

Outsourcing Practices of Manufacturing Firms in A Developing Economy: Effects and Perspectives from Kenya

NYABUNDI SHEILA ATIENO¹, DR. CAROLINE A. OLOO², PhD. DR. RENSON W. WANYONYI³, PhD

¹PhD. Scholar (Supply Chain Management), Department of Management Science, Maseno University, Kisumu, Kenya

²BBA., MBA. (*Entrepreneurship*), MBA. (*Strategic Management*), PhD. (*Entrepreneurship*)

²Senior Lecturer & Head of Department (Business Administration & Management Science)

Maseno University, Kisumu, Kenya

²ORCID No. [0000-0003-2209-9593](https://orcid.org/0000-0003-2209-9593)

³Bsc., Msc., PhD. (*Supply Chain Management*), MKISM

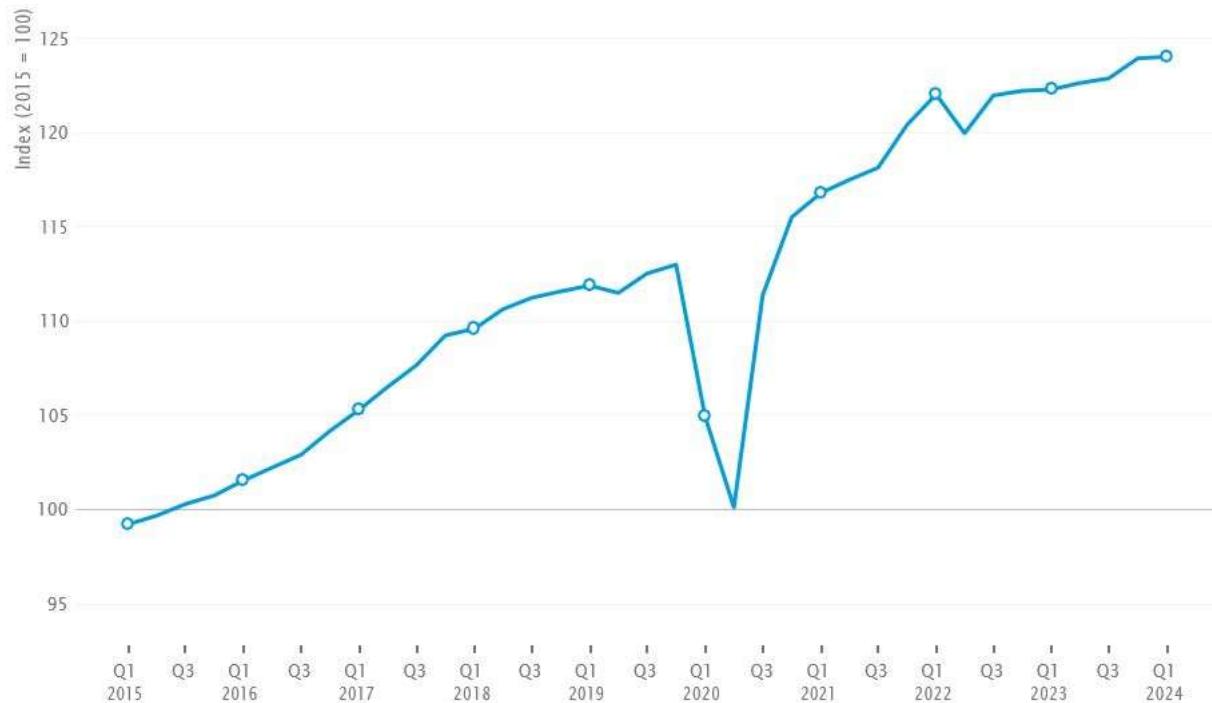
³ORCID No. - 0000-0002-0263-3747

³Lecturer, Department of Management Science, Maseno University, Kisumu, Kenya

ABSTRACT: In the current boisterous business environments, manufacturing firms are on the lookout for new means of creating value for their clients. Many organizations are turning to outsourcing to optimize their services, hedge into expert competence and reduce costs. Kenya National Bureau of Statistics (KNBS, 2024) report however indicate that manufacturing sector performance slumped to its lowest in the last 16 years to a low rate of 1.3% in 2024, partly due to increased costs, taxation policies, inability to adopt cost cutting measures such as outsourcing among others. While earlier works on outsourcing have been documented, empirical evidence mined employed descriptive designs in the public sector. The purpose of study was to determine effect of outsourcing practices on performance of manufacturing firms in the developing economy of Kenya. We achieved this through a primary quantitative approach embedded in positivism lens. A correlational design on a population of 596 manufacturing firms, where a sample of 234 was arrived at by Kreycie and Morgan sample table was employed. Data were collected using a questionnaire to heads of procurement departments as units of analysis. Descriptive statistics and linear regression guided analysis process. The results show that outsourcing practices of manufacturing firms has a positive significant effect and explains 61.4% change in performance ($R^2=.614$, $\beta=.783$, $p<.05$), this implying unit implementation of the practices results in 0.783 units yield in performance. The perspectives on the practice is that its lowly adopted in the firms as evidenced by descriptive results. Findings back Brundtland (1987) sustainable development thought that outsourcing practices can alleviate firm goals. We conclude that outsourcing practices improves performance in the manufacturing firms and offer recommendation that stakeholders to continually arouse policies meant to engrave outsourcing in their practice.

