore able to order the outsourcing activities in manufacturing firms in Nairobi County based on their relative importance. The empirical literature just identified business process outsourcing

practices in manufacturing firms. This study has extended the breadth of knowledge by ranking the outsourcing activities from the most practised to the least practised.

Regarding the second objective, the findings showed that primary activities outsourcing has a minor effect on the operational performance of local manufacturing companies in Nairobi County. The estimated model equation reveals that the impact of primary activities outsourcing on operational performance was negative and not statistically significant. Primary activities outsourcing, therefore, has a weaker effect on operational performance. In addition, the study reveals an inverse relationship between outsourcing of primary activities and operational performance, depicting that outsourcing of primary activities may result in reduced operational performance of the concerned organizations. This could be because the cost savings anticipated may have been exaggerated, and costs end up being higher after outsourcing. In addition to not realizing the cost savings that initially influenced the outsourcing decision, there are also some extra indirect and social costs that may be incurred. For example, the indirect costs may include transaction costs. Contract monitoring and oversight, intangibles and contract generation and procurement

Concerning the third objective, the research concludes that accounting and finance activities outsourcing has a significant effect on the operational performance of local manufacturing companies in Nairobi County. The impact of accounting and finance activities outsourcing on operational performance was positive and statistically significant. The significant effect implies that the outsourcing of accounting and finance activities has a major influence on the operational performance of the manufacturing firms. The positive association between accounting & finance activities outsourcing and operational performance depicts that enhanced outsourcing of accounting and finance department activities is associated with improved operational performance concerning costs, flexibility and innovation. The positive association may be justified by the fact that outsourcing of repetitive and non-value adding low-end transaction processing activities allow firms to focus more on strategic activities like financial planning. In addition, it provides advantages such as economies of scale, process expertise, access to capital, and access to expensive technology. By outsourcing the accounting and finance activities, the companies can avoid massive investments in human resources,

equipment, software, infrastructure, employees' payment, which are involved by an in-house department hence a reduction in costs and significant savings.

Regarding the fourth objective, on the effect of back-office activities outsourcing on operational performance. The study concludes that back-office activities outsourcing has a major influence on the operational performance of manufacturing companies in Nairobi County. In addition, back-office activities outsourcing had the most substantial effect on operational performance. The positive and significant relationship between back-office activities outsourcing and operational performance implies that such outsourcing has a major implication on operational performance with regards to costs, flexibility and innovation. The positive effect may be attributed to the fact that back-office activities outsourcing is a powerful means to enhance efficiency by obtaining access to specialists in various fields. In addition, companies can profit from the increased comparative advantage of expert service providers who have knowledge in the fields concerned. Back-office outsourcing enables firms and external service providers to consolidate their consultative and strategic roles in designing and implementing plans to improve the organization's operational performance; through the reduction of costs, higher level of flexibility, access to state of the art technology and infrastructure and access to professionals with domain expertise.

5.4 Recommendations

5.4.1 Management of Manufacturing firms

The study makes some recommendations based on findings. The study revealed that back-office activities outsourcing has a major impact on the operational performance of local manufacturing companies in Nairobi County. The positive and significant relationship between back-office activities outsourcing and operational performance implies that such outsourcing has a major implication on operational performance concerning costs, flexibility and innovation. The study, hence, advises that the management of manufacturing companies place more emphasis on outsourcing back-office activities since they have the most substantial impact on operational performance. The managers should be aware that back-office activities outsourcing is a powerful means to enhance productivity through gaining access to specialists in various areas. Managers should additionally appreciate that back-office outsourcing enables companies and external service providers to unite their consultative and strategic roles in designing and implementing plans to improve the organization's operational performance

through the reduction of costs, more flexibility, accessibility to advanced technology and infrastructure, access to professionals with domain expertise.

The effect of accounting and finance activities outsourcing on operational performance was positive and statistically significant. The significant impact implies that the outsourcing of accounting and finance activities has a major influence on the operational performance of the local manufacturing firms. The positive association between accounting & finance activities outsourcing and operational performance depicts that enhanced outsourcing of accounting and finance department activities is associated with improved operational performance with regards to costs, flexibility and innovation. The managers of manufacturing firms should, therefore, also focus on the outsourcing of accounting and finance activities. The managers should outsource repetitive and non-value adding low-end transaction processing activities. This way companies can concentrate on more strategic activities like financial planning.

The study revealed that primary activities outsourcing has a weaker effect on operational performance. In addition, the research shows an inverse relationship between outsourcing of primary activities and operational performance, depicting that outsourcing of primary activities may lead to reduced operational performance. Consequently, the research study advice that the top management of the local manufacturing organizations should consider not to outsource any its critical primary activities. The descriptive analysis showed that some primary activities are critical and should therefore not be outsourced while other primary activities are less critical hence may be outsourced with little repercussions to the firm. The outsourcing of primary activities leads to reduced operational performance since outsourcing core activities of the manufacturing firm's leads to loss of focus and complete dependence of the form on the third parties. The management should be aware that the cost savings expected from outsourcing may have been overestimated at the planning stage and costs are at times higher after outsourcing. The Kenya Association of Manufacturers (KAM) would find the study helpful in advising their members. Based on the study findings, KAM should advise their members to pursue business process outsourcing practices as a strategy for improving their operational performance.

5.4.2 Recommendation for Policy

First, the Ministry of Industrialization may find this study useful for the purpose of policy. The Ministry of Industrialization would get an insight into how the operational performance of local manufacturing firms could be enhanced through business process outsourcing practices. The Ministry of Industrialization should encourage local manufacturing firms to pursue business process outsourcing practices as an avenue to enhance their performance. The ministry should also give stimulus packages for firms that are greatly outsourcing their non-essential activities.

5.4.3 Recommendation for Theory

5.5 Limitations of the study

The research was based on local manufacturing companies in Nairobi County, and the findings may not be applicable to other manufacturing firms outside Nairobi. The manufacturing firms in other counties may not have adopted business process outsourcing practices or the level of adoption of business process outsourcing practices may be below what is happening in Nairobi County. Finally, the study on the effect of business process outsourcing practices on operational performance focused on three business process outsourcing practices, namely primary activities outsourcing, accounting and finance activities outsourcing, and back-office activities outsourcing. Business process outsourcing practices is multifaceted hence future studies to focus on other aspects of business process outsourcing practices that was not in the scope of this study.

5.6 Areas for Further Research

The study was based on manufacturing firms within Nairobi County only hence the findings may not be applicable to local manufacturing firms outside Nairobi. The study therefore suggests that another research should be carried out on the impact of business process outsourcing practices on the operational performance of local manufacturing firms outside Nairobi. The study utilised primary method of data collection. Business process outsourcing is multifaceted concept that may need both primary and secondary data to adequately capture all its aspects. The study therefore recommends that future studies, in addition to structured

questionnaires, should adopt secondary data to enhance the information collected with the primary tools of data collection. Future studies should consider utilizing data collection sheets to collect secondary data on business process outsourcing practices and operational performance. Business process outsourcing is multifaceted and that there are other variables that also affect operational performance in addition to business process outsourcing. The research therefore suggests that future studies should introduce intervening variables in the study to control for other significant factors that also do affect operational performance in addition to business process outsourcing practices. The other variables can include strategic planning, research and knowledge management, which are also critical to operational performance.



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APPENDICES

APPENDIX I: LETTER OF INTRODUCTION

23rd November 2017

TO WHOM IT MAY CONCERN

Mulli Julia-089482

Ms. Mulli Julia is a postgraduate student in our Master of Commerce (MCom) programme. In partial fulfillment of the MCom degree, students are required to carry out a research project and write a thesis on a contemporary subject within their field of specialization. Among other activities, the project involves data collection and analysis.

Julia is requesting to gather information to be used in her research. The information she will obtain from your organization will be used for this academic purpose only and will be kept confidential. The results of the survey will be in summary form and will not disclose any individual, company name or company information in any way.

The research study is entitled **“The effects of business process outsourcing practices on the operational performance of local manufacturing companies in Nairobi County”**

We hope that your organization can assist by providing information to the above-named student.

Yours faithfully,

Quindos Karanja
MCOM Coordinator
School of Management and Commerce
Email: qkaranja@strathmore.edu

APPENDIX II: QUESTIONNAIRE

Instructions

Kindly complete the following questionnaire using the instruments provided for each set of questions. Please tick (✓) appropriately

Confidentiality

All information given shall be treated with strict confidence. No mention will be made of any participant (s) or organization in the report of the study.

