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#### OUTSOURCED LOGISTICS SERVICES ON THE PERFORMANCE OF ALCOHOLIC BEVERAGES MANUFACTURING FIRMS IN KENYA

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#### ABSTRACT

The purpose of the study was to determine the influence of outsourced logistics services on the performance of alcoholic beverages manufacturing firms in Kenya. The study established the influence of outsourced transport services and outsourced clearing and forwarding on the performance alcoholic beverages manufacturing firms in Kenya. To achieve this, the researcher reviewed both theoretical and empirical literature and propose research methodology that addressed the gaps identified in literature as well as answer the stipulated research questions. The study employed a descriptive research design. The study targeted 130 respondents including procurement managers, finance managers, operations managers, transport & logistics managers, warehouse/storage managers, sales and marketing managers and internal auditors from spirits manufacturers. Data was collected using self-administered questionnaires. Pilot study was carried out to establish the validity and reliability of the research instruments and the findings affirmed that the research instrument is both valid and reliable, ensuring the accuracy and consistency of the data to be collected in the main study. The instruments were designed appropriately according to the study objectives. The data collected was analyzed by use of descriptive and inferential statistics. The study used multiple regression and correlation analysis to show the relationship between the dependent variable and the independent variables. The data collected was keyed in and analyzed by use of Statistical Package of Social Sciences (SPSS). The findings were presented in tables and figures. The findings revealed that logistics services significantly contribute to firm performance, with clearing and forwarding services having the most substantial impact ( $\beta = 0.331$ , p < 0.001), followed by transport services ( $\beta =$ 0.308, p < 0.001). These results underscore the importance of efficient logistics management in enhancing operational efficiency, reducing costs, and improving customer satisfaction. The study concludes that strategic outsourcing of these services is crucial for maintaining a competitive edge and achieving sustained business success. Based on these findings, the study recommends that firms should invest in advanced technological solutions for order processing, select reliable transport and warehousing partners, and engage proficient clearing and forwarding agents to optimize their logistics operations. These targeted strategies will help firms maximize the benefits of outsourcing, thereby boosting their overall performance in the market.

**Key Words:** Outsourced Logistics Services, Outsourced Transport Services, Outsourced Clearing and Forwarding, Performance, Alcoholic Beverages Manufacturing Firms

#### **Background of the Study**

In the current competitive and challenging environment, the key market players are forced to innovate ways of being competitive and improve their organization performance. This has been achieved by most organizations through the outsourcing of logistics services so as to limit their range of activities that they need to do and focus on the ones that they are good at (Jabir & Jawab, 2019). The process of logistics outsourcing is a reengineering process that affects each individual in an organization right from the supplier to the distributor. The most important thing is to reduce costs in a context where the logistical issues become more complex. However, under the constraint of the economic environment and looking to be more competitive, companies are developing collaborative relationships increasingly close (Parashkevova, 2017).

Logistics outsourcing involves continuous flow of activities and processes between companies and it concerns all the services of a company which includes in the reflection the partners (Bellingkrodt & Wallenburg, 2018). The process of logistics can also be broken down into four levels; the first level involves the implementation of elementary undertakings such as warehousing and transportation. The second level encompasses the value-added activities such as; after sales support and customer service. The third level entails control and planning and at this point some of the logistics services that can be outsourced include; transport management and warehousing services. The fourth level which is the highest level in the logistics activities involves decision making in matters such as carrier selection, location and analysis of site location and logistics network management (Beulens, 2017). When the activities at this level are outsourced, the LSP takes in charge the design of the logistics network and orchestrates all the logistics flows of the network.

The manufacturing industry encompasses a series of complex activities that cannot be managed fully by the manufacturing firms alone. In today's business environment, it's difficult to find manufacturing industries that produce 100% of its product internally. Logistics outsourcing has led to the improvement of operational performance by manufacturing firms it has become one of the major strategies that companies are adapting to remain competitive in the current dynamic environment. In line with (House & Stank, 2018), third-party logistics provider can help a firm achieve substantial results in its operational performance. As per (Muller, 2018) an improvement in the delivery process, resulting from the logistics outsourcing process, can also contribute towards competitive advantages, as contributed by the product. Logistics outsourcing results in operational performance improvement through; decreased operating costs, improved customer satisfaction, increased productivity, timely delivery of services to clients, reduced lead time and improved profits, faster response to customer's demands and use of modern technology in offering services

According to (Magutu, Chirchir, & Mulama, 2018) logistics outsourcing is a major player in deciding on how operations are controlled and how goods are shipped and stored. All these decisions are based on accurate demand forecasts while the delivery schemes and mode of transport used must be agreed upon by all members of a supply chain. This has become the new norm across the manufacturing industry in an effort to reduce cost and enhance value while distributing and transporting products. (Marasco, 2018) Pointed out that the modern market is highly competitive characterized with a significant increase in customer demand for tailored products and services. This has forced manufacturing companies to continuously evaluate, reengineer and improve their transport operations. Indeed, these companies have found it beneficial so much so that they have, to a large extent, met customer expectations as far as customer service is concerned. It is prudent for both manufacturing organizations therefore to bridge the gap between transportation and customer service. Logistics outsourcing practices include information management, transportation management, warehouse management, material handling management and inventory management

efficiency.

#### **Statement of the Problem**

According to the 23<sup>rd</sup> Annual Third-Party Logistics Study of 2019, cost is always important, and continues to be top-of-mind in every conversation and is a major consideration for both shippers and their logistics providers. It is a leading factor in the decision-making process between shippers and logistics providers. Although many firms outsource to reduce costs, they often fail to do so and may actually increase if not handled properly (Meixell, 2008).