I. INTRODUCTION

The manufacturing industry in the 21st century remains tumultuous more than ever as companies seek for best ways of improving performance (Rehman, Kraus, Shah, Khanin & Mahto, 2021). The report of United Nations Industrial Development Organization, UNIDO (2024) show that the global manufacturing output has witnessed a lackluster performance in the first quarter of 2024, extending the demeaning performance from 2022. In the first quarter of 2024, the global manufacturing firms recorded no notable growth, an even diminishing growth compared to 2023 where the industry recorded a slim growth of 0.9%, this being attuned to global challenges such as high global inflation, changing oil and gas prices, biting supply chain and procurement disruptions, regional conflicts (such as Russia's invasion of Ukraine, Israel-Hamas war, DRC conflicts) and changing political landscape.



Source: United Nations Industrial Development Organization, UNIDO (2024)

Figure 1. 1: Index of global manufacturing output

Worldwide, the manufacturing industry posted reduction in production output in various countries, implying need for concerted efforts of ramifications. In 2024, China recorded the best output performance at 1.3%, this signifying an annual improvement of 5%. Countries in Asia and the oceanic recorded an output growth rate in the region of a slim 0.8 in 2023, dropping in performance to a loss of (-0.7) in 2024. Manufacturing output in countries such as Indonesia, India and China's Taiwan province posted a growth rate of 1.0% in 2024 whereas Japan, Korea and Thailand recorded losses in production at -5.2%, -0.6% and -1.1% respectively, this painting a grim picture of global manufacturing output (UNIDO, 2024). In the same note, manufacturing production in European countries recorded a decrease of 1.0 % in 2024 compared to the previous 2023 even though the different countries revealed different output patterns. For instance, France, Italy, Netherlands and Switzerland recorded a reduction rate of -0.6%, -0.9%, -2.1% and -1.0% in their manufacturing output respectively (UNIDO, 2024).

Outsourcing can be said to be the practice of hiring a business, organization or individual to handle some or all of the supply chain's operations. By giving organization's access to specialized knowledge, resources and technology, outsourcing is becoming one of the most commonly adopted practices among supply chain firms. From this practices, businesses are increasing their productivity, reducing costs of operations and streamlining supply chain operations. (Edvardsson, Oskarsson and Durst, 2021). In the words of Wamunyima et al. (2024) strategic outsourcing refers to contracting with an outside organization with the view of handling designated supply chain activities. On the other hand, operational outsourcing refers to the outsourcing of some aspects of the supply chain operation e.g. supplier development programs. Outsourcing is important when it comes to supply chain management as it allows organizations to focus on their core competencies while delegating non- essential activities to external specialists. This approach helps businesses reduce costs, enhance efficiency, and mitigate risks. Businesses can lower expenses, increase productivity, and lower risks by doing this.

Edvardsson et al. (2021) studied outsourcing practices in service organizations in Iceland. The study targeted 804 small knowledge-based firms between 2009-2018. In a research design that combines descriptive and analytical approaches, the study applied telephone interview, a structured questionnaire and email surveys to collate primary data. Chi-square tests and descriptive statistics were used to analyze the data to compare two groups. Further, Kruskal-Wallis test analyzed the difference between groups for means. The researchers argue that the main objective of outsourcing practices especially in-

Outsourcing Practices of Manufacturing Firms in A Developing Economy: Effects and.....

service firms is to enable an organization to focus on their main functions. The findings of the research indicate that knowledge service companies in Iceland practice outsourcing than any other firm in the industry. Further the results pinpoint that the knowledge service firms have a high pedigree to have an outsourcing strategy as compared to other firms. The main reasons for outsourcing are reduction of costs of operations and focus on core activities.

In the recent past, there is an increasing need by stakeholders to manage day to day company activities with the aim of improving results. Manufacturing firms are important markets of raw materials for producers, and offers finished products to final consumers who are satisfied when these products are quality and offered at fair prices. The report of Kenya National Bureau of Statistics (KNBS) report, 2023 reveal that Kenya's manufacturing firm's performance increased by 2.7% from 7.3% to 10.0% between 2021 to 2023. In addition, the KAM report, 2019 indicate that manufacturing firms in Kenya provide employment to 600, 000 people formally and 2 million people informally (Lysons and Farrington, 2006)

With this ensuing significance nonetheless, the KNBS report, 2023 however indicates that the manufacturing industry has continuously provided a low rate of 10% to the country's Gross Domestic Product in the last 10 years. It is reported that this low performance has been caused by among others, inefficient outsourcing strategies. Empirical evidence on outsourcing practices have employed diverse designs & analytical techniques in the public sector, pausing a gap in literature to investigate the effect of outsourcing practices on the performance of manufacturing firms in a developing economy like Kenya. In this regard, the current paper hoped to fulfill the aforementioned important gap.

1.2 Objective of the study

The main objective of the study is to establish the effect of the outsourcing practices on performance of manufacturing firms in a developing economy, Kenya

1.3 Hypothesis

H_0 : Outsourcing practices has no significant effect on performance of manufacturing firms in Kenya

1.4 Conceptual framework

The paper is guided by a conceptual model framework to understand the relationship between independent variable and the dependent outcome variable. This model framework is presented in figure 1.1

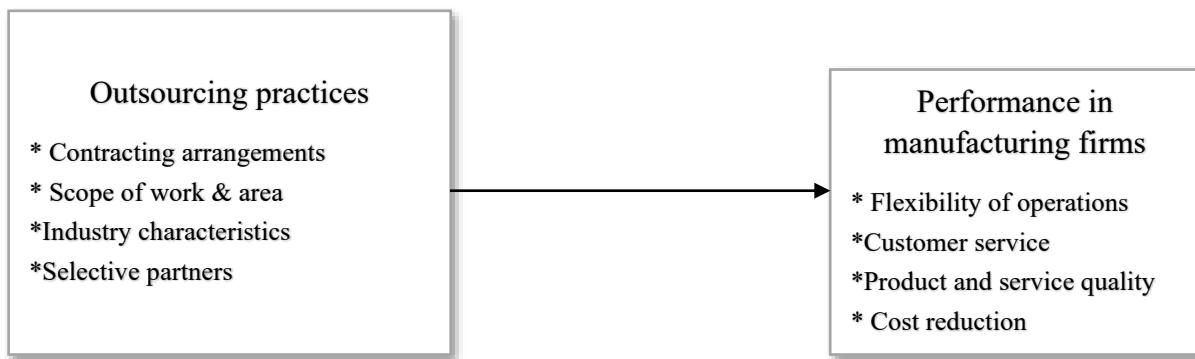


Figure 1: Model Framework of outsourcing practices on the performance of manufacturing firms in Kenya. **Source:** (Adopted from: Brundtland report, 1987)