SECTION A

PART I: Respondents Profile

1. Name of the respondent (Optional):
2. Title/Position of the respondent in the firm
3. How long have you been with this firm?
4. Please indicate your phone number:
5. Please indicate your email address:

PART II: Company Profile

Name of the organization (Optional)

6. How would you classify your firm regarding ownership?

- | | |
|---------------------|-----|
| Sole Proprietorship | () |
| Partnership | () |
| Limited Partnership | () |
| Corporation | () |
| Cooperative | () |

7. For how long has the firm been operational?

- <10 years
- Between 10 and 20 years
- > 20 years

8. Indicate the total number of employees in your company

- Less than 10 (Micro)
- Between 10 and 50 (Small)
- Between 50 and 99 (Medium)
- Over 100 + (Large)

9. Under which sector does your firm fall?

- Food, Beverage, Fresh Produce
- Leather, Footwear, Textiles, Apparel
- Timber, Wood, Furniture
- Plastic, Rubber, Paper, Board
- Metal and Allied; Chemical and Allied
- Motor Vehicle and Accessories
- Energy, Electricals and Electronics
- Pharmaceutical and Medical Equipment
- Building, Mining, Construction

10. Does your firm;

- | | Yes | No |
|-----------------------------|--------------------------|--------------------------|
| Export any of its products | <input type="checkbox"/> | <input type="checkbox"/> |
| Import any of its products. | <input type="checkbox"/> | <input type="checkbox"/> |

11. Please indicate what department you belong to

- Manufacturing of components for the final product
- Accounting/Finance
-

Human Resource

Information Technology ()

Sales & Marketing ()

Management services /administration ()

Logistics & Transport { }

Real Estate & Physical Plants ()

SECTION B: OUTSOURCING PRACTICES

Please indicate by ticking (✓) in the appropriate space the extent to which your company outsources the below activities. The activities have been categorized under primary activities, accounting/finance activities and back-office activities by functions/departments

(Where 1= Strongly disagree, 2=Disagree, 3= Somewhat agree, 4= Agree, 5=Strongly agree)

<u>PRIMARY ACTIVITIES OUTSOURCING</u>		1	2	3	4	5
1. Manufacturing of components for the Final product	Our organization outsources the engineering process					
	Our organization outsources the research & development function					
	Our organization outsources the product design process					
	Our organization outsources the moulding process.i.e. process of shaping liquid or malleable raw material by using a fixed frame called a mold or matrix					
	Our organization outsources the machining process. i.e. this is where raw material is cut into the intended final shapes and sizes using power driven machine tools					
	Our organization outsources the assembly function e.g. welding, riveting, soldering, brazing, mechanical fastening and adhesive joining etc.					

	Our organization outsources the product repair process					
	Our organization outsources the aesthetic aspects e.g. cleaning, blasting, puffing, polishing, painting					
<u>ACCOUNTING/FINANCE</u>		<u>ACTIVITIES</u>				
<u>OUTSOURCING</u>						
2. Accounting/Finance	Our organization outsources general accounting. For example: accounts payable, accounts receivables					
	Our organization outsources financial reporting (Preparation of financial statements)					
	Our organization outsources tax compliance (VAT, Corporate tax, excise etc.)					
	Our organization outsources the billing process					
	Our organization outsources cheque writing					
	Our organization outsources the stock count/take process					
<u>BACK-OFFICE ACTIVITIES</u>		<u>OUTSOURCING</u>				
3.Human Resources	Our organization outsources the HR information Systems					
	Our organization outsources training					
	Our organization outsources recruitment & staffing					
	Our organization outsources relocation					
	Our organization outsources payroll processing					
	Our organization outsources contract employees' management					
	Our organization outsources administration of retirement plans					
	Our organization outsources administration of benefits					

	Our organization outsources administration of medical services						
	Our organization outsources administration of employee loans						
4.Information Technology	Our organization outsources application development						
	Our organization outsources maintenance/repairs						
	Our organization outsources training of IT						
	Our organization outsources the end-user support						
	Our organization outsources the desktop system						
	Our organization outsources data entry and simple processing						
	Our organization outsources the website management						
	Our organization outsources the full IT function						
	Our organization outsources computer graphic and design						
	5.Sales & Marketing	Our organization outsources advertising					
Our organization outsources the field sales							
Our organization outsources sales promotions							
Our organization outsources telemarketing							
Our organization outsources direct mail							
Our organization outsources market analysis & planning							
Our organization outsources customer service							
Our organization outsources the research (Market) & brand tracking							
6.Management Services/Administration	Our organization outsources secretarial services						

	Our organization outsources reception/telephone services					
	Our organization outsources cleaning services					
	Our organization outsources tea/refreshment services					
	Our organization outsources supply/inventory management					
	Our organization outsources records management					
	Our organization outsources mailroom/delivery services					
	Our organization outsources printing & reprographic (reproduction of graphics through mechanical and electrical means)					
	Our organization outsources photocopying services					
7.Logistics & Transport	Our organization outsources the distribution of our products					
	Our organization outsources the logistics operations network					
	Our organization outsources customer service					
	Our organization outsources freight audit					
	Our organization outsources the warehousing					
	Our organization outsources the fleet management					
	Our organization outsources the fleet operations					
	Our organization outsources the fleet maintenance					
8.Real Estate & Physical Plants	Our organization outsources the facilities management					
	Our organization outsources the facilities maintenance					
	Our organization outsources security					

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SECTION C: OPERATIONAL PERFORMANCE

This section seeks to determine the impact of the outsourcing practices adopted on operational performance. Indicate the extent to which you agree or disagree with the following statement ticking (✓) in the appropriate space.

(Where 1= Strongly disagree, 2=Disagree, 3=Somewhat agree, 4=Agree, 5=Strongly agree)

OPERATIONAL PERFORMANCE MEASURES	Primary activities outsourcing					Accounting activities outsourcing					Back-office activities outsourcing				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
<u>Cost Efficiency</u>															
Outsourcing has enabled us to access the vendor's cost-efficient system hence reducing our overall costs															
There has been a reduction in payroll costs as the company does not need its own employees for the tasks outsourced															
Outsourcing has improved our company's cash-flow															
There has been an overall reduction of capital expenditure through outsourcing i.e. reduction in investment of assets															

Through outsourcing, we no longer need patent for the needed technology.																			
Outsourcing has stimulated innovation among our personnel.																			
Outsourcing has enabled us to respond quickly to the customer's needs.																			

Thank you for your time and cooperation.



APPENDIX III: LIST OF MANUFACTURING COMPANIES

No.	Company Name	Postal address	Contacts	Email address	Website	Product	Sector
1	Acme Containers	P.O Box 11092 - 00400 Nairobi Opp. Tumaini Muguku High School next to Kantaria Police Post, Kiringothi, Red Hill Limuru Road	254 (066) 51319, (020) 2017431/2, 2018018	info@acmecontainers.com		Basins And Baskets	Plastic And Rubber
2	Adpak international Kenya	PO Box 38130-00623 Parklands Enterprise Road, Opp. Road A. Next to Roto Moulders	254 (020) 2347903	adpakintl@yahoo.com		Self-Adhesive Labels and Tapes	Paper And Board
3	A Plus PVC Technology Company Limited	P.O. Box 17248-00510, Nairobi, Kenya Lusingeti Rd, off Likoni Rd, Industrial Area	+254-20-6553644, +254-20-6534350, +254-722-204651	sales@aplus-pvc.com, info@aplus-pvc.com, applus@wananchi.com	http://aplus-pvc.com/	PVC Sheets and windows	Plastic And Rubber
4	Allpack Industries Ltd	Mlolongo	254-722-205512, 733-601590	info@allpack.co.ke	https://allpack.co.ke/	Product packaging solutions	Paper And Board
5	Ashut Engineers	Nyahera Road Off Lunga Lunga Road, Industrial Area Lokitaung Road, off Likoni Road, Industrial Area, Nairobi	020 2494566 / 2494665 254 20 552225 / 651718 / 556887	enquiries@ashut.com sales@ashut.com	https://www.ashut.com/	Aluminium & allied products; Plastic packaging; Shelves & Storage	Metal And Allied

6	Banbros Ltd	P.O. Box 76511-0508 Main Mombasa Road, Mavoko, Nairobi	020-2107266/350 or 020-8024556 or 020-8163992	banbros@banbros.co.ke	http://www.banbros.co.ke/	Body building mechanical fabricators	Motor Vehicle And Accessories
7	Basco Products (K) Ltd	Basco products (K) Ltd Airport North Road, Embakasi	0800 221 331	customerservice@bascopaints.com	https://bascopaints.com/	Paint and Paint products	Chemical And Allied
8	C & P Shoes Industries Ltd	ALONG MOMBASA ROAD, NEXT TO PANARI HOTEL, NAIROBI KENYA	254-20 3563233 / 3563234 / 077 2263318 / 077 2293066	info@cpshoes.com	https://cpshoes.com/	Footware ; Personal Protective Equipment (PPE)	Leather And Footwear
9	Kinpash Enterprises Ltd	P.O Box59353-00200 Nairobi 07 Baricho Rd, Industrial Area	+254 (020) 6536503, 8042123	kinpash@wananchi.com, accounts@kinpash.com		HDPE Pipes	Plastic And Rubber
10	Kip Melamine Co. Ltd	P.O Box 44794-00100 Nairobi 10 Pate Road, Off Lunga Lunga Road	+254 (020) 2492272 - 254 (722) 773850	info@kipmelamine.com	www.kipmelamine.com	Adhesive Tapes	Chemical And Allied
11	Koba Waters Ltd	P.O Box 45797-00100 GPO Nairobi Mpaka House, Mpaka Road Westlands	+254 (020) 2029196 +254 (720) 946 475, (752) 868 879	email: broomhillsprings@wananchi.com	web: www.broomhillsprings.wananchi.com	Bottled Drinking Water	Food And Beverages
12	Kridha Limited	P.O Box 17777-00500 Nairobi Henkel Chemicals, Go down No. 9, 31 Enterprise Road, Industrial Area	+254 (020) 3546665, 2072233 +254 (725) 249249	business@kridha.com	web: www.kridha.com	Water Treatment and Solutions	Chemical And Allied