The activities of alcoholic manufacturing companies have great diversity of customers spread over vast geographical areas thus must integrate the systems components of distribution to achieve an acceptable customer service level and avoid reduction of market share (Kamakia, 2019). This explains the problem of getting the right quantity of the product to the right place at the right time and the least cost possible. This challenge has confronted companies with issues such as meeting delivery due dates and operating an efficient distribution network. One strategy of improving their organizational performance is resorting to logistics outsourcing (Parashkevova, 2017).

East African Breweries Limited (EABL) reported 5% revenue decrease for the year ending June 2018, as organization performance significantly decreased in the second half. EABL's spirits net sales decreased by 8% in the full year, driven by a poor organization performance of the mainstream spirits portfolio (up 23%) while beer decreased by 4%, fueled by growth of bottled beer and partially offset by decline of Senator keg sales (EABL, 2018). The decreased organization performance is as a result of the logistic sector experiencing challenges such as increased transportation cost, maintaining visibility and control of inventories, the technology is costly, the business environment is highly fluctuating with customer demands that are dynamic, inadequate logistics professionals, insecurity and poor infrastructure and high legal compliance requirement (Springinklee & Wallenburg, 2017). Alcoholic beverage Companies in Kenya are also faced with challenges of measuring the performance of their 3PL because they are not able to anticipate the requirements for clearing and removing their cargo from the port and are not able to assess the effectiveness of their logistics providers (Mathenge et al., 2018).

While some companies have opted for outsourcing their logistics services, their performance has continued to deteriorate and thus several manufacturing companies are in a dilemma on whether to perform in-house logistics services or to outsource the services from Third Party Logistics (3PL) providers (Lucie & Hudziak, 2012). Several studies on logistics outsourcing have been done both locally and globally but few have studied on logistics outsourcing in Alcoholic beverage manufacturing companies. Wordu (2017) conducted a study on Impacts of Logistics Outsourcing on Organizational Performance in Selected Oil and Gas Companies in Rivers State in Nigeria. The study covered the aspect of logistics outsourcing, but it was carried out in a different context and setting (oil and gas companies in Nigeria), yielding a contextual gap. This study will be carried out in alcoholic beverage manufacturing firms in Kenya. (Waugh, 2017) examined the logistics outsourcing by manufacturers in South Africa. The study was carried out in a different context (South Africa) and did not point out logistics outsourcing in alcoholic beverage manufacturing firms which this study intends to cover, hence both knowledge and contextual gaps are realized. Chirchir (2018) analyzed the Logistics outsourcing and performance of Horticultural Firms in Nairobi County. The study brings out knowledge and contextual gaps since it did not cover logistics outsourcing in alcoholic beverage manufacturing firms. It is on the basis of these findings, that this study sought to shed light on the impact of logistics outsourcing on the organization performance of alcoholic beverage manufacturing firms in Kenya.

#### **General Objective**

The general objective was to establish the influence of outsourced logistics services on the performance of alcoholic beverages manufacturing firms in Kenya.

# **Specific Objectives**

- i. To determine the influence of outsourced transport services on the performance of alcoholic beverages manufacturing firms in Kenya
- ii. To examine the influence of outsourced clearing and forwarding on performance of alcoholic beverages manufacturing firms in Kenya.

# LITERATURE REVIEW

# Theoretical Framework Network Theory Perspective

The network perspective emphasizes net value over least cost as the driver for its implementation (Skjoett-Larsen, 2019). The significance of these drivers in contractual relations is dependent on firms' abilities to manage their contractual relationships. Further experience at managing these relationships results in the development and refinement of competitive routines for managing inter-firm transactions and information transfer across firm boundaries. The network perspective adds considerably to the understanding of the dynamics of third-party relations between individuals within the parties.

The common understanding and knowledge of each other's visions, attitudes and past relations experiences play a major part in the development of third-party cooperation. Applied to logistics outsourcing, network theory focuses on the formation of relationships, organizational structures, and alliances (Ellram & Cooper, 2019). According to the network perspective firms lacking adequate in-house logistics capabilities enter into close cooperation with third-party providers that possess complementary skills that these firms can use to deliver benefits.

This theory is relevant to the outsourced transportation services variable in this study. Transportation is the most commonly outsourced activity; including related support services such as freight bill audit/payment and shipment consolidation, warehousing and customs clearance, and freight forwarding. The benefits primarily fall into two categories: cost savings like on fuel, wages, sales administration overhead, asset reductions in fleets and warehouses and service improvements for example, reduction of order cycle time, inventory, and the cash-to-cash cycle (Coyle, Bardi & Novack, 2018). Network theory represents an attempt to develop an opportunism-independent theory of the firm while broadening the focus from cost minimization to incorporate the management of multiple firms' resource base (Madhok, 2017).

# **Queuing Theory**

The theory was developed by (Wagner, 1969), queuing system consists of one or more berth that provide service of some sort to arriving ships. Ships arrived to find all berths busy generally join one or more queues (lines) in front or near the berths, hence the name queuing systems. There queuing systems in ports has the objective of measure performance such as queue length and waiting time. The random characteristic of queue system is specifically considering giving results which are long-term average and variance of measure. This is to be contrasted with simulation approach where the output would represent the delay or congestion at the port. Adedayo, Ojo, & Obamiro (2018) Stressed that many situations in life requires one to line up or queue before being attended to. These lines formed are referred to as waiting lines or queues. According to them queue occurs when the capacity of service provided fall short of the demand for the service. (Sanish, 2017) In his article on application of queuing to the traffic at the Port refers to queuing theory as an analytical technique accepted as valuable tool for solving congestion problems. According to him the primary inputs to the models are the arrival and service patterns. These patterns are generally described by suitable random distribution. He observed that the arrival rate of ships follows exponential distribution while the service time follows Poisson distribution. Therefore, it can be observed that that queuing theory can be used to predict some important parameters like average waiting time of ships, average queuing length, average number of ships in the port and average berth utilization factor closer to the

actual values. Therefore, this theory is very important in managing congestion and its related problems at the port.