The conceptual model framework of the study shows an association between outsourcing practices and performance which exhibits a cause and effect relationship. The independent variable is outsourcing practices. Aspects of outsourcing practices in place (contracting arrangements, scope of work & area, industry characteristics, selective partners) may affect performance of manufacturing firms. With this therefore, it is expected that performance indicators (modelled here as Flexibility of operations, Customer service, Product and service quality, Cost reduction) may be achieved by manufacturing firms. Therefore, the study is composed of two main variables; independent variable (outsourcing practices) and the dependent variable (performance) as shown in the figure 1.1

II. LITERATURE REVIEW

2.1 Sustainable Development Theory

The concept of sustainable development was first popularized in the Brundtland report, 1987. The advent of sustainable development theory came into existence in order to evolve a society where resources and living conditions of people meet human needs without conceding the needs of the future earth. Sustainable development aims to balance the needs of the environment of operation, the economy, and social welfare of the people. It refers to using financial advantage to help raise the standard of living for people in the present era without affecting the need for a future group of individuals. The theory entails protecting assets without compromising their quantity or caliber.

The reasoning behind controllable progress is to adapt to the population, various resources, various climate zones, and technological advancements. The normative concept of sustainability and sustainable development are related. The two ideas are distinguished by UNESCO in a fundamental way: Sustainability is frequently regarded as a time taking objective (more sustainable world over a long period). On the other hand, sustainable development is about various procedures and routes to get to the future, without hurting the present. The idea of sustainable development has certain issues. Since development is necessarily unsustainable, some academics claim it is an oxymoron. The paucity of advancements made thus far has frustrated other analysts. The fact that development is not always defined is one aspect of the issue.

The concept of sustainable development has gathered global recognition, particularly following the Rio Process that began with the 1992 Earth Summit in Rio de Janeiro. The United Nations General Assembly (UNGA) approved the 2030 Sustainable Development Goals in 2015 which focused on addressing critical world problems such as unemployment, poverty and climate change among others. Intergenerational equity/sustainable development of society is the first of the five guiding elements of sustainable development. According to this idea, each generation of humans has the obligation to protect the resources of previous generations and the right to profit from them. This idea emphasizes the preservation of renewable resources and biodiversity. This idea of sustainable development dates back to the first and the second principle of the 1972 Stockholm Declaration, which states that the environment is the foundation of resources for the current generation's survival.

The second concept is the precautionary principle, which aims to conserve the ecology, ecosystem, and biodiversity of the world. This idea was acknowledged and embraced as Principles 8 and 23 in the 1992 Rio Earth Summit Declaration. This sustainable development principle states that natural resources must be used with consideration for their preservation for future generations. Because of urbanization, industrialization and overpopulation, these resources are rapidly running out. Finding substitute technology like renewable energy, is crucial to preserving resources for future generations due to their depletion. This approach is based on the idea that, so as to utilize natural resources for future, the current generation must use them sparingly and reasonably.

The principle is applied in portions after evaluating the veracity of the evidence, even if it recommends taking preventive action even in the lack of scientific proof of this hazard. In line with Principle 15 of the Rio Declaration of 1992, a lack of complete scientific knowledge should not be used as an excuse to put off taking preventive action to stop environmental degradation wherever there is a risk of significant or irreversible environmental harm. The use and preservation of natural resources as well as the preservation of the environment or ecosystem constitute the second principle.

Environmental protection and ecosystem or environment conservation, as well as biodiversity conservation on Earth, constitute another principle. Protecting our environment is crucial to ensuring sustainable growth in the most efficient way possible. Laws must be upheld by nations in so as to allow for the long-term, environmentally friendly use of natural resources. Since agriculture, industries, energy, and power have a direct bearing on the environment, countries must regulate these sectors to protect it. To protect the environment, India implemented the Environment (Protection) Act of 1986. In addition, the nation has anti-pollution legislation.

The concept of liability to assist and collaborate is the last one. The Rio Declaration (1992) included this sustainable development principle as outlined in Principle 9. This principle suggests that states must work together to increase scientific knowledge in order to build the indigenous capacity for sustainable development. Scientific and technical knowledge should be shared in order to further scientific understanding. Enhancing the creation and adaptation of current technologies as well as those that are novel yet practical is equally crucial. Principle 10 of the Rio Declaration states that active and pertinent participation by all parties involved is equally important. This cooperation is necessary to promote

Outsourcing Practices of Manufacturing Firms in A Developing Economy: Effects and.....

economic prosperity and sustainable development in any country. Principle 27 encourages cooperation and partnership between nations and citizens in order to create international legislation for sustainable development.

Sustainable development theory has various significance. It is its emphasis on promoting environmental health and preservation. The biodiversity that is essential to our existence and our economic endeavors would disappear in the absence of sustainable development. How does biodiversity relate to sustainability, then? Biodiversity plays a vital role in achieving the sustainable Development Goals (SDGs) as enshrined in the United Nations. It is essential for providing clean food, water, and supporting human health. Furthermore, biodiversity contributes to job creation and aids in combating climate change. Healthy ecosystems, supported by biodiversity, enhance resilience and offer natural protections against disasters such as storms and droughts. As biodiversity conservation aligns with sustainability efforts, organizations like Enel X focus on its preservation. In addition, promoting compact, mixed-use urban development and avoiding sprawling, car-dependent growth can support sustainability, efficiently utilizing land while contributing to broader community goals.