13	Kuguru Food Complex Ltd	P.O Box 47343-00100 GPO Nairobi Kuguru House, Off Enterprise Road, Industrial Area Off Mombasa Road	+254 (020) 3089/91/92/93 +254 (722) 755421, (733) 508 191	info@kuguru.com	www.kuguru.com	Soft Drinks	Food And Beverages
14	Kiboko Leisure Wear Limited	P.O. Box 19449,0020 2 Mombasa Road Viraj Complex /Opposite Jomo Kenyatta International Airport	254 (0)20 2514329 or 2578973;254 (0)710 577786	kiboko@kiboko.co.ke	http://www.kibokoleisurewear.com/	Garment & Fabric	Textile And Apparels
15	L.G. Harris and Co. Ltd	P.O Box 49919-00100 GPO Nairobi Baba Dogo Road, Ruaraka	+254 (020) 8560954/8, 8563953/4	info@harrisea.net	www.igharri sea.com	Paint and Paint products	Plastic And Rubber
16	Label Converters	P.O Box 44518-00100 GPO Nairobi Old Mombasa Road	Tel: +254 (020)253782 +254 (733) 721615	email: ashish@labelconverters.com		Basic Dye	Paper And Board
17	Labh Singh Harnam Singh Ltd	P.O Box 45569-00100 GPO Nairobi Off Mombasa Road	+254 (020) 3538174/5 +254 (722) 304765, (733) 581663	email: lshs@lshs.co.ke	web: www.lshs.co.ke	Vehicle Assembly and Body Building	Motor Vehicle And Accessories
18	Laboratory and Allied Limited	P.O Box 42875-00100 GPO Nairobi Mombasa Road, Opposite Sameer Africa, Next to Libra House	+254 (020) 8040306, 2337478, 8029485, +254 (020) 8029896, 8029487	info@laballied.com		Pharmaceutical Products, Medical Equipment and Medicines	Pharmaceutical And Medical Equipment
19	Laneeb Plastic Industries Ltd	P.O Box 59285-00200 City Square Nairobi Off	+254 (722) 514339, (733) 830077, 752948	laneebclass@yahoo.com, email: manoj@laneeb.co.ke		Polythene Bags	Plastic And Rubber

		Mombasa Road Next to Saj Ceramics Opp. Doshi and Company Hardware					
20	Le Stud Limited	P.O Box 38737-00600 Nairobi Likoni Road Enterprise Road, Next to Barclays Bank	+254 (020) 552901, 552327 +254 (722) 512 897	lestud@wananchi.com		Promotional Items	Textile And Apparels
21	Le Stud Limited	P.O Box 38737-00600 Nairobi Likoni Road Enterprise Road, Next to Barclays Bank	Tel: +254 (020) 552901, 552327 +254 (722) 512 897	email: lestud@wananchi.com		Promotional Items	Textile And Apparels
22	Lean Energy Solutions Ltd	P.O Box 121-00606 Sarit Centre Westlands Nairobi Kipro Centre Building Sports Road, 4th Floor Westlands	Tel: +254 (020) 4450649 +254 (736) 450649, (728) 249674 Fax: Fax: +254 (020) 4450649	info@leansolutions.co.ke	web: www.leansolutions.co.ke	Lean Briquettes and Boiler Conversions	Services And Consultancy
23	Libya Oil Kenya Limited (Formerly Mobil Oil Kenya)	P.O Box 64900-00620 Mobil Plaza Muthaiga, Nairobi	Tel: +254 (020) 362200, 3622420 +254 (719) 020000	email: info@oilibya.co.ke	website: www.oilibya.co.ke	Petrol	Energy, Electricals and Electronics
24	London Distillers	P.O Box 57387-00200 City Square Nairobi Dunga Road, Industrial Area	Tel: +254 (020) 6531007-10, 55263 +254 (722) 205854, (733) 633478	email: ldk@londondistillers.com	web: www.londondistillers.com	Wines and Spirits	Nairobi And Surrounding Areas
25	Magnate Ventures Ltd	P.O Box 74937-00200 City Square Nairobi	Cell: +254 (722) 204400, 204 400, +254 (733) 641635, 641635,	email: info@magnate-ventures.com	www.magnate-ventures.com	Billboards	Services And Consultancy

		Magnate Centre Bunyala Road next to Mobil Petrol Station, Nairobi	601010, (725) 079092 +254 (020) 2010509, 2350739, 2634086				
26	Manhar Brothers (K) Ltd	P.O Box 40447-00100 GPO Nairobi Solai Road, Industrial Area Off Bunyala	Tel: +254 (020) 558842, 555883, 532294			Pharmaceutical Products, Medical Equipment And Medicines	Pharmaceutical And Medical Equipment
27	Manipal International Printing Press Ltd	P.O Box 39987 - 00623 Nairobi Variety Flooring Works Ltd Godown along Mombasa Road	Tel: +254 (020) 2451441 or 2034248 +254 (788) 142892 or (736) 046779	email: pritam@manipalea.com or mallya@manipalea.com	web: www.manipaltechnology.com, www.manipalea.com	Flower Sleeves	Paper And Board
28	Manji Food Industries Limited	P.O Box 78277-00507 Viwandani Nairobi Junction Off Likoni and Lunga Lunga Road	Tel: +254 (020) 555148/67/94 4, 6534827 +254 (722) 203626, +254 (733) 333288	sales@dawdata.net	www.houseofdwada.com	Biscuits	Food And Beverages
29	Manson Hart Kenya Ltd	P.O Box 14360-00800 Westlands Baba Dogo Road, Ruaraka, Nairobi	+254 (020) 8561160, 8561244 +254 (722) 670802	manson@kenya web.com		Precast Concrete Products	Building, Mining And Construction
30	Manufacturers and Suppliers (K) Ltd	P.O Box 47108-00100 GPO Nairobi Enterprise Road, Opp. Homabay Road Roundabout, Industrial Area	+254 (020) 554199, 535551/2	osotua@iconnect.co.ke		Rubbing And Polishing Stones	Energy, Electricals And Electronics
31	Maroo Polymers	P.O Box 32187-	+254 (020) 552884/5,	maroo@maroopolymers.com		Paint and Paint products	Chemical And Allied

	Ltd	00600 Nairobi Addis Ababa Road, Industrial Area	6530144 +254 0202355885, 0202326108				
32	Marshall Fowler (Engineers)	P.O Box 18190 - 00500 Nairobi Marshall Fowler Bldg Enterprise Road, Industrial Area	+254 020 8044533, 6532228 +254 020 2116397 +254 (731) 376366	info@marshallfo wler.com, email: mfe@marshallfo wler.com	www.marsh allfowler.co m	Tea and Coffee Machinery	Energy,Electrica ls And Electronics
33	Marvel Lifestyle Ltd	P.O Box 38634- 00623 Nairobi Off Mombasa Road, Mutana Godown, Behind Vision Plaza	+254 (020) 6531783 +254 (737) 991001/ (737) 991011	info@marveldec or.com	www.marv eldecor.com	Window Blinds, Fils, Curtain Rods and Tracts	Metal And Allied
34	Mastermin d Tobacco (K) Ltd	P.O Box 68144- 00200 City Square, Nairobi MTK Complex, Mombasa Road	Tel: +254 (020) 2798000, 3542400 +254 (735) 337881, (722) 209906	mail@mastermin kenya.co.ke		Tobacco and Tobacco Products	Food And Beverages
35	Mecol Limited	P.O Box 49861- 00100 GPO Nairobi Commercial Street, Industrial Area	+254 (020) 531371-4, 0734 084 608 +254 (724) 162127	sales@mecol.co. ke	www@mec ol.co.ke	Office Furniture, Carpet	Metal And Allied
36	Megh Cushion Industries Ltd	P.O Box 18523-18178 Corner Road B/Enterpris e Road, Off Mombasa Road	+254 (020) 536041, 536091+254 02035347023 +254 (722) 511486, (734) 511486	info@mci.co.ke	www.mci.c o.ke	Fixtures And Fittings	Motor Vehicle And Accessories
37	Melvin Marsh Internation al	P.O Box 40270- 00100 GPO Nairobi Dakar Rd, Industrial	+254 (020) 6537759, 8083045 +254 (733) 708627	sales@melvinste a.com	www.melvi nstea.com	Rice	Food And Beverages