Queuing theory was employed in this study and helped to coordinate contradictions between clearing and forwarding service cost and customers waiting cost so that it can improve the level of designing of service system and achieve a reasonable allocation. It is related to the allocation of equipment and personnel and that affect clearing and forwarding. Considering the factors of ways to reach customer, service, equipment and personnel service, also recommendations based on the study will be given out which may will be wise to outsource and increase the number of equipment and person to improve service level, reduce queuing time and attract more customer; principles of priority of queuing. Arrange proper way for customer to queue in various situations. And adopt principles of justice to improve customer satisfaction. From the point of view of customer, solving the problem of queuing is effective for bettering customer service and saving cost. It can both supply better service in a low cost and increase customer loyalty to enhance competitiveness in the market (Nchimbi, 2018).

# **Conceptual Framework**

A conceptual framework is a structure which the researcher believes can best explain the natural progression of the phenomenon to be studied (Camp, 2018). In this study, the dependent variable is the Performance of Alcoholic Beverages Manufacturing Firms while the independent variables are Outsourced Transport Services and Outsourced clearing and forwarding.



# Figure 2. 1: Conceptual Framework Outsourced Transport Services

Transportation can be defined as the activities involved in shipping any goods or finished products from suppliers to a facility or to warehouses and sales locations (Kenyon & Meixell, 2018). It is a major part of the supply chain due to its power to add value to some goods by moving them from their current location to a more advantageous location (Laird, 2017). Through research, (Atos, 2017; Kenyon 2017; Xiande, 2018; Hausman, 2019; Gunasekaran, 2019) transportation is a major factor in logistics processes as it was the one which joined the separated activities. It is the most important economic activity among the components of business logistics systems (Tsen, Yue&Taylor, 2019). Transport management is the planning, controlling and decision making on operational area of logistics that geographically moved and positioned inventory (Bowersox, et al., 2019). Because of its fundamental importance and visible cost, transportation has traditionally received considerable managerial attention and almost all enterprises, big and small, have managers responsible for transportation

Transportation occupies one-third to two thirds of the amount in the logistics costs hence transport management influence the organization performance of logistics system immensely.

Transportation is required in the whole production procedures, from manufacturing to delivery to the final consumers and returns. Only a good management and coordination between each component would bring the benefits of logistics to a maximum. A good transport management in logistics activities could provide better logistics efficiency, reduce operation cost, and promote service quality on firms (Bowersox, et al., 2019).

Obviously, a product has more value at a retail store than it has in a firm 's warehouse, because in the retail store it is available for sale (Laird, 2017). At the store it could generate revenue, while in the warehouse it is simply sitting there waiting to be moved. This is where transportation adds value to goods. Whether the good was moved from the manufacturer to the warehouse and then to a retail store, straight from the manufacturer to the retail store, or simply from one warehouse to the next, the product become more valuable to the company as it moved closer to the end user (Laird, 2017).

From the logistical system point of view, three factors are fundamental to transportation performance: cost, speed, and consistency. The cost of transport is the payment for shipment between two geographical locations and the expenses related to maintaining on-transit inventory. Logistical systems utilize transportation that minimizes total system cost. The speed of transportation is the time required to complete a specific movement. Speed and cost of transportation are related in two ways. First, transportation firms that can offer faster delivery typically charge higher rates for their services. Second, the faster the transportation service, the shorter the time interval during which inventory are on transit and the higher the charges (Bowersox, et al., 2020). Thus, a critical aspect of selecting the most desirable method of transportation to a firm is to balance speed and cost of service.

Transportation consistency refers to variations in time required to perform a specific movement over several shipments. Consistency reflected the dependability of transportation. For years, logistics managers have identified consistency as the most important attribute of quality transportation (Kenyon &Meixell, 2018). When transportation lack consistency, inventory safety stocks are required to protect against service failure, impacting both the sellers and buyers overall inventory commitment. With the advent of advanced information technology to control and report shipment status, logistics managers have begun to seek faster movement while maintaining consistency. Speed and consistency are combined to create the quality aspect of transportation (Bowersox, et al., 2019).

In designing a logistical system, a delicate balance has to be maintained between transportation cost and service quality. In some circumstances low cost, slow transportation is satisfactory. In other situations, faster service is essential to achieving operating goals. Finding and managing the desired transportation mix across the supply chain is a primary responsibility of transport management. Transport management efficiency is therefore dependent on how much value a firm is able to gain based on how much they are able or willing to spend on transportation. Lastly it is transport management that makes firm goods and products move with lower cost, speed and consistency and provide timely and effective delivery of firm products.