Sustainable development theory has some drawbacks despite its benefits. First and foremost, expensive pricing is among the main criticism of the sustainable development. It is costly to implement sustainable initiatives like green infrastructure and renewable energy. This could deter some business firms and individuals from implementing sustainable activities. The second disadvantage of sustainable development is the potential lack of accessibility to certain of the resources required for sustainable activities. For instance, access to alternative energy sources like wind and solar may be limited in some locations. Another criticism is of social and cultural obstacles.

These barriers may stand in the way of sustainable development, especially in cultures where traditional practices are deeply ingrained. Adopting and putting into effect sustainable methods could be difficult as a result. Lastly, slow progress sustainable development is a lengthy process that takes a lot of time and money. This implies that people who want to see results right away may find it disappointing when growth is gradual and slow. According to sustainable development, an organization must devise strategies for addressing future requirements in this case, long-term objectives without compromising present demands, in this case, short-term objectives. Plans, strategies, and practices that an organization uses can illustrate these methods. According to this perspective, manufacturing companies can use outsourcing practices in place (contracting arrangements, scope of work & area, industry characteristics, selective partners) to accomplish both short and long-term objectives.

2.2 The issue of outsourcing and performance

Outsourcing is the process in which a firm leaves part of the production obligations to another company or party to be performed on behalf of the mother company. The concept has become popular especially after the covid 19 menace, as companies move to reduce staff and make the business more profitable (Edvardsson et al., 2021). The practice has due advantages, the first is its cost effectiveness. It's often cheaper than hiring your own permanent staff due to the fact that you cut costs both in the sense that you spend less time recruiting a candidate you deem perfect as well as reduction of operation costs through employing and training staff thus reducing overheads. It also leads to increasing productivity and efficiency. This means that the firm reduces time on the processes that don't do so well and gives them time to focus on the process that lead to higher profit margins. This means your firm can make profit even in your absence particularly if you outsource from overseas due to the different time zones (Lysons and Farrington, 2006)

In addition, outsourcing creates a competitive edge for business firms. This is because you will engage others with expert opinions who are used to doing this activity everyday therefore giving you a competitive advantage over your competitors who use in house staff. Despite the stated advantages, outsourcing also has a number of disadvantages firstly being negative impact on staff. This is because some employees may feel they are doing menial jobs instead of what they signed up for. They may feel they should be carrying out the work in case they get wind that the outsourced company is being compensated better than them. Second, there are dangers related to confidentiality and data protection. It can sometimes be easy to examine the terms of a service contract than a consultancy arrangement, even though the parties have a formal agreement outlining all the requirements of the outsourcing, including responsibilities for data protection and sensitive information. Furthermore, the formal conditions of their employment contract, employees are often bound by implied requirements, such as the need to uphold trade secrets and desist from competing with their employer. Furthermore, restrictive covenants may be easier to enforce against an employee (though not necessarily), and their presence in a consulting agreement may be a sign that an employment tribunal views the outsourcing as an employee or worker. There are hazards associated with transferring and using data outside of your company (Lysons and Farrington, 2006).

Firm performance, which includes the existence of specific goals, the time required to reach these goals, and the realization of efficiency and effectiveness, is the ultimate accomplishment of an organization (Blowfield & Dolan, 2010). Accordingly, a manufacturing firm's performance is defined as its capacity to use an appropriate course of action to accomplish goals like high profit, high-quality product, a large market share, strong financial outcomes, and survival at a certain time (Koontz & Donnell, 2003). Performance serves as the foundation for a company's evaluation of its progress towards predefined goals, identification of its strengths and weaknesses, and decision-making on future activities aimed at launching performance improvement (Kakwezi & Nyeko, 2019).

Performance is demonstrated by the company's market share and its generation of profits throughout time. Quality, flexibility, and delivery speed are only a few of the strategy elements that Stock et al. (1999) incorporated in their conceptual model. When backed by internal and external integration, the strategy can improve business performance. Return on Investment, (ROI), market share, returns growth, sales volume, profit margins and industry competitiveness are the six metrics used to quantify a firm's performance. Since the other entities are more familiar with their capabilities, information flow always has the ability to withstand bad business cycles better than non-integrated manufacturing firms. This allows manufacturing firms to predict changes or uncertainties in the market (Kakwezi & Nyeko, 2019).

2.3 Review of empirical literature on outsourcing practices and performance

Tayaouova (2017) in an Indian case looked at the advantages and disadvantages of outsourcing. Based on a case study design of three banks operating in Kazakhstan region in India, the study is grounded in three theories (The Resource Based View Theory (RBV), Transaction Cost Economics theory, the Core competencies theory) Researcher argues that in the aftermath of a business environment made up of ensuing competition, outsourcing has emerged as a tool that will position business firms to nearly every advantage in markets. The study applied primary data which was obtained from the field by scheduled interviews as a measuring instrument. The units of analysis were initially managers of the cased banks, planned before hand in separate days. Findings of the study revealed that the advantages and disadvantage of outsourcing differ according to the size and type of organization as well as the outsourcing practices adopted.