		Area					
38	Metal Crowns Ltd	P.O Box 45484-00100 GPO Nairobi Runyenjes Road, Off Nanyuki Road Opp, Co-operative Bank, Industrial Area	+254 (020) 2444875/6 +254 (722) 209648, +254 (735) 880009	contactus@metalcrowns.com		Crown Corks	Metal And Allied
39	Metlex International Ltd	P.O Box 18682-00500 Nairobi Dar es Salaam Road, Industrial Area	+254 (020) 556262/3/4/5/6 +254 (721) 234330, +254 (735) 234330	metlex@africaonline.co.ke		Boiler and Boiler Repair	Energy, Electricals And Electronics
40	Metoxide Africa Ltd	P.O Box 18087-00500 Enterprise Rd., Nairobi Old Mombasa Rd, Next to MRM Behind Signode Packaging	+254 (020) 3540450, 2359682, 2142521	kenya@metoxide.com		Zinc Oxide	Chemical And Allied
41	Metro Plastics Kenya Limited	P.O Box 78485-00507 Viwandani Nairobi Nadume Close Off Lunga Lunga Road, Industrial Area	+254 (020) 551097/8/9, 551027	metroplast@kenyaweb.com, email: info@metrogroup.com		Industrial Chemicals	Plastic And Rubber
42	Metsec Ltd	P.O Box 75963-00200 City Square Nairobi Mombasa Road	+254 (020) 2743500, 2344777, 2132727	metsec-iso@doshigroup.com	www.metsec.co.ke	PVC Conduit Pipe and Pipe Fittings	Energy, Electricals, and Electronics
43	Midco Textiles (EA) Ltd	P.O Box 18160-00500 Nairobi	+254 (020) 556222 +254 (722) 718 555, (738) 743	info@midcotex.com		Clothing, Textile and Knit Wear	Textile And Apparels

		Gilgil Road, Off Enterprise Road, Industrial Area	500, (733)225 333				
44	Miritini Kenya Ltd	P.O Box 18178-18178 Funzi Road, Nairobi Industrial Area	+254 (020) 6531636, 557093 +254 (722) 206954	info@miritinikenya.com, miritinikenya@gmail.com	www.miritinikenya.com	Juices	Food And Beverages
45	Modern Lithographic (K) Ltd	P.O Box 52810-00200 City Square Nairobi Ectoville Estate Off Enterprise Road, Road ?A?, Industrial Area	+254 (020) 534391, 652567, 559290 +254 211960, (051) 8006363/4/ (020) 8074601 +254 (722) 412 135, (734) 209 515	sales@modernlithographic.co.ke		Books and Brochures Printing	Paper And Board
46	Mufindi Paper Ltd	P.O Box 17554-00500 Enterprise Rd., Nairobi Enterprise Road Industrial Area Tel: +254 (020) 556089		peekay@mufindipaper.com		Paper Products, Paper Bags, Paper Sacks and Multiwall Paper Sacks	Paper And Board
47	Nail and Steel Products Ltd	P.O Box 17690-00500 GPO Nairobi Kampala Road Off Enterprise Road	+254 (020) 531172, Tel: +254 (020) 557586 +254 020 8068190/1 +254 (733) 622433	info@nspltd.com		Barbed Wire And Chain Link Fencing	Metal And Allied
48	Nairobi Bottlers	P.O Box 18034-00500 Enterprise Rd., Nairobi Airport North Road, Embakasi	+254 (020) 6998000	nairobibottlers@ccsabco.co.za		Bottled Drinking Water	Food And Beverages
49	Napro Industries Limited	P.O Box 46723-00100 GPO Nairobi Makungi Road Off	+254 (020) 557925/28, 311802 +254 (724) 257027, (734) 239239	napro@iconnect.co.ke	www.ngarisha.com	Steel Wool	Metal And Allied

		Lunga Lunga Road					
50	NAS Airport Services Ltd	P.O Box 19010-00501 Embakasi Nairobi NAS Building, Airport South Road	+254 (020) 824100, 823991	customerservices@nascat.com	www.nascat.com	Meat Products (Beef, Lamb, Fish, Poultry)	Food And Beverages
51	Nation Media Group Limited Printing Plant	P.O Box 49010-00100 GPO Nairobi Nation Centre, Kimathi Street	+254 (020) 3288000, 221222 +254 (719) 038701, (722) 209997	info@nation.co.ke	www.nationmedia.com	Newspapers	Paper And Board
52	Newline Ltd	P.O Box 10245-00100 GPO Nairobi Chester House Ground Floor	+254 (020) 315110/1/2/3 +254 (722) 515489, (713) 235559, (713) 235563	newline@newline.co.ke	www.newline.co.ke	Office Furniture, Carpet	Timber, Wood And Furniture
53	Ngecha Industries Ltd	P.O Box 46470-00100 GPO Nairobi Off Mombasa Road, Opposite Mombasa Road Police Station	+254 (020) 531105	info@ngecha.com		Clothing, Textile And Knit Wear	Textile And Apparels
54	Novelty Manufacturing Ltd	P.O Box 42708-00100 GPO Nairobi Lusaka Road, Industrial Area	+254 (020) 554260	novelty@africanline.co.ke		Pharmaceutical Products, Medical Equipment And Medicines	Pharmaceutical And Medical Equipment
55	Oasis Limited	P.O Box 49465-00100 GPO Nairobi Kasarani Road, Kasarani	+254 (020) 3556810, 2013155 +254 (735) 333061, (720) 463841, Cell: +254 (720) 463841	info@oasisltd.co.ke	www.oasisltd.co.ke	Cosmetics	Chemical And Allied
56	Odex Chemicals Ltd	P.O Box 72390-00100 GPO Nairobi Off Mombasa Road Behind Ramtons	+254 (020) 823222/3	info@odexchem.co.ke		Industrial Detergents	Chemical And Allied

		Ltd					
57	Ombi Rubber Rollers Ltd	P.O Box 56001-00200 City Square Nairobi Kentmere, Limuru Road	+254 (020) 2100088, 2012742 +25420 2012745/6/7 +254 (722) 439729, +254 (733)122567	info@ombirollers.com	www.ombirollers.com	Industrial Rubber and Polyurethane Rollers	Plastic And Rubber
58	Optimum Lubricants Ltd	P.O Box 49925-00100 GPO Nairobi Jasmin Centre, Westlands, Nairobi	+254 (020) 4453693/451 +254 2017724 +254 (722) 701182, +254 (770)139836	cometoil@cometoil.com		Lubricants	Energy,Electricals And Electronics
59	Orbit Chemicals Industries Limited	P.O Box 48870-00100 GPO Nairobi Mombasa Road, next to Nation Press	+254 (020) 821625, 821646-8 +254 0202338200/1/2, 0202338306/7/8 +254 (722) 205505, +254 (733)333938	orbit@orbitchemical.com	www.orbitchemical.com	Consumer Products and Plastics	Chemical And Allied
60	Orbit Engineering Ltd	P.O Box 13476-00800 Westlands Nairobi Lusaka Close, Off Lusaka Road	+254 (020) 2512584, 531721, 557781 +254 (720)634888	oel@wananchi.com, info@orbiteng.com	www.orbiteng.com	Furniture Wood / Metal	Metal And Allied
61	Orbit Enterprises Ltd	P.O Box 49604-00100 GPO Nairobi Chiromo Lane, Muthithi Road	+254 (020) 3750898, 3746290, 3746927	orbitent@yahoo.com		Concrete Blocks	Building, Mining And Construction
62	Osho Chemicals Industries Ltd	P.O Box 49916-00100 GPO Nairobi Osho Complex, Sasio Road Off Lunga Lunga Road, Industrial Area	+254 (020) 533621/3, 532939/40, 3912000 +254 (711) 045000, (732)167000	oshochem@oshochem.com	www.oshochem.com	Dairy Hygiene	Chemical And Allied

63	Oss.chemie (K) Limited	P.O Box 68502-00622 Nairobi North Airport Road, Opp. Kabansora	+254 (020) 823804, (020)2053725 +254 (721) 372212	nfo@osschemie.co.ke, email: osschemi@yahoo.com		Medical Equipment and Medicines	Pharmaceutical And Medical Equipment
64	Packaging Industries Ltd	P.O Box 48811-00100 GPO Nairobi Sasio Road Off Lunga Lunga Road, Industrial Area	+254 (020) 551451-60, 531133	nishit@pil.co.ke, info@pil.co.ke		Flexible Packaging	Plastic And Rubber
65	Packaging Masters Limited	P.O Box 70251-00400 Tom Mboya Str., Nairobi Lunga Lunga Road, Off Likoni Road, Industrial Area	+254 (020) 557441, 651752, 651753	info@pml.co.ke		Polythene Tubings	Plastic And Rubber
66	Palmhouse Diaries Ltd	P.O Box 10001-00400 Nairobi Moi Road Githunguri Ltd	+254 (020) 2014041	palmhouse@africanonline.co.ke		Processed Food	Food And Beverages
67	Palmy Enterprises	P.O Box 3775-00200 Nairobi Lunga Lunga Road, Industrial Area	+254 (020) 2625219 +254 (722) 397461, (722) 754044	info@palmy.co.ke	www.palmy.co.ke	Toilet Tissue Rolls and Tissues	Paper And Board
68	Paper House of Kenya Ltd	P.O Box 49998-00100 GPO Nairobi Sasio Road, Off Lunga-Lunga Road, Industrial Area	+254 (020) 6531255-7/19/60/1/2/3 +254 (720) 770 681, (734) 975 460	info@paperhouse.com		Paper Merchants	Paper And Board
69	Paperbags Limited	P.O Box 18167-00500	+254 (020) 559491, 559060 +254	info@paperbagsltd.com	www.mafuco.com	Bags And Bailleurs	Paper And Board