#### **Outsourced Clearing and Forwarding Services**

Clearing and forwarding is the process of ensuring that cargoes/consignments imported from abroad and exported abroad are removed from respective ports and airports by paying customs duties and excise duties. It means getting a ship free of its cargo by signing/doing what is necessary; e.g. signing papers, paying duties etc. on entering or leaving a port. Clearing goods through customs deals with requirement of the customs e.g. paying any necessary duties. Forwarding help to send forward, help to advance, send or dispatch goods to the owners. Forwarding is defined as the process of exporting goods (Shipment) through airports, land ports, posts, and post office and customs authorities by documentation procedure to customer in another country. The crux of competent clearing and forwarding rests in the fundamental skill of timely and efficient documentation for clearance of goods (Allan, 2019). Selecting the optimum route and selecting optimum transport mode for the dispatch of consignments from origin to destination. The choice of route and carrier needs to confirm to the freight forwarders

four basic criteria of efficiency of clearing/dispatch namely cost, risk time and adherence. To the make the study clearer and meaningful the researcher saw it convenient to define terms used from time to time. Some of the activities conducted by clearing and forwarding agents include; collecting of shipment information such as charges and shipping lines, shipment documentation, custom clearance and goods dispatch (Coolican, 2018).

The Clearing and Forwarding agent start assisting an exporter right from the very beginning by getting shipment ready for overseas by providing the necessary shipment information such as assistance in preparing quotation, advice on freight cost, port charge, consular fee, cost of special documentation, insurance cost, recommending degree of packing needed and arranging to have merchandise packed or containerized. Apart from the above said the Clearing and Forwarding agent prepares ocean bills of lading, getting any special consular documents ready if needed and reviews letters of credit and packing list to ensure that all procedures are in order. Customs clearance of goods will always be speedily made through proper documentation (Bittel, 2017). It is so insisted that having improper or incorrect documents may hinder or cause unnecessary delays in the whole process of trade facilitation. Importers and their agents are therefore urged to submit to Customs at the earliest possible, the following documents for ease of processing: Import declaration form (IDF), Proforma Invoice, Final Invoice, packing list, Bill of Lading/Airway bill / Consignment note, Exemption documents, and Import permits (TRA Clearing Manual, 2018). The customs clearance formalities are generally considered to be cumbersome by the exporters. The forwarding agent renders them easy by carrying out still more services like assisting in processing shipping bills covering the shipment, paying export / import duty on behalf of the shipper, obtaining carting order from the shipping company and carts down the goods from the factory to the docks, delivering the goods to the stevedores and obtaining master receipt from the ship captain and obtaining bill of lading from the shipping company and submits the same after proper checking (Kyusya, 2019).

Outsourcing of clearing and forwarding services is essential in easing the difficulties experienced during shipment and decrease congestion. The freight industry has different players who make sure that the business is responsible and the two consignees, as well as the freight company, derive all the satisfaction as possible attained. Anyone that is not used to the transport sector could have difficulties in mastering the whole process along with before a shipment may be deemed to reach your goals. This may be a daunting task to many who may prefer to contract services of other individuals to achieve it on their behalf (Lacity, Solomon, Yan, & Willcocks, 2019). This is where they clear forwarding agents to prove useful. Clearing forwarding agents are individuals or perhaps to a lot large extent companies who organize shipments for fellow companies or individuals. They needn't be carriers of the goods, but they will organize to ensure goods reach the final destination. They may not be involved in the handling in the goods and often will play an important role in making certain items are delivered inside a sound state.

Clearing and forwarding agents save the consignee the problem of experiencing to make the freight office and book for the transport service. This is particularly to a person that is completely new towards the freight sector and contains probably never used it before. In this particular scenario, one could be forced to proceed through many steps, many of which might be wrong if proper inquiries are not made which makes the complete process a fancy affair. This is when clearing forwarding agents come in handy to rectify the problem (Lieb & Kendrick, 2018). Clearing and forwarding agents are fully conversant with the transport requirements and can, therefore, know precisely what it takes to get a certain cargo to become delivered. They thus save the consignee the tedious task of going to book and complete the essential forms like the export declaration bill, bill of lading among others. Everything that clearing forwarding agents require is more knowledge about a certain shipment which is required to be filled in those documents. Then they begin working on it to ensure that items are sent and will also be sent to where these were intended by the sender. In the port, they also aid in the clearing and forwarding once they are instructed to do so. This can be to stop delays that are unnecessary because goods await clearing (Maku & Iravo, 2018).

# Performance of Alcoholic Beverages Manufacturing Firms

Performance is an important lever to generate loyalty which is achieved through logistics outsourcing. Performance is the entire ability to meet end-customer needs through product availability and responsive on-time delivery (Hoek, 2017). Performance has a major component of competitive strategy aimed at enhancing organizational productivity and profitability. With a specific end goal to determine performance, an analytical performance measurement system and a mechanism must be established to initiate steps for realizing key performance indicators (KPI) goals (Gunasekaran et al., 2018). Performance contains a set of variables that capture the impact of the workings on earnings and costs of the whole system. These vary as drivers of performance are always gotten from service management practices.

Performance can be measured with regards to profitability, lead time, Return on Investment and market share (Gunasekaran et al., 2018). Performance measurement however has numerous irregularities because of the absence of a balanced approach since there are no particular recognizable measurements to be utilized. To address this issue subsequently, measures of dispersion i.e. Mean, standard deviation and variation can be utilized to asses logistics performance.

Logistics outsourcing improves performance through exceeding goals and expectations of the customer and improved loyalty (Wallenberg, Cahill, Goldsby & Knemeyer, 2019). Logistics outsourcing improves organization performance by cutting down logistics cost, thereby enabling them to offer their products and services at more competitive rates to beat the stiff competition (Qureshi, Dinesh, & Pradeep, 2017). LSPs are strategically selected to enable create product differentiation by providing flexibility, speed with minimal holding off in a logistical supply chain. A study by (Green, Whitten, & Inman, 2018) found a positive relationship between logistics performance and organizational performance within the manufacturing sector. An interesting observation by (Solakivi, Töyli, Engblom, & Ojala, 2017); Logistics was being handled equally efficiently in the surveyed companies regardless of whether it had remained in-house or been outsourced. This finding suggests that the fit between the company context and its outsourcing decision might be more important and organization performance driver than outsourcing per se. Mulama (2017) in a study of logistics outsourcing and performance of large manufacturing firms, found out that various benefits accrue to a firm as a result of outsourcing all or part of its logistics services to a third party company through reduced operation costs which results in operational and organizational efficiency.