Edvardsson et al. (2021) studied outsourcing practices in service organizations Iceland. The study targeted 804 small knowledge-based firms between 2009-2018. By the use of both descriptive and analytical research designs, the study employed telephone interview, a structured questionnaire and email surveys to collect primary data from the field. In the analysis of collected data, descriptive statistics was employed, whereas chi square tests were adopted to compare two groups. Further, Kruskal-Wallis test analyzed the difference between groups for means. The researchers argue that the main objective of outsourcing practices especially in-service firms is to enable an organization to focus on their main functions. Findings of the study showed that knowledge service organizations in Iceland practice outsourcing than any other firm in the industry. Further the results pinpoint that the knowledge service firms have a higher pedigree to have an outsourcing strategy as compared to other firms. The main reasons for outsourcing are reduction of costs of operations and focus on core activities.

Wamunyima, Madimutsa, Shikabi, Hang'andu and Nyirenda (2024) looked at outsourcing practices and its effect on public sector service delivery in Zambia. In a descriptive research design, the writers discuss that many public sector firms in Zambia are turning to outsourcing strategy to in order to apportion public resources using market dynamics. Even though this trend is has taken center stage among scholars, the participation of private firms in delivering goods and services for the common citizenry has been characterized by poor performance. In a descriptive design, the writers used a structured questionnaire to obtain primary data from managers of public organizations. Regression analysis were used as main analytical means. It is argued that as for the case of Zambia, outsourcing practices are done in four ways; by joint venturing, management contracting, supplying and building-operating transfers. The results suggest that negative results of outsourcing are high prices for materials and services, delivery failure, production and physical distribution of low-quality products. Further, the results show that outsourcing practices by the involvement of private sector does not improve performance of the public sector.

Nyaguthii, Klibet & Gitau (2019) conducted a study on role of outsourcing aspects and the performance of companies in the Nairobi Securities Exchange (NSE) by utilizing an explanatory research design in a population of 66 firms which were listed at the NSE. Grounded in the Transaction Cost economics theory, the target units of analysis were composed of firm managers making up a total of 264 participants. Primary data informed actualizing objectives and was collected using a give and pick later means. In the analysis, descriptive statistics encompassing mean, mode and standard deviation and

Outsourcing Practices of Manufacturing Firms in A Developing Economy: Effects and.....

inferential analysis were chosen. Results of the study show that outsourcing practices has a significant positive effect on the performance of listed firms at the NSE. Study implored firms at the NSE and other industry to adopt policies meant to continue the adoption-use of outsourcing practices.

Kiptum (2014) on the role of outsourcing practices on productivity of selected parastatals employed a descriptive research design to actualize the following objectives: investigate forms of outsourcing in Kenyan parastatals, to ascertain how outsourcing affects the cost of parastatals, evaluate how outsourcing affects staff productivity, and evaluate how outsourcing affects innovations in a subset of Kenyan parastatals. Both quantitative and qualitative data were used in the study with questionnaire employed to collect quantitative data, and an interview schedule adopted for qualitative data. Regression analysis was used to analyze quantitative data, whereas content analysis was used to achieve objective for qualitative data. The most prevalent kind of outsourcing, according to the results, was contracting out. Additionally, it was discovered that outsourcing had a favorable and considerable impact on costs by lowering operating expenses. Nonetheless, it was shown that outsourcing methods' impact on creativity and output was favorable but unimportant.

The reviewed studies on outsourcing and performance adopted different research designs, like the studies by (Tayauova, 2017: case study design; Edvardsson, Oskarsson & Durst, 2021: surveys design; Wamunyima, et al., 2024: descriptive research design, Nyaguthii, et al., 2019: explanatory research design; Kiptum, 2014: descriptive research design), thus ignoring correlational design. Similarly, the reviewed studies concentrated on different industry and firm contexts (Tayauova, 2017: advantages and disadvantages of outsourcing in Kazakhstan banks of India; Edvardsson et al., 2021: outsourcing practices in service organizations of Iceland; Wamunyima et al., 2024: outsourcing practices and its effect on public sector service delivery in Zambia; Nyaguthii et al., 2019: outsourcing practices and the performance of companies in the NSE of Kenya; Kiptum, 2014: role of outsourcing practices on productivity of selected parastatals in Kenya), ignoring the focus on manufacturing firms. In the same vein, the studies discussed on outsourcing and performance were grounded in differing philosophical and theoretical grounds, like in the discussions by (Tayauova, 2017: RBV theory, Transaction Cost Economics theory, the Core competencies theory; Nyaguthii et al., 2019: Transaction Cost) while others were not based in a theory foundation (Kiptum, 2014), therefore not considering the systems theory, sustainable development theory and the dynamics capabilities theory. Information on the role of outsourcing on performance when all these differences are considered is therefore not existent. The current study hence sought to actualize these gaps in studying the role of outsourcing practices on the firm performance of manufacturing firms in Kenya.

III. METHODOLOGY AND DESIGN

The study used a correlational design situated in the positivism philosophy. The origin of research design is the philosophy. Research philosophy deals with the source, nature and development of knowledge (Ramanadhan, Revette, Lee & Aveling, 2021)). In simple terms, it is the underpinning belief about the ways in which data about a phenomenon should be collected, analyzed and used thus it informs the entire research design, including research approach, methodological choice, research strategies, time horizon, techniques, and procedures. The choice of a research philosophy is usually based on the researcher's beliefs and assumption on orientation of knowledge. These assumptions may be linked to realities encountered about the research (ontology), assumptions about the human knowledge (epistemology) or assumptions about the way the researcher's values influence the research (axiology) (Wanyonyi, 2023). For this study, we employed a positivism philosophy for the intent that we used quantitative approach to data collection and measurement. The choice of correlational design is informed by the understanding that the study sets to ascertain causality, i.e. the relationship among conceptualized variables. Ramanadhan et al. (2021) is of the opinion that a correlational design is desirable when a researcher sets to understanding the existing relationships among variables

The population of interest was 596 manufacturing firms as listed by the Kenya Association of Manufacturers (KAM, 2021) as quoted in (Rajab, 2024). The association of manufacturers has membership of firms in 14 category sectors of manufacturing located geographically all over the country. In order to determine the sample size, Krejcie & Morgan (1970) sample size estimation table IS adopted. In choosing a sample size outside the margin, Bukhari (2020) argues that sample size close to the highest margin group is selected since a higher size gives a higher precision level.