		Nairobi Enterprise Rd., Nairobi Funzi Road, Industrial Area	(723)938777, (734) 579070, (700)725725, (738)125125				
70	Patco Industries Limited	P.O Box 44100-00100 GPO Nairobi Rangwe Road, Lunga Lunga, Industrial Area	+254 (020) 6558598/5 +254 (020) 2167479/80 +254 (722) 624867/733 600796	patco@africaonline.co.ke	www.patcoindustriesltd.com	Powdered Beverages	Food And Beverages
71	PCTL Automation Ltd	P.O Box 683-00606 Sarit Centre Nairobi, Mombasa Road	+254 (020) 82648 +254 0202025354 +254 (722) 816124, (734) 339594	accounts@pctlautomation.com, info@pctlautomation.com	www.pctlautomation.com	Low Voltage Switchgear	Energy,Electricals And Electronics
72	Pembe Flour Mills Ltd	P.O Box 17955-00500 Nairobi Lunga Lunga Road, Industrial Area	+254 (020) 551933/43/53 +254 (020) 2046407/2171 178 +254 (734) 666607, +254 (716) 777722	pembe@pembe.co.ke		Baking Flour	Food And Beverages
73	Pentagon Agencies	P.O Box 34432-00100 GPO Nairobi Outering Road	+254 (020) 783591	waigwamurage@yahoo.com		Water Pumps	Energy,Electricals And Electronics
74	PG Bison Ltd	P.O Box 45221-00100 GPO Nairobi Kampala Road, Industrial Area	+254 (020) 550014/84, 8088882/3 +254 (020) 2049786 +254 (722)763947, (722)763 947, (733)726 855	info@pgbison.co.ke, email: hmdratta@pgbison.co.ke	www.pgbison.co.ke	Block Board	Timber,Wood And Furniture
75	Pharm Access Africa Ltd	P.O Box 21507-00505 Nairobi Ngong Rd 4th Floor, Chiromo Court, Chiromo Road	+254 (020) 3743294-6	info@pharmaccessafrica.com	www.pharmaccessafrica.com	Pharmaceutical Products, Medical Equipment And Medicines	Pharmaceutical And Medical Equipment
76	Pharmaceutical Manufacturer	P.O Box 47211-00100 GPO	+254 (020) 558290 +254 (724) 133735	pmc@africaonline.co.ke		Medical Equipment and Medicines	Pharmaceutical And Medical Equipment

	ung Co.	Nairobi Junction of Dakar/Enterprise Road, Nairobi					
77	Pipe Manufacturers Ltd	P.O Box 18628- 00500 Nairobi Enterprise Rd., Nairobi Airport North Road	+254 (020) 60201-5, 823422/92, 6825420 +254 (739) 393 939	sales@pipeman. com	www.pipeman.com	Hydraulic Hoses and Couplings	Motor Vehicle And Accessories
78	Plastic Electronics	P.O Box 45643- 00100 GPO Nairobi Off Dunga Road	+254 (020) 558145, 557376	mohanshah@swi ftkenya.com		Plastic Products, Furniture and Packaging	Plastic And Rubber
79	Plastics and Rubber Industries Ltd	P.O Box 46957- 00100 GPO Nairobi Gilgil Rd, Off Enterprise Rd, Industrial Area	+254 (020) 6531344/45 +254 (020) 2641787 +254 (733) 227 766, (723) 312 801, Cell: +254 (772) 462 240	plastrub@gmail. com		Industrial Moulded Rubbers Products	Plastic And Rubber
80	Polyblend Limited	P.O Box 46716- 00100 GPO Nairobi Road ?A? Off Enterprise Road, Ectovillie Road	+254 (020) 551625, 531980, 650490	polyblend@vajas .com		Pigment	Plastic And Rubber
81	Polychem East Africa	P.O Box 60384- 00200 City Square Nairobi Mogadishu Road, Industrial Area (Highchem Complex)	+(254) 20652568, 557744, 537661+254 (020) 3566495, 3546493 +254 (722) 511 929	wambugu@poly chem.co.ke, email: info@highchem. co.ke	www.polychem.co.ke	Industrial Chemicals	Chemical And Allied
82	Polyflex Industries Limited	P.O Box 49401- 00100 Nairobi GPO Lunga Lunga Road, Industrial	+254 (020) 202112190, 559644/5 +254 (733) 612999, +254 (714) 222244	info@polyflexind .com		Polythene Bags	Plastic And Rubber

		Area					
83	Polythene Industries Ltd	P.O Box 17931-00500 Enterprise Rd. Industrial Area, Along Mombasa Rd	+254 (020) 551588/9 +254 (722) 203099	info@polythene.co.ke	www.polythene.co.ke	Polythene Products	Plastic And Rubber
84	Power Technics Ltd	P.O Box 49197-00100 Nairobi Mombasa Road	+254 (703) 069000 +254 (733) 642 469	info@powertechs.com	www.powertechs.com	Electrical Engineers	Energy,Electricals And Electronics
85	Powerex Lubricants	P.O Box 161-00606 Nairobi Road C, Off Enterprise Road	:0721233050	powerexlubricants@gmail.com		Brake Fluid	Energy,Electricals And Electronics
86	Premier Flour Mills Ltd	P O Box 59307-00200 City Square Nairobi Mogadishu Road, Industrial Area, Nairobi	+254 (020) 531313/5/6	admin@premiergroup.co.ke		Home Baking Flour	Food And Beverages
87	Premier Food Industries Limited	P.O Box 41476-00100 City Square Nairobi Baba Dogo Road, Ruaraka, Nairobi	+254 (020) 3523106, 8011108/9, 8561919, Tel: +254 8561714, 2367908/9 +254 (722) 440461, (734) 333401	pfil@peptang.com, sales@peptang.com	www.peptang.com	Flavoured Water and Drinks	Food And Beverages
88	Premier Industries Limited	P.O Box 22460-00400 Nairobi Baba Dogo Road, Ruaraka	+254 (020) 8562175, 8562260, 856075/ 2664526 +254 (722) 511173, (734) 511173, (772) 557 483	info@premierindltd.com	www.premierindltd.com	Clothing, Textile And Knit Wear	Plastic And Rubber
89	Pressmaster Ltd	P.O Box 17560-00500 Nairobi Off Airport North Road	+254 (020) 6823048, 820253, 820254, Tel: +254 (020) 820422, 820423 +254 (020)	pressmas@africaonline.co.ke	www.pressmasterkenya.com	Cartons	Paper And Board

			2604310, 2604312 +254 (722)514623, (733)743763				
90	Printing Services Ltd	P.O Box 32197- 00600 Ngara Rd., Nairobi Factory Street Industrial Area	+254 (020) 3567102	dhillon@wanan hi.com		Printing	Paper And Board
91	Printpak	P.O Box 78354- 00507 Viwandani Nairobi Likoni Road, Industrial Area	+254 (020) 650520/2, (020) 2935382 +254 (722)250293/ (733)687098	mail@printpakke nya.com		Bags And Bailleurs	Paper And Board
92	Printpak Multi Packaging Ltd	P.O Box 78354- 00507 Viwandani Nairobi Likoni Road, Industrial Area, Opposite BAT	+254 (020) 650520/2, 2935382 +254 (722)250293, (733)687098	mail@printpakke nya.com		Plastic Products, Furniture and Packaging	Paper And Board
93	Printwell Industries Ltd	P.O Box 5216-00506 Ectoville Estate Road ?A? Off Enterprise Rd.	+254 (020) 553734, 553739, 2105532, 2167186 +254 (770)986 141, (722)407 244, (736)407 244	inquiries@printw ell.co.ke		Printing	Paper And Board
94	Procter and Gamble East Africa Ltd	P.O Box 30454- 00100 GPO Nairobi Westland Rd, Purshattam Place, 7th Flr	+254 (020) 823108/6, 825033-7, 3601000	oreme.c@pg.co m		Catamenials	Chemical And Allied
95	Procter and Allan (E.A.) Ltd	P.O Box 18218- 00500 Nairobi Procter and Allan Building, Lusaka	+254 (020) 556361/9/24 +254 (722) 266161, +254 (733)623590	proctor@proctor -allan.com	www.proct orallan.com	Breakfast Cereals	Food And Beverages