Buyers of logistics services have a dilemma: there is a trade-off between service quality and the price of services, and generally also between long-term partnership and competitive markets. Moreover, the buyers need to consider outsourcing also from a broader network perspective, and how to utilize the competences and resources of specialized service providers in the logistics service markets (Joskow, 2019). The link between outsourcing and performance is less developed empirically. Quinn, (2019) and Porter, (2017) in their normative literature suggest that outsourcing is one of the key sources of increasing firm's performance arguing that such a positive relationship is because outsourcing makes a firm nimbler and allows it to increasingly focus on its core activities. It also increases the firm's strategic flexibility to deal with technological or volume fluctuations (Kotabe, 2018).

Various benefits accrue to a firm as a result of outsourcing all or part of its logistics services to a third-party company through reduced operation costs which results in operational and organizational efficiency Mulama, (2017). Contracting out logistics services to a firm with competitive advantages in terms of reliability, quality and cost was found is the main driver of outsourcing. Logistic outsourcing by manufacturing firms with respect to their performance is an imminent exercise, which is highly practices and endowed to these institutions (Mulinge, 2019). In lieu of the challenges which the manufacturing firms face in their process of outsourcing logistic services, these are practices that add value to the manufacturing firm's overall performance and competitive margins in the industry they operate in. According to (Muriithi, 2019), On the relationship between outsourcing and operational performance, outsourcing does not significantly affect operational performance.

Logistics outsourcing can contribute to organizations profitability by ensuring that a firm is able to achieve the five rights (5R) of purchasing, i.e. right time, right place, right quality, right price and right quantity this in turn results to a strong and more efficient supply chain which enables users to gain competitive advantage, adding measurable value to products, enhancing customer service, assisting in opening new markets, and providing dedicated resources (Agure, 2018). Therefore, the outsourcing of logistics can improve organizations' operations through reduced lead times and enhanced value creation for organizations leading them to become more competitive and profitable through speedy and superior customer service and thus improving the supply chain performance. Value creation involves the understanding of the dynamic interaction within the customer's supply chain.

One of the most important reasons for employing third-party logistics providers is their ability to provide their clients with expertise and experience that otherwise would be difficult to acquire, or costly to have in-house (Byrne, 2018). Their expertise gained from working with other clients allows users to benchmark against other companies and may lead to opportunities to lower costs and improve customer service hence an opportunity for innovations. It is believed that a contract logistics company with national and regional expertise can even provide a customer a local image even though that company may have no local presence in assets and employees (Bradley, 2018). As such the impact of logistics outsourcing on a supply chain cannot be gainsaid since it has a direct bearing on its performance. According to Luck (2019), the use of contract logistics frees management time hence firms spend more time pursuing strategic issues, and focus on their core business, rather than on logistics which is a non-core activity. Luck further asserts that logistics reduces overhead costs associated with maintaining in-house inventories and warehousing. Other impacts logistics outsourcing and organizational performance include, increased supply chain visibility and risk reduction.

#### **RESEARCH METHODOLOGY**

This study adopted a descriptive research design. The population for this study was Spirits Manufacturers operating in the alcoholic beverages manufacturing sector in Kenya. According to KAM (2019), there are 28 spirits manufacturers. The unit of analysis was therefore the spirits manufacturers while the unit of observation was management employees.

Management Position	Population	Percent	
Transport and logistics managers	28	14.3	
Procurement managers	28	14.3	
Finance managers	28	14.3	
Operations managers	28	14.3	
Warehouse/storage managers	28	14.3	
Sales and marketing managers	28	14.3	
Internal auditors	28	14.3	
Total	196	100.0	

Table 1:	<b>Target Population</b>
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Therefore, the sampling frame was 196 management level employees. In order to determine a representative sample, Modified Fisher's Model for calculating sample size for study populations of less than 10,000 was used. Therefore, the sample size for the study was 130 respondents. This study employed a stratified random sampling. This research utilized a structured questionnaire to collect data. The study conducted the pilot test among 13 management level employees from Keroche Breweries Limited and Kenya Breweries Limited which are beer manufacturing company. The selected sample represented approximately 10% of the study sample size. A pre-test sample of 1-10% of the sample size as advocated by

Mugenda and Mugenda (2008) is adequate. The pilot test results were not included in the final study.

The open-ended questions (qualitative data) were analyzed using conceptual content analysis. The findings were presented through narration. The closed ended questions (quantitative data) were analyzed using both descriptive and inferential statistics. The descriptive statistics to be obtained included frequencies, percentages, mean score and standard deviation. Data from descriptive statistics analysis were presented in tables. Inferential data analysis was carried out by the use of correlation and multivariate regression model.

# **RESEARCH FINDINGS AND DISCUSSIONS**

The study selected a sample of 130 respondents, out of these, 105 questionnaires were returned, yielding a response rate of 89.74%. According to Mugenda and Mugenda (2023), a response rate of 50% and above is adequate for analysis and reporting, 60% is good, and 70% and above is excellent. Therefore, the response rate of 89.74% was considered excellent for further analysis and reporting.