With a target population, $N = 596$, the estimated sample size, $n = 234$ (close to $N = 600$)

Given that $N = 596$ is close to $N = 600$ than $N = 550$

The sample size will therefore be, $n = 234$

A simple random sampling is employed to select heads of procurement departments to participate in the study. This step

Outsourcing Practices of Manufacturing Firms in A Developing Economy: Effects and.....

ensures that data is collected from individuals who are knowledgeable about the organization's outsourcing practices. The random selection within each firm helps minimize selection bias and enhances the representativeness of the sample. In this, the study ensures a robust and comprehensive data collection process (Ghauri, Grønhaug, & Strange, 2020). For this study, primary data is gathered using structured questionnaires from the manufacturing firms. Structured questionnaire was utilized to collect primary data, targeting heads of procuring units in the manufacturing firms. The use of questionnaires ensures that quantitative data can be systematically gathered and analyzed. In the analysis of data, descriptive statistics encompassing mean and standard deviation as well as a standard linear regression model established the effect of outsourcing practices on performance, bearing the mean subscales of outsourcing practices and the mean subscales of performance. This is modelled in equation 3.1:

(Cohen, Cohen, West, & Aiken, 2013)

In this, Y is the performance outcome, β_0 is the constant of the model, β_1 s the coefficient of the predictor variables while ε_i is the error term in the model.

IV. RESULTS AND DISCUSSIONS

4.1 Response rate

From a sample of 234 firms, 224 issued questionnaires were fully filled and returned, this representing a 95.7% response rate. The highly response rate was made possible by persistent follow up through personal visits and follow up through telephone calls. In addition, the researcher and the employed research assistants stationed in key geographical location of the firms continuously assured the respondents that their responses were not to be used for exposing their competitive scales or to victimize them but rather to academically understand the effect of outsourcing practices of manufacturing firms.

4.2 Perspectives on outsourcing practices in manufacturing firms

Outsourcing practices was measured on an item pool of 10 aspects. The sub variables examined under outsourcing practices included contracting arrangements, scope of work and area, industry characteristics, selective partners. Respondents were asked to rate the extent to which they agreed with ten specific statements using a five-point Likert scale ranging from Strongly Agree (5) to Strongly Disagree (1). The findings, summarized in Table 4.1, are presented using percentages, means, and standard deviations to reflect the distribution and intensity of responses across the outsourcing practices.

Table 4.1: Outsourcing practices in manufacturing

Outsourcing practices	SD	D	N	A	SA	M	STD
We carry out outsourcing with firms we have contract arrangements with.	114(50.9)	99(44.2)	8(3.6)	2(0.9)	1(0.4)	1.56	.654
The contracts for outsourcing is clearly defined and understood by both parties	109(48.7)	110(49.1)	3(1.3)	1(0.4)	1(0.4)	1.55	.597
The scope of work for outsourcing is clearly defined for the outsourced firms	91(40.6)	126(56.3)	2(0.9)	4(1.8)	1(0.4)	1.65	.638
We consider the industry performance when outsourcing from outside firms	112(50)	101(45.1)	5(2.2)	5(2.2)	1(0.4)	1.58	.691
We carry out supplier collaboration programs when outsourcing from outside firms	110(49.1)	86(38.4)	19(8.5)	8(3.6)	1(0.4)	1.68	.812
Our selective partners in outsourcing consider capability and experience when selecting firms for outsourcing	122(54.5)	85(37.9)	9(4)	7(3.1)	1(0.4)	1.57	.754
The organization considers competitive position of a firm in the industry when entering in outsourcing arrangements	117(52.2)	83(37.1)	11(4.9)	12(5.4)	1(0.4)	1.65	.839
Our organization considers cost and quality requirements when entering into outsourcing arrangements with outside firms.	136(60.7)	75(33.5)	5(2.2)	7(3.1)	1(0.4)	1.49	.734

Outsourcing Practices of Manufacturing Firms in A Developing Economy: Effects and.....

Our organization maintains and upholds continuous collaboration with selected partners to enhance on time delivery of materials required for daily operations	121(54)	86(38.4)	4(1.8)	10(4.5)	3(1.3)	1.61	.840
The firm's procurement and supply chain department has made available systems for monitoring and evaluation of service provider's outsourced performance	107(47.8)	81(36.2)	8(3.6)	27(12.1)	1(0.4)	1.81	1.003

Source (Field Survey Data, 2025)

A majority of respondents (50.9%) strongly disagreed and 44.2% disagreed that they carry out outsourcing with firms they have contract arrangements with, resulting in a low mean of 1.56 (SD = 0.654). This indicates that most manufacturing firms do not prioritize entering into formal contracts when outsourcing services, which may expose them to legal and operational risks. The absence of structured agreements could potentially result in delivery inconsistencies and weak performance accountability from service providers. Similarly, when asked whether outsourcing contracts are clearly defined and understood by both parties, 48.7% strongly disagreed and 49.1% disagreed, yielding a mean of 1.55 (SD = 0.597). This suggests that contractual clarity is lacking in most outsourcing engagements. Ambiguous contracts can create misunderstandings regarding roles, deliverables, and timelines, which may negatively affect the efficiency and performance of outsourced operations.