		Road Off Enterprise Rd, Industrial Area					
96	Promasidor Kenya Ltd	P.O Box 10336-00100 GPO Nairobi Off Namanga Road, Industrial Area	+254 (045) 6626205/6/7 +254 (720) 600599, (734) 600599	info@promasidor.co.ke	www.promasidor.co.ke, www.promasidor.com	Powdered Beverages	Food And Beverages
97	Prosel Ltd	P O Box 44730 - 00100 GPO Nairobi Off Lusaka Road next to Technical Trading Building	+254(020) 558116, 558138, 559049 +254(0722) 700345	proseltd@wananchi.com, infi@proseltd.com	www.proseltd.com	Pleetz	Plastic And Rubber
98	Pyramid Packaging Ltd	P.O Box 162-30100 Eldoret Kipkaren Road, Next to Rivertex	+254 (053) 532061660	pyrapack@africaonline.co.ke		Propelene Sheeting	Plastic And Rubber
99	PZ Cussons EA Ltd	P.O Box 48597-00100 GPO Nairobi Ruaraka, Baba Dogo Road	+254 (020) 8563132/9 +254 (722) 207204/5, (734) 652030 /1	general.enquires.@pzcussons.com	www.pzcussons.com	Medicaments	Chemical And Allied
100	Rafiki Millers Ltd	P.O Box 45298-00100 GPO Nairobi Next to Inland Container DeP.Ot, Mombasa Road	+254 (020) 533438, 559592/3	info@rafikimillers.com, rajesh@ungacom		Baking Flour	Food And Beverages
101	Ramco Printing Works Ltd	P.O Box 27750-00506 Nyayo Stadium Nairobi Dunga Close Off Dunga Rd Industrial Area	+254 (020) 2502301-8, 535424/5/6 +254 (770) 160181, +254 (722) 513109, Cell: +254 (733) 600538	info@printing.ramco-group.com	www.ramcoprinting.com	Books and Brochures Printing	Paper And Board
102	Razco Ltd	P O Box 63538 -	+254(020) 8561432-5	info@lyonsmaid.com		Ice Cream	Food And Beverages

		00619 Muthaiga Baba Dogo Road, Ruaraka					
103	Reckitt Benckiser (E.A.) Ltd	P.O Box 78051- 00507 Viwandani Nairobi Likoni Road, Industrial Area	+254 (020) 652404, 531453, 531453, 652407/8	aseem.soni@rec kittbenckiser.co m		Insecticides	Chemical And Allied
104	Regal Pharmaceu ticals Ltd	P.O Box 44421- 00100 GPO Nairobi Road 1, Off Baba Dogo Road, Ruaraka, Nairobi	+254 (020)- 8564211-4 or (020) 8560947/8 +254 (020) 3577554 +254 (722)202389, (734) 600375	info@regalphar maceuticals.com	www.regalp harmaceutic als.com	Medical Equipment and Medicines	Pharmaceutical And Medical Equipment
105	Regal Press Kenya Ltd	P.O Box 44421 - 00100 Nairobi Bunyala Road off Uhuru Highway, Nairobi	+254 020- 8564211-4, 8560947/8 +254(020) 3577554 +254 (722)202389, (734) 600375, (722) 414082/3	info@regalphar maceuticals.com	www.regalp harmaceutic als.com	Books and Brochures Printing	Paper And Board
106	Reliable Electricals Engineers (Nrb) Ltd	P.O Box 41489- 00100 GPO Nairobi Road ?C? Off Enterprise Road	+254 (020) 25998/9	reliable@reenl.c om		Light Fittings	Energy,Electrica ls And Electronics
107	Revolution Stores Ltd	P.O Box 47539- 00100 GPO Nairobi Nanyuki Road, Off Lunga Lunga	+254 (020) 650452/3 +254 (735) 419332	info@revolution. co.ke		Industrial Chemicals	Chemical And Allied
108	Rolmil Kenya Ltd	P.O Box 48662- 00100 GPO Nairobi Enterprise Road behind General Motors, Industrial	+254 (020) 552539/40/44 +254 (723) 552540	rolmil@wananchi .com		Steel Reinforcement Bars	Metal And Allied

		Area					
109	Rosewood Furniture Manufacturers	P.O Box 42910-00100 GPO Nairobi Mombasa Road, Opposite Vitafoam	+254 (020) 2384661/3 +254 0203524514-8 +254 (722) 205135	info@rosewoodfirm.com	www.rosewood-furn.com	Furniture Wood / Metal	Timber, Wood And Furniture
110	Rubber Products Ltd	P.O Box 18410-00500 Nairobi Dakar Road, Off Enterprise Rd, Industrial Area	+254 (020) 557173, 557368	arpinbo@wananchi.com		Moulding Rubber Products	Plastic And Rubber
111	Rumorth Group of Companies Ltd	P.O Box 104550-00100 City Square Nairobi Skyline Building 55 Cross Road	+254 (020) 211944 +254 (734) 211 009	rumorthgroup@yahoo.com, email: info@rumorthgroup.co.ke	www.rumorthgroup.com	Invisiglove (Liquid Hand Protection)	Chemical And Allied
112	S C Johnson and Son Kenya	P.O Box 30457-00100 GPO Nairobi Outer Ring/Thika Road, Ruaraka, Nairobi	+254 (020) 3635000 +254 (711) 084000	keinfo@scj.com, gichane@scj.com	www.scjohnson.com	Pest Control	Chemical And Allied
113	Sadolin Paints (E.A.) Ltd	P.O Box 18011-00500 Nairobi Jirore Road Off Enterprise Road, Industrial Area	+254 (020) 555711, Dedicated line: +254 020 6534750 +254 (020) 2369405-8, 2421143/70 +254 (733) 687074, 0722 480576	info@sadolin.co.ke	www.sadolin.co.ke	Paint and Paint products	Chemical And Allied
114	Safepak Limited	P.O Box 39060-00623 Parklands Nairobi Masai Road, Off Mombasa Road, Behind	+254 (020) 535862/3, 535655	pa@safepak.co.ke		P.E.T Preforms And Bottles	Plastic And Rubber

		Libra House					
115	Saj Ceramics Ltd	P.O Box 45244-00100 GPO Nairobi Mombasa Road	+254(020) 3587001/2 +254 0202346131 +254 (722) 597166, (721) 128346, (738) 562281	ceramics@saj.co.ke	www.sajceramics.com	Ceramic Wall and Floor Tiles	Building, Mining And Construction
116	Sameer Africa Ltd	P.O Box 30429-00100 Nairobi GPO Junction of Mombasa Road and Enterprise Road	+254(020) 3962 000, 3962 3070 +254 (733) 61138/9, (722) 204674/5	nfo@sameerafrica.com, email: services@sameerafrica.com, email: salesinfo@sameerafrica.com	www.sameerafrica.com	Light Truck Tyres	Plastic And Rubber
117	Sandstorm Africa Limited	P.O Box 45312-00100 GPO Nairobi Lenana Business Centre	+254 (721) 208463	operations@sandstormkenya.com	www.sandstormkenya.com	Safari Chairs And Car Sit Covers	Leather And Footwear
118	Sanergy	P.O Box 24523-00100 Nairobi Theta Lane, Off Lenana Road	+254 (788) 511824	info@saner.gy	www.sanergy	Manure	Chemical And Allied
119	Sanpac Africa Ltd	P.O Box 20496-00200 City Square Nairobi Off Mombasa Road, (Next to Nation Media Printing Plant)	+254 (020) 2112100-3 254 (722)/(733) 201338	info@sanpac.com	www.sanpac.com	Cosmetics	Plastic And Rubber
120	Shah Timber Mart Ltd	P.O Box 18054-00500 Enterprise Rd, Nairobi Homa Bay Rd, Industrial Area	+254 (020) 652224, 652346, 559598 +254 (733) 636398, 0722 664411	stm@wananchi.com, info@shahtimber.co.ke	www.shahtimber.co.ke	Machine and Treated Timber	Timber, Wood And Furniture
121	Shamco Industries Ltd	P.O Box 18408-00500 Nairobi	+254 (020) 559444, 557227 +254 20 3540834	shamco@africaonline.co.ke	www.shamcoindustries.com	Domestic Furniture	Timber, Wood And Furniture

		Enterprise Rd., Nairobi Dares Salaam Road, Off Enterprise Road, Industrial Area	+254 (733) 994371, (720) 901434, (771) 398 540				
122	Sheffield Steel Systems Ltd	P.O Box 29-00606 Sarit Centre Godown No. 11 Kenbelt Industrial Park, Off Mombasa Road, Behind former Metrocash and Carry	+254 (020) 2095883, 20412266 +254 (722) 524655, (722) 291730	info@shefieldafricacom	www.shefieldafrica.com	Kitchen Equipment	Metal And Allied
123	Siemens Ltd Kenya	P.O Box 50867-00200 City Square Nairobi Unit-B, Gr. Floor, Nairobi Bussiness Park, Ngong Road, Nairobi, Kenya	+254 (020) 2856000	info.ke@siemens.com	www.siemens.com	Information Technology Equipment	Services And Consultancy
124	Sigma Supplies Ltd	P.O Box 18138-00500 Nairobi Athi River Rd ,Off Enterprise Rd. Off Mombasa Rd	+254 (020) 820056, 820834, 2338172 +254 (723) 004289	sigmasuppliesltd@yahoo.com	www.sigma.co.ke	Isa Layer Day Old Chicks	Food And Beverages
125	Signode Packaging Systems Ltd	P.O Box 78160-00507 Viwandani Nairobi Mombasa Road	+254 (020) 2135002/3, 2338400 +254 (733) 623410, (722) 325695	info@signodekenya.co.ke	www.signode.com	Coding Equipment	Plastic And Rubber
126	Silpack Industries Limited	P.O Box 22001-00400 Nairobi	+254 (020) 5552063, 5552067, 5553779, Tel:	info@silpack.com	www.silpak.com	Corrugated Cardboard And Cartons	Plastic And Rubber