# **Descriptive Statistics**

This section presents the findings from Likert scale questions where respondents were asked to indicate their level of agreement or disagreement with various statements regarding the influence of outsourced logistics services on organizational performance. A 5-point Likert scale was used where 1-strongly disagree, 2-disagree, 3-moderate, 4-agree, 5-strongly agree, with mean values and standard deviations calculated to interpret the findings. A mean value of 1-1.4 was strongly disagree, 1.5-2.4 disagree, 2.5-3.4 neutral, 3.5-4.4 agree and 4.5-5 strongly agree. On the other hand, a standard deviation greater than 1.5, suggests that the responses were more diverse, with a wider range of scores across the participants.

# **Outsourced Transport Services**

The first objective was to determine the influence of outsourced transport services on the performance of alcoholic beverages manufacturing firms in Kenya. Respondents indicated their agreement with statements about the effect of outsourced transport services on organizational performance. The findings are summarized in Table 2,

Statements	Mean	Std.
		Dev.
Our 3PL service provider provides us with load consolidation	3.810	0.883
Vehicle scheduling in our organization is done by 3PL service provider	3.785	0.876
In our organization, we use 3PL service provider for route optimization	3.774	0.881
Our organization uses 3PL service provider for cross docking	3.755	0.889
We use 3PL service provider in our organization for load consolidation	3.792	0.873
The faster the transportation service, the shorter the time interval during	3.743	0.886
which inventory are on transit and the higher the charges		
3PL service provider has helped our organization with route optimization	3.738	0.884
Our organization balances between speed and cost of service to select the	3.723	0.881
most desirable method of transportation		
Logistics managers in our organization have identified consistency as the	3.747	0.882
most important attribute of quality transportation		
Aggregate Score	3.763	0.882

The findings showed that on average, the respondents agreed that their 3PL service provider provides them with load consolidation (M= 3.810, SD= 0.883); that vehicle scheduling in their organization is done by 3PL service provider (M= 3.785, SD= 0.876); that in their organization, they use 3PL service provider for route optimization (M= 3.774, SD= 0.881); and that their

organization uses 3PL service provider for cross docking (M= 3.755, SD= 0.889). They were also in agreement that they use 3PL service provider in their organization for load consolidation (M= 3.792, SD= 0.873); that the faster the transportation service, the shorter the time interval during which inventory are on transit and the higher the charges (M= 3.743, SD= 0.886); and that 3PL service provider has helped their organization with route optimization (M= 3.738, SD= 0.884). They were further in agreement that their organization balances between speed and cost of service to select the most desirable method of transportation (M= 3.723, SD= 0.881); and that logistics managers in their organization have identified consistency as the most important attribute of quality transportation (M= 3.747, SD= 0.882).

The findings indicate that respondents agreed that outsourced transport services positively influence organizational performance, with an aggregate mean score of 3.763 (SD=0.882). This result is supported by the literature, such as Kenyon and Meixell (2018), who assert that transportation is a critical component of the supply chain due to its ability to add value by moving goods to more advantageous locations. Effective transport management can significantly enhance logistics efficiency, reduce operational costs, and improve service quality, thereby positively impacting organizational performance. Additionally, Bowersox et al. (2019) highlight that transport management involves balancing cost, speed, and consistency to achieve the desired service quality. Their research emphasizes that well-managed transportation services can reduce inventory safety stocks and ensure timely delivery, which aligns with the study's findings on the positive impact of outsourced transport services on organizational performance.

# **Outsourced Clearing and Forwarding Services**

The second objective of the study was to examine the influence of outsourced clearing and forwarding on performance of alcoholic beverages manufacturing firms in Kenya. Respondents indicated their agreement with statements about the effect of outsourced clearing and forwarding services on organizational performance. The findings are summarized in Table 3.

Statements	Mean	Std.
		Dev.
Our 3PL service providers make full load deliveries	3.780	0.873
Due to 3PL service provider our organization delivers products on time	3.794	0.870
3PL service provider delivers undamaged products	3.773	0.869
Order processing and consolidation in our organization is done by 3PL	3.765	0.872
service provider 3PL service provider for our organization delivers products in full	3.787	0.871
3PL service provider for our organization delivers products on time	3.793	0.873
3PL service provider for our organization delivers undamaged products reducing cycle time	3.782	0.875
3PL provider is used in our organization for order processing and consolidation	3.776	0.874
The choice of route and carrier in our organization confirms to the freight forwarders four basic criteria of efficiency	3.769	0.872
Aggregate Score	3.780	0.872

Table 3: Descriptive Statistics for Outsourced Clearing and Forwarding Services

The findings show that the respondents agreed on average that their 3PL service providers make full load deliveries (M= 3.780, SD= 0.873); that due to 3PL service provider their organization delivers products on time (M= 3.794, SD= 0.870); that 3PL service provider delivers undamaged products (M= 3.773, SD= 0.869); and that order processing and consolidation in their organization is done by 3PL service provider (M= 3.765, SD= 0.872). They further agreed that 3PL service provider for their organization delivers products in full

(M= 3.787, SD= 0.871); that 3PL service provider for their organization delivers products on time (M= 3.793, SD= 0.873); that 3PL service provider for their organization delivers undamaged products reducing cycle time (M= 3.782, SD= 0.875). Also, they agreed that 3PL provider is used in their organization for order processing and consolidation (M= 3.776, SD= 0.874); and that the choice of route and carrier in their organization confirms to the freight forwarders four basic criteria of efficiency (M= 3.769, SD= 0.872).