Regarding whether the scope of work for outsourcing is clearly defined for outsourced firms, 40.6% strongly disagreed and 56.3% disagreed. The resulting mean score of 1.65 (SD = 0.638) supports the conclusion that most firms do not provide clear task specifications. Without a well-outlined scope, outsourced providers may fail to meet expectations or deliver consistent outputs, thereby limiting the intended performance gains from outsourcing. The practice of evaluating industry performance before outsourcing was also rated poorly, with 50% of respondents strongly disagreeing and 45.1% disagreeing (M = 1.58, SD = 0.691). This suggests that firms may not be conducting sufficient due diligence when choosing external providers. Overlooking industry track record could lead to engagement with underqualified or poorly performing partners, ultimately hindering productivity and competitiveness.

On supplier collaboration, a notable portion of respondents (49.1%) strongly disagreed and 38.4% disagreed that their organizations conduct such programs (M = 1.68, SD = 0.812). This reflects a limited emphasis on joint initiatives with suppliers. The absence of collaboration reduces opportunities for process improvement, innovation, and knowledge sharing, all of which are critical for successful outsourcing relationships. Concerning selection of partners based on capability and experience, 54.5% strongly disagreed and 37.9% disagreed, yielding a mean of 1.57 (SD = 0.754). This points to a concerning trend where competence is not a primary consideration in partner selection. Choosing providers without assessing their expertise may increase operational risk and reduce the effectiveness of outsourced services.

Similarly, 52.2% of respondents strongly disagreed and 37.1% disagreed that they consider the competitive position of firms when entering outsourcing arrangements (M = 1.65, SD = 0.839). Neglecting this factor could lead to engagements with firms that lack strategic advantage, potentially affecting quality, cost-efficiency, and delivery reliability. The consideration of cost and quality requirements received the strongest disagreement among respondents, with 60.7% strongly disagreeing and 33.5% disagreeing (M = 1.49, SD = 0.734). This result challenges the expectation that firms aim to balance financial and quality outcomes when outsourcing. It suggests a possible lack of formal criteria or policies guiding outsourcing decisions.

Regarding continuity in collaboration for timely delivery, 54% of respondents strongly disagreed and 38.4% disagreed (M = 1.61, SD = 0.840). This implies that most firms do not maintain sustained engagement with outsourcing partners, which can lead to disruptions, misalignments, and delivery delays, ultimately affecting operational efficiency. Finally, the availability of systems for monitoring and evaluating outsourced performance was also rated poorly, with 47.8% strongly disagreeing and 36.2% disagreeing (M = 1.81, SD = 1.003). The relatively higher standard deviation suggests some variability in responses, but overall, the findings indicate a lack of structured performance assessment. Without monitoring systems, firms cannot effectively track progress, address inefficiencies, or evaluate return on outsourcing investments.

4.3 The effect of outsourcing practices

In order to achieve the effect of outsourcing practices on performance, the study performed a standard linear regression involving Mean outsourcing practices and Mean performance as modelled in methodology section. This approach allows for a more focused understanding of the direct relationship between outsourcing and firm performance, without the influence of other variables. By employing simple linear regression, the study provides a clear and interpretable measure of the strength and direction of this individual predictor, which is essential for decision-making in both policy and practice within the manufacturing sector. Consider the results in table 4.3:

Table 4.2: Summary model results on effect outsourcing practices

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Model Summary				
					Change Statistics	R Square	F Change	df1	df2
1	.783 ^a	.614	.612	.35947	.614	352.866	1	222	.000
a. Predictors: (Constant), Mean Outsourcing practices									
Coefficients^a									
Model		Unstandardized Coefficients				Standardized Coefficients	t		Sig.
		B		Std. Error		Beta			
1	(Constant)	.390		.074			5.269		.000
	Outsourcing practices	.815		.043	.783		18.785		.000
a. Dependent Variable: Mean Performance of manufacturing firms									

Source (Field Survey Data, 2025)

The model summary shows a strong positive relationship between outsourcing practices and firm performance, as indicated by an R value of 0.783. The R Square value of 0.614 reveals that outsourcing practices account for 61.4% of the variation in performance among the firms, a substantial proportion for a single-variable model. The F-statistic (F=1, 222) = 352.866, $p < .001$ confirms the model's statistical significance and robustness. With an adjusted R Square of 0.612, the model maintains its explanatory power even after adjusting for the sample size, suggesting that outsourcing is a key determinant of firm performance in the manufacturing sector.

The coefficients provide further support for the strong positive impact of outsourcing. The unstandardized coefficient (B = 0.815) indicates that for every one-unit increase in outsourcing practices, firm performance increases by 0.815 units on average. The standardized beta coefficient of 0.783 and the high t-value of 18.785 ($p < .001$) emphasize the strength and statistical significance of this effect. These findings suggest that firms that strategically outsource non-core activities can achieve better performance, likely through cost reduction, increased focus on core competencies, and access to specialized expertise. As such, outsourcing emerges as a powerful operational lever for enhancing competitiveness in Kenya's manufacturing sector.

Findings of this study ($R^2=.614$, $\beta=.783$, $p<.05$) provides evidence that outsourcing practices in supply chains of manufacturing firms in Kenya has a positive significant effect on performance and agrees with results in empirical literature. Firstly, the results are in agreement with establishment in the works of Edvardsson et al. (2021) who studied outsourcing practices in service organizations of Iceland. By targeting 804 small knowledge-based firms between 2009-2018 and using of both descriptive and analytical research designs, the findings of the study showed that knowledge service organizations in Iceland practice outsourcing than any other firm in the industry. Further the results pinpoint that the knowledge service firms have a higher pedigree to have an outsourcing strategy as compared to other firms. The main reasons for outsourcing are reduction of costs of operations and focus on core activities.