		Likoni Road, Industrial Area	+254 (020) 557523, 650928, 650943 +254 (020) 8085902, 8080903 +254 (728) 603518, (736) 519 845				
127	Socabelec (EA) Ltd	P.O Box 40598-00100 GPO Nairobi Mombasa Road Mlolongo	+254 (020) 2513370 -3 +254 (727) 531 959, (734) 531 959	info@socabelec.co.ke	www.socabelec.co.ke	Industrial Electricity	Energy,Electricals And Electronics
128	Sohansons Limited	P.O Box 40414-00100 GPO Nairobi Kijabe Street	254 (020) 2212072, 2220619 +254 (020) 2638054/5 +254 (720) 742345	soken@kenyawe b.com	www.suzuki kenya.com	Motorcycles	Motor Vehicle And Accessories
129	Soilex Prosolve Limited	P.O Box 78175-00507 Nairobi Off Road A, Nairobi, Ectoville Estate	+254 (020) 2175592, +254 (020) 6531839, Tel: +254 (020) 3556849, 3556849 +254 (724) 583333, +254 (736) 583333	info@soilex.co.ke		Industrial Detergents	Chemical And Allied
130	Solimpex Africa Ltd	P.O Box62981-00200 Nairobi Viras Complex, Off Msa Road, Embakasi	+254 (020) 2380042	solimpexafrica.com	www.solimpexafrica.com	PV Lighting Systems	Energy,Electricals And Electronics
131	Soloh Worldwide InterEnterprises Ltd	P.O Box 1868-00100 Nairobi Musembi Rd, Off Limuru Road	+254 (020) 2247191, 317871, 2597004 +254 (714) 991062	info@soloworld.co.ke		Printing	Paper And Board
132	Solvochem East Africa Ltd	P.O Box 656-00606 Sarit Centre Nairobi Eden Square, Block 3, 2nd Floor,	+254 (020) 3743176, 3743327, 3743188, 3743107 +254 0203743107 +254 (735) 772270, (723)	gilbert.miya@solvochem.com, email: nairobi@solvochem.com	www.solvochem.com	Petrochemicals	Plastic And Rubber

		Chiromo Rd	963950, Cell: +254 (723) 966035,(734) 201205				
133	Specialised Engineering Co. (EA) Ltd	P.O Box 18564-00500 Nairobi Enterprise Rd., Secol House, Athi River, Off Addis Ababa Road - Industrial Area	+254 (020) 536720 (3 lines), 2020118 +254 (787) 643 765,(774) 921 096	info@secolea.com	www.secolea.com	Kitchen Equipment	Metal And Allied
134	Specialised Power Systems Ltd	P.O Box 18435-00500 Nairobi Enterprise Rd., Nairobi Melili Road (Next to Marshalls Showroom) Off Mombasa Road	+254 (020) 2077219, 8019435/6/7 +254 (020) 2077217 +254 (724) 255298	info@spsafrica.com	www.spsafrica.com	Electrical Engineers	Energy,Electricals And Electronics
135	Spice World Ltd	P.O Box 78008-00507 Nairobi Viwandani, Nanyuki Road, Industrial Area	+254 (020) 555999, 531442	info@spiceworldltd.co.ke		Pasta	Food And Beverages
136	Springbox Kenya Ltd	P.O Box 240-00507 Viwandani Nairobi Road ?B? Off Enterprise Road, Industrial Area	+254 (020) 651496/7 +254 (722) 380983, Fax: +254 (020) 651497	springbox@iconnect.co.ke		Milk Bottles and Cans	Plastic And Rubber
137	Stallion Stationary Manufacturers Ltd	P.O Box 32654-00600 Nairobi Ngara Rd., Nairobi Road ?A? Off Enterprise	+254 (020) 2626199/130 +254 (020) 2504052 +254 (721) 324289, (737) 608301	stallionkenya@afrikaonline.co.ke	www.stallionkenya.com	Stationery	Paper And Board

		Rd					
138	Standard Group Ltd	P.O Box 30080-00100 GPO Nairobi Mombasa Road	+254 (020) 3222111 +254 (719) 012116 (732)142111	info@standardmedia.co.ke	www.standardmedia.co.ke	Newspapers	Paper And Board
139	Statpack Industries Ltd	P.O Box 22015-00400 Nairobi North Airport Rd, Embakasi	+254 (020) 552402, 552403, 821404/5/6 +254 (020) 2519326/7 +254(722) 852979, (733) 883329	info@statpack.co.ke	www.statpack.co.ke	Cellotapes	Paper And Board
140	Steel Structures Ltd	P.O Box 49862-00100 GPO Nairobi Kagundo road, off outer ring road	+254 (020) 2405445-7 +254 (733)/(722) 517700	info@steelstructureskenya.com	steelstructureskenya.com	Bridges and Bridge Sections	Metal And Allied
141	Steelmakers Ltd	P.O Box 44574-00100 GPO Nairobi Mombasa Road, Next to Alpha Centre	+254 (020) 821790-5, (041) 2223974 +254 (720) 633733, (734) 633000	nbo@steelmakers.com	www.steelmakers.com	Bolts And Nuts	Metal And Allied
142	Steelwool (Africa) Ltd	P.O Box 10105-00100 GPO Nairobi Old Mombasa Road, Next to Nation Printing Press, Embakasi	+254 (020) 2017719/20 +254 (770) 127888	info@steelwool-africa.com	www.steelwool-africa.com	Steel Wool	Metal And Allied
143	Straightline Enterprises	P.O Box 17716-00500 Nairobi Enterprise Road, Industrial Area, Opposite Henkel E.A	+254 (020) 558808, 555468 +254 0202493514 +254 (725) 342332	info@one-way.cc	www.one-way.cc	Clothing, Textile And Knit Wear	Textile And Apparels
144	Strategic Industries Limited	P.O Box 30682-00100 GPO Nairobi Sasio Street	+254 (020) 530230, 554924 +254 (020) 2470675 +254	darlingk@africaonline.co.ke, email: info@darlingkenya.co.ke	www.darlingkenya.biz	Personal Care Products	Chemical And Allied

		Off Lunga Lunga Road/Rai Plaza	(724) 969899				
145	Styloplast Limited	P.O Box 32654-00600 Nairobi Migwani Road, Off Enterprise Road, Behind tetra Pak	+254 (077) 3106743, 3106744 +254 (735) 126622 (728) 570069	info@styroplastkenya.com		Polythene Bags	Plastic And Rubber
146	Sumaria Industries Ltd	P.O Box 42565-00100 GPO Nairobi Sunview Estate, Suite 81, Mbagathi Way	+254 (020) 531329/30-4	sumaria@silkenya.com	www.silafri.ca.com	Ball Point Pens	Plastic And Rubber
147	Sunflag Textile and Knitwear Mills Ltd	P.O Box 41627-00100 GPO Nairobi Kitui Road, Pate Road, Lunga Lunga Road	+254 (020) 559550, 533199/9	info@sunflagkenya.com		Yarns	Textile And Apparels
148	Supa Brite Ltd	P.O Box 60793-00200 City Square, Nairobi Road ?B? Off Enterprise Road, Industrial Area	+254 (020) 532222-6	info@supabrite.com	www.superbrite.com	Foam And Foam Products	Chemical And Allied
149	Super Manufacturers Ltd	P.O Box 10600-00400 Nairobi Wajir Road, Industrial Area	+254 (020) 550572/3/8	info@super.co.ke		Polyester Buttons	Plastic And Rubber
150	Superfoam Ltd	P.O Box 49887-01000 Nairobi Kiambu/Ruiru Road	+254 (020) 2041346-8 +254 (020) 2041346-8 +254 (720) 600969, (734) 600969	info@superfoamltd.com	www.superfoamltd.com	Foam And Foam Products	Chemical And Allied
151	Syngenta East Africa	P.O Box 30393-	+254 (020) 552515 +254	syngenta.east_africa@syngenta.c	www.syngenta.com	Seeds	Chemical And Allied

	Ltd	00100 GPO Nairobi Mogadishu Rd Off Lunga Lunga Rd, Industrial Area	(703) 018000, (703) 019000	om			
152	Synresins Ltd	P.O Box 18725- 00500 Nairobi Enterprise Rd. Sasio Road, Off Lunga Lunga Road, Industrial Area	+254 (020) 2100825/6 +254 (020) 2100825/6 +254 (713) 783399, (735) 777704	synresins@iconn ect.co.ke	www.synres ins.co.ke	Paint and Paint products	Chemical And Allied
153	Tarpo Industries Limited	P.O Box 45164- 00100 GPO Nairobi Off Enterprise Road, Road ?C?, Behind Sameer Africa	+254 (020) 651616-9 +254 0203561111, 0203562222 +254 (722) 204747, (733) 958400	info@tarpo.com	www.tarpo. com	Tarpaulins	Textile And Apparels
154	Taws Limited	P.O Box 40611- 00100 GPO Nairobi Addis Ababa Road, Industrial Area	+254 (020) 6531364/5/6/7 +254 (722) 704562	info@taws.co.ke		Security Printing	Paper And Board
155	Technostee l Industries Limited	P.O Box 17512-00500 Nairobi Makadara Road, Off Namanga Road	+254 (020) 2446662, 809836/7 +254 (733) 590250	technosteel@afri caonline.co.ke, email:info@tech nosteel.co.ke	www.tech osteel.co.ke	Industrial Spares and Equipment	Metal And Allied
156	Techpak Industries Ltd	P.O Box 30802- 00100 GPO Nairobi Road ?A? Ectoville , Off Enterprise Road, Industrial Area	+254 (020) 551625 +254 (733) 330004, (703) 379264, (703) 792264	techpak@vajas.c om, sales@techpak.b iz	www.techp akindustries .com	Plastic Products, Furniture and Packaging	Plastic And Rubber