The findings indicate that respondents agreed that the choice of route and carrier in their organization conforms to the freight forwarders' four basic criteria of efficiency, with a mean score of 3.769 (SD=0.872). This aligns with Kenyon and Meixell (2018), who highlight that transportation performance hinges on cost, speed, and consistency. They assert that careful selection of routes and carriers can optimize these factors, leading to more efficient logistics operations. Similarly, Bittel (2017) underscores the importance of proper documentation and adherence to procedures in ensuring efficient customs clearance and forwarding. By meticulously selecting routes and carriers that meet these criteria, organizations can enhance their logistics efficiency, reduce delays, and maintain consistent service quality, thereby confirming the positive impact of strategic route and carrier choices on overall operational performance.

# Performance of Alcoholic Beverages Manufacturing Firms

The general objective was to establish the influence of outsourced logistics services on the performance of alcoholic beverages manufacturing firms in Kenya. Respondents rated their agreement with statements regarding the performance of alcoholic beverages manufacturing firms. The findings are summarized in Table 4.

# Table 4: Descriptive Statistics for Performance of Alcoholic Beverages Manufacturing Firms

Statements	Mean	Std.
		Dev.
Outsourced order processing services in our organization has helped reduce the overall lead time	3.769	0.871
Outsourcing logistics has resulted to increase in market share	3.783	0.874
Customer complaints/returns have reduced over the last three years	3.754	0.876
Outsourcing logistics has led to minimum disruption in provision of products and services to customers	3.792	0.873
Through outsourcing the profitability of the company has increased	3.780	0.872
Through outsourcing, our organization has recorded an increase in its return on Investment	3.768	0.871
The delivery lead-time has reduced over the last three years	3.776	0.874
Aggregate Score	3.775	0.873

Based on the findings, it is evident that the respondents generally agreed that outsourced order processing services in their organization has helped reduce the overall lead time (M= 3.769, SD= 0.871); that outsourcing logistics has resulted to increase in market share (M= 3.783, SD= 0.874); and that customer complaints/returns have reduced over the last three years (M= 3.754, SD= 0.876). They further agreed that outsourcing logistics has led to minimum disruption in provision of products and services to customers (M= 3.792, SD= 0.873); that through outsourcing the profitability of the company has increased (M= 3.780, SD= 0.872); that through outsourcing, their organization has recorded an increase in its return on Investment (M= 3.768, SD= 0.871); and that the delivery lead-time have reduced over the last three years (M= 3.776, SD= 0.874).

The findings indicate that respondents agreed that outsourcing logistics services positively impacts the performance of alcoholic beverages manufacturing firms (M=3.775, SD=0.873). This result aligns with the research by Gunasekaran et al. (2018), who argue that logistics outsourcing is a key strategy for enhancing organizational performance by improving

efficiency, reducing costs, and enabling firms to focus on their core competencies. Additionally, Solakivi et al. (2017) found that logistics outsourcing contributes to organizational performance by providing flexibility and leveraging specialized expertise, which leads to better service quality and operational efficiency. These studies support the finding that outsourcing logistics services allows alcoholic beverages manufacturing firms to achieve significant performance improvements, including increased profitability, faster delivery times, and enhanced customer satisfaction.

#### **Correlation Analysis**

Pearson correlation was used to measure the strength and direction of the linear relationship between the variables. The correlation coefficients between the dependent variable (performance of alcoholic beverages manufacturing firms) and the independent variables outsourced transport services and outsourced clearing and forwarding services) are presented in Table 4.9. The relationship was considered to be small if  $\pm 0.1 < r < \pm 0.29$ ; medium if  $\pm 0.3 < r < \pm 0.49$ ; and strong if  $r > \pm 0.5$ .

		Performance	Transport	Clearing Forwarding	&
	Pearson Correlation	1			
Performance	Sig. (2-tailed)				
	Ν	105			
	Pearson Correlation	.781**	1		
Transport	Sig. (2-tailed)	.000			
	Ν	105	105		
Clearing & Forwarding	Pearson Correlation	.795**	.487	1	
	Sig. (2-tailed)	.000	.098		
	Ν	105	105	105	

#### Table 4: Correlation Analysis

Correlation is significant at the 0.05 level (2-tailed).

The Pearson correlation coefficient between performance and outsourced transport services is 0.781, with a p-value of 0.000, indicating a strong and statistically significant positive relationship. This suggests that improvements in outsourced transport services, such as faster and more reliable deliveries, are closely associated with better organizational performance. The literature by Laird (2017) supports this finding by highlighting that effective transportation adds value to goods by moving them closer to the end user, thereby enhancing their availability and generating revenue for the company. Efficient transport services reduce operational bottlenecks, thus directly improving overall firm performance.

The Pearson correlation coefficient between performance and outsourced clearing and forwarding services is the highest among the variables, at 0.795, with a p-value of 0.000, indicating a very strong and statistically significant positive relationship. This finding implies that efficient clearing and forwarding services, which ensure timely and accurate customs processing and delivery of goods, are crucial for enhancing the performance of alcoholic beverages manufacturing firms. Allan (2019) highlights the importance of clearing and forwarding in ensuring that goods are processed and delivered without delays, which is vital for maintaining a smooth supply chain and optimizing overall business performance.

# Multiple Regression Analysis

Multiple regression models were fitted to determine how the predictor variables affect the response variable. This study used a multiple regression model to examine the impact of outsourced logistics services on the performance of alcoholic beverages manufacturing firms.

#### **Model Summary**

The model summary shows the amount of variation in the dependent variable explained by changes in the independent variables.