Furthermore, the findings agree with the findings in Nyaguthii et al. (2019) who conducted a study on role of outsourcing aspects and the performance of companies in the Nairobi Securities Exchange (NSE) by utilizing an explanatory research design in a population of 66 firms which were listed at the NSE. By grounding the study in the Transaction Cost economics theory, the writers targeted firm managers as study respondents, making up a total of 264 participants. The results of the study show that outsourcing practices has a significant positive effect on the performance of listed firms at the NSE, imploring firms at the NSE and other industry to adopt policies meant to continue the adoption-use of outsourcing practices.

Outsourcing Practices of Manufacturing Firms in A Developing Economy: Effects and.....

In addition, the results agree with the results of Kiptum (2014) who studied the role of outsourcing practices on productivity of selected parastatals in Kenya, using a descriptive research design. In this study, both quantitative and qualitative data were used with questionnaire employed to collect quantitative data while an interview schedule was adopted for qualitative data. It was discovered that outsourcing had a favorable and considerable impact on costs by lowering operating expenses. Nonetheless, it was shown that outsourcing methods' impact on creativity and output was favorable but not important.

While findings of the study agree with previous works, it hitherto, disagrees with previous other writers. For instance, Wamunyima et al. (2024) who looked at outsourcing practices and its effect on public sector service delivery in Zambia. In a descriptive design, the writers used a structured questionnaire to obtain primary data from managers of public organizations. The results suggest that negative results of outsourcing are high prices for materials and services, delivery failure, production and physical distribution of low-quality products. Further, the results show that outsourcing practices by the involvement of private sector does not improve performance of the public sector.

V. CONLUSION

The paper sought to understand the perspective and effect of outsourcing practices on performance of manufacturing firms a developing economy, Kenya. The perspective on some outsourcing practices such as contracting arrangements, scope of work and area, industry characteristics show that the practices are moderating and lowly practiced. The mean and std. deviation results confirm outsourcing is practiced in manufacturing firms. In a standard linear regression analysis, model results show that outsourcing practices has a significant positive effect on performance, agreeing with empirical establishments. We thus conclude: Improvements in use of outsourcing practices improves performance in the manufacturing firms. The paper provides a primary-quantitative evidence that if supply chains among business firms implement policies geared towards adopting and using outsourcing practices, then manufacturing firms will raise their economic levels by improving their performance. The paper provides interesting discussions that supply chains in business firms can be agents of value creation through there outsourcing practices, but then recognize that such efforts can only bear fruits if such firms effectively and religiously implement such practices.

RECOMMENDATION AND FUTURE RESEARCH AGENDA

The paper divulges from theoretical assertions that have heavily focused on outsourcing practices in other industries, ignoring the delve in manufacturing in the case of a developing economy like Kenya. We provide sufficient evidence that indeed, outsourcing practices can alleviate performance of manufacturing firms. In this, the study recommends that policy makers and stakeholders in manufacturing firms to regularly implement outsourcing practices. We suggest the following future research lens;

1. Given that the paper is a primary study birthed in quantitative paradigm, future research need to focus on literature reviews over the last decade to investigate whether there is a harmonious agreement in wider academic community that outsourcing practices alleviates results.

REFERENCES

- [1] Blowfiel, M., & Dolan, C. S. (2016). Business as a development agent: Evidence of possibility and improbability. In *New Actors and Alliances in Development* (pp. 22-42). Routledge.
- [2] Edvardsson, I. R., Óskarsson, G. K., & Durst, S. (2021). The outsourcing practice among small knowledge-intensive service firms. *VINE Journal of Information and Knowledge Management Systems*, 51(1), 177-191
- [3] Kakwezi, P., & Nyeko, S. (2019). Procurement processes and performance: Efficiency and effectiveness of the procurement function. *International Journal of Social Sciences Management and Entrepreneurship (IJSSME)*, 3(1)
- [4] Kiptum, D. (2014). *Analysis of the effects of outsourcing on organization productivity in selected parastatals in Kenya* (Doctoral dissertation, Kabarak University)
- [5] Krejcie, R.V., & Morgan, D.W., (1970). Determining Sample Size for Research Activities.
- [6] Nyaguthi, E., Kibet, Y., & Gitau, F. (2019). Effect of outsourcing practices on performance of companies listed on the Nairobi Securities Exchange
- [7] Ramanadhan, S., Revette, A. C., Lee, R. M. & Aveling, E. L. (2021). Pragmatic approaches to analyzing qualitative data for implementation science: an introduction. *Implementation Science Communications*, 2:70.
- [8] Rehman, S. U., Kraus, S., Shah, S. A., Khanin, D., & Mahto, R. V. (2021). Analyzing the relationship between green innovation and environmental performance in large manufacturing firms. *Technological forecasting and social change*, 163, 120481.
- [9] Tayauova, G. (2017). Advantages and disadvantages of outsourcing: analysis of outsourcing practices of Kazakhstan banks. *Procedia-Social and Behavioral Sciences*, 41, 188-195
- [10] United Nations Industrial Development Organization (UNIDO). CIP Competitive Industrial Performance Index Database. Available at <https://stat.unido.org> (accessed on Oct. 2023). Vienna, 2022 (cited on pages 2, 4, 8).
- [11] United Nations Industrial Development Organization (UNIDO). National Accounts Database. Available at <https://stat.unido.org> (accessed on Nov. 2023). Vienna, 2023 (cited on pages 2, 6, 8, 9)
- [12] Wamunyima, N. A., Madimutsa, C., Shikabi, P., Hang'andu, M., & Nyirenda, T. C. (2024). Outsourcing in the Public Sector and Its Negative Effects on Service Delivery in Zambia. *The African Review*, 1(aop), 1-30