157	Teita Estate Ltd	P.O Box 18488-00500 Nairobi Funzi Off Enterprise Rd, Nairobi Funzi Road, Industrial Area	+254 (020) 559755/6	info@teitaestate.co.ke	www.teitae state.co.ke	Sisal Sacks	Textile And Apparels
158	Tetra Pak Ltd	P.O Box 78340-00507 Viwandani Nairobi Tetra Pak Building, Likoni Road, Off Enterprise Rd	+254 (020) 6909000, 534300	wanjiku.mugo@t etrapak.com	www.tetrap ak.com	Packaging And Distribution Of Liquid Food Products	Paper And Board
159	The Breakfast Cereal Company (K) Ltd	P.O Box 78633-00507 Nairobi Lusingeti Road, Off Likoni Rd, Industrial Area	+254 (020) 536114/65237 7	info@weetabixe a.com	www.weata bixea.com	Natural Cereal	Food And Beverages
160	The Rodwell Press Ltd	P.O Box 65-00507 Viwandani Nairobi Maasai Road Off Mombasa Road	+254 (020) 2471001/2/3/5 +254 (020) 3587600 +254 (734) 699750, (725) 374 336	sales@rodwellpr ess.com	www.rodw ellpress.co m	Books and Brochures Printing	Paper And Board
161	Theevan Enterprises Ltd	P.O Box 17244-00100 GPO Nairobi Kenya Industrial Estates Godown No. 18	+254 (020) 550570, 532654, 553969	theevan@africaonline.co.ke		Oil Filters	Motor Vehicle And Accessories
162	Thermopak Ltd	P.O Box 18896-00500 Nairobi Funzi Road, Industrial Area	+254 (020) 550486/7, (020) 551734/5 +254 (722 / 733 207 787	sales@thermopa kkenya.com	www.therm opakkenya. com	Precision Injection Moulding	Plastic And Rubber
163	Timsales Ltd	P.O Box 18080-00500 Nairobi	+254 (020) 6532277 +254 0202325598, 0202325621	nairobi@timsales .com	www.timsa les.com	Block Board	Timber, Wood And Furniture

		Enterprise Rd	+254 (733) 333307, (722) 206961				
164	Tononoka Steel Ltd	P.O Box 44689-00100 GPO Nairobi Airport North Road, Embakasi	+254 (020) 826330-6, 2493144-6 +254 (721) 404252	tononoka@tononokasteels.com	www.tononokasteels.com	Galvanised Black Pipes	Metal And Allied
165	Treadsetters Tyres Ltd	P.O Box 45242-00100 GPO Nairobi Off Baba Dogo Rd, Ruaraka	+254 (020) 8560660-4, 8560700-3	amatheka@treadsetters.com		Retreaded Tyres	Plastic And Rubber
166	Tri-Clover Industries (K) Ltd	P.O Box 17663-00500 Nairobi Opposite Alpha Centre, Mombasa Road	+254 (020) 821045/6, 825001, Direct Line: +254 (020) 825004 +254 (733) 621633, (722) 206598 (722) 413962	info@triclover.co.ke, sales@triclover.co.ke		Personal Care Products	Chemical And Allied
167	Trufoods Ltd	P.O Box 41521-00100 GPO Nairobi Jogoo Road	+254 (020) 557700, 559612 +254 (020) 2385880 +254 (721) 668853	info@trufoods.biz	www.trufoods.biz	Jam	Food And Beverages
168	Twiga Chemical Industries Limited	P.O Box 30172-00100 GPO Nairobi Ol Kalau Road	+254 (020) 3942300 +254 (722) 204605, (733) 605 818	info@twiga-chem.com	www.twigachemicals.com	Dairy Hygiene	Chemical And Allied
169	Unga Group Ltd	P.O Box 30386-00100 GPO Nairobi Commercial Street, Industrial Area	+254 (020) 3933000, 532471, 533586, 535618, 6534126	information@ungagroup.com		Baking Flour	Food And Beverages
170	Uni-Plastics Limited	P.O Box 48538-00100 GPO Nairobi Baba Dogo Road, Ruaraka	+254 (020) 2694464/69/70 +254 (722) 509997, (735) 338027, (774) 135044	info@uniplastics.co.ke		Poly-Propelene Woven Bags	Plastic And Rubber
171	Unifilters Kenya Ltd	P.O Box 78637-00507 Viwandani Busia Road, Industrial	+254 (020) 536418/9, 650106 /7 +254 (714) 211374	info@unifilterskenya.biz, email: unifilters@iconnet.co.ke	www.unifilterskenya.biz	Filters	Motor Vehicle And Accessories

		Area					
172	Unilever East and Southern Africa	P.O Box 30062-00100 GPO Nairobi Commercial Street, Industrial Area	+254 (020) 6922000 +254 (722) 204157 / 8 / 9	consumer-ukl@unilever.com	www.unilever-esa.com	Laundry Powder and Bar Soap	Chemical And Allied
173	United Distillers and Vintners(U DV)	P.O Box 30161-00100 GPO Nairobi Kampala Road, Industrial Area	+254 (020) 8042216	info@eabl.com	www.eabl.com	Whisky	Food And Beverages
174	Vajas Manufacturers Ltd	P.O Box 46716-00100 Nairobi Ectoville Estate, Road ?A? Off Enterprise Road	+254 (020) 3512946/47/7073, 554834, Tel: +254 (020) 551625, 650491+254 (020) 650490-3 +254 (736) 623995/56, +254 (716) 152802/814	sales@vajas.com , admin@vajas.com	www.vajas.com	Bags And Bailleurs	Textile And Apparels
175	Viking Industries Ltd	P.O Box 45268-00100 GPO Nairobi Maasai Road, Behind Libra House Off Mombasa Road	+254 (020) 534815, 536421, 555545	vikingtanks@jandu.biz		Water Storage Tanks	Metal And Allied
176	Vitafoam Products Limited	P.O Box 18094-00500 Nairobi Mombasa Road after Panari Hotel	+254 (020) 651540-4 +254 3589300/1/2 +254 (722/8) 205535, (732/3) 605535	sales@vitafoam.co.ke, info@vitafoam.co.ke	www.vitafoam.co.ke	Baby Care Products And Clothing	Chemical And Allied
177	Wanji Food Industries Limited	P.O Box 3124-00100 GPO Nairobi Former Johnson Wax Nyahera Rd Off Lunga	+254 (020) 2467190/2, 650954, 650569 +254 (729) 821985	sales@wanjis.com	www.wanjis.com	Snacks	Food And Beverages

		Lunga					
178	Warren Enterprises Ltd	P.O Box 8251-00300 Nairobi Kasarani Road, Ruaraka (Near ICIPE/Kasarani)	+254 (020) 8561932-4, 3556838, 3569255 +254 (726) 550303, (724) 256552	warren@accesskenya.com, warren@warren-enterprises.co.ke	www.warren.co.ke	Steel Pipes	Metal And Allied
179	Welding Alloys Limited	P.O Box 78055-00507 Viwandani Nairobi Migwani Road, Off Enterprise Rd, Industrial Area	+254 (020) 6533290, 6530513-6 +254 2487444/5 +254 (722) 524355, (738) 524355	info@weldalloys.com	www.weldalloys.com	Industrial Gases	Metal And Allied
180	Westminster Paints and Resins Ltd	P.O Box 2731-00200 Nairobi Canon Building, Mombasa Road		info@westministers.co.ke		Paints	Chemical And Allied
181	Wire Products Ltd	P.O Box 18281-00500 Nairobi Athi River Road, Off Addis Ababa Road, Off Enterprise Road, Industrial Area	+254 (020) 557930, 558271, 554857 +254 (723) 860962, (733) 756073	info@wireprod.net	www.wireprod.net	Barbed Wire And Chain Link Fencing	Metal And Allied
182	Wonderpac Industries Ltd	P.O Box 10372-00100 GPO Nairobi Mombasa Road Plot No. 20259	+254 (020) 824237/38/46	birju@africaonline.co.ke		Laminated Sacks	Plastic And Rubber
183	Woodtex Kenya Ltd	P.O Box 74863-00200 City Square Nairobi Rex Godwn, Kabansora Road, Embakasi	+254 (020) 824951/2	info@woodtex.co.ke	www.woodtex.co.ke	Pallets	Timber, Wood And Furniture

184	Zingo Investments Limited	P.O Box 5849 - 00200 Nairobi LungaLunga Road, Industrial Area	+ 254 (020) 556104,558319	zingoinvlt@zingo.co.ke , email: zingoinvlt@yahoo.com	www.zingo.co.ke	Leather	Leather And Footwear
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