Table 5: Model Summary	
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Model	R	R Square	Square Adjusted R Square Std. Error of the Estimate	
1	0.868	0.754	0.748	0.1376

The findings indicate that the R square value is 0.754, meaning that 75.4% of the variation in the performance of alcoholic beverages manufacturing firms can be attributed to changes in transport services, and clearing and forwarding services. This high R square value (0.868) underscores the significant influence of these logistics services on firm performance. However, the remaining 24.6% of the variation suggests that there are other factors influencing performance that were not covered in this study. These additional factors may include internal operational efficiencies, market conditions, competitive strategies, or other external variables that warrant further investigation.

#### Analysis of Variance (ANOVA)

ANOVA was used to test the significance of the model. The significance of the model was tested at 5% confidence interval. The results are presented in Table 6.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	108.567	4	27.142	24.932	0.000
Residual	262.103	100	2.621		
Total	370.670	104			

#### Table 6: Analysis of Variance

The significance of the model was 0.000, which is less than the selected level of significance (0.05). This indicates that the model is significant and that the independent variables reliably predict the dependent variable. The F-calculated value (24.932) being greater than the F-critical value (F 4,100 = 2.457) suggests that the overall regression model is statistically significant. his significance level suggests that the model reliably predicts the performance of the firms based on the independent variables included in the study.

#### **Beta Coefficients of the Study Variables**

The beta values were used to fit the regression equation and answer the research questions. The results are presented in Table 7.

Variables	Unstandardized Coefficients (B)	Standard Error	Standardized Coefficients (Beta)	t	Sig.
(Constant)	1.195	0.120		9.958	0.000
Outsourced Transport Services	0.308	0.048	0.323	6.417	0.000
Outsourced Clearing and Forwarding Services	0.331	0.047	0.346	7.043	0.000

#### Table 7: Beta Coefficients of the Study Variables

From the findings, the following regression equation was fitted:

$$Y{=}\;1.195+0.308\;X_1+0.331\;X_2$$

The beta coefficient for outsourced transport services is 0.308, with a p-value less than 0.001, suggesting a statistically significant positive impact on firm performance. This coefficient indicates that for every unit improvement in transport services, firm performance increases by 0.308 units, all else being equal. This result is supported by Kenyon and Meixell (2018), who highlight that well-managed transportation adds significant value by ensuring timely delivery,

reducing costs, and improving service quality, all of which contribute positively to the overall performance of the firm.

The beta coefficient for outsourced clearing and forwarding services is 0.331, with a p-value less than 0.001, making it the highest among the independent variables. This indicates that clearing and forwarding services have the most substantial positive impact on firm performance, with a 0.331 unit increase in performance for every one-unit improvement in these services. Allan (2019) emphasizes that efficient clearing and forwarding are critical for ensuring that goods are processed through customs smoothly and delivered on time, which is essential for maintaining a reliable supply chain and enhancing overall firm performance.

#### Conclusions

Outsourced transport services are crucial for the performance of alcoholic beverages manufacturing firms. The study shows that timely, reliable, and cost-effective transportation solutions, provided by third-party logistics providers, significantly enhance operational efficiency and customer satisfaction. Strategic management of transport services is essential for minimizing transit times and reducing costs, thereby boosting overall firm performance.

Outsourced clearing and forwarding services have the most significant impact on the performance of alcoholic beverages manufacturing firms. Efficient handling of customs procedures and timely delivery of goods are crucial for reducing delays and maintaining a reliable supply chain. Engaging proficient service providers in this area is key to enhancing operational efficiency and achieving competitive advantage.

#### Recommendations

For alcoholic beverages manufacturing firms, it is essential to prioritize the selection of transport service providers who demonstrate a strong ability to optimize routes, consolidate loads, and balance speed with cost-effectiveness. Given the importance of timely and reliable delivery in maintaining customer satisfaction and market competitiveness, firms should establish robust criteria for evaluating potential transport partners. This includes assessing their track record in meeting delivery deadlines, their capability to handle various transportation challenges, and their use of technology for route planning and real-time tracking. Regular performance reviews and feedback mechanisms should be in place to ensure that transport service providers continuously align with the firm's logistical needs. Additionally, firms should consider establishing long-term partnerships with their most effective providers to ensure consistency in service quality and to benefit from volume-based cost efficiencies.

# **Outsourced Clearing and Forwarding Services**

Given the critical role of clearing and forwarding services in ensuring the smooth movement of goods across borders, alcoholic beverages manufacturing firms should collaborate with service providers who have a deep understanding of customs regulations and a proven ability to expedite the clearance process. Firms should prioritize partners who demonstrate efficiency in documentation, compliance with international trade regulations, and the ability to navigate complex customs procedures with minimal delays. It is also recommended that firms establish direct communication channels with their clearing and forwarding agents to ensure transparency and timely updates on the status of shipments. Regular reviews of the clearing and forwarding processes should be conducted to identify any bottlenecks and implement improvements. Additionally, firms should explore opportunities for strategic partnerships or preferred provider agreements with top-performing clearing and forwarding agents to ensure consistency and reliability in these critical services.

# **Suggestions for Further Studies**

While this study has provided valuable insights into the impact of outsourced logistics services on the performance of alcoholic beverages manufacturing firms, further research could explore the impact of these services in other sectors or regions. Additionally, future studies could investigate the role of technology and innovation in enhancing the efficiency of outsourced logistics services. Qualitative research could also be conducted to gain a deeper understanding of the experiences and challenges faced by firms in managing outsourced logistics operations. Such studies would contribute to a more understanding of the factors that influence the success of outsourcing strategies in different contexts.

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