

**EFFECT OF SUPPLIER RELATIONSHIP MANAGEMENT ON SUPPLY
CHAIN PERFORMANCE OF THE ALCOHOLIC BEVERAGE COMPANIES
IN KENYA**

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DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

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DEDICATION

I dedicate the research project to my mum, Jenipher Onyango because she supported me when developing it both financially and morally.

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DEFINITION OF TERMS

Relationship Management: the interlink in the entity where there is flow of services, products, information and finances either upstream or downstream (Sigala, 2018).

Supplier Development: the process of working one - to-one with other suppliers to improve their efficiency to the advantage of the purchasing organization (Rezaei, Wang & Tavasszy, 2015).

Supply Chain Collaboration: Supply chain collaboration is where two or more independent companies work together to plan and conduct supply chain operations (Chen, Zhao, Tang, Price, Zhang, & Zhu, 2017).

Supply Chain Performance: Supply Chain Performance refers to the operations of the extended supply chain to fulfill end-customer requirements including product quality, on-time delivery, and all the inventory and resources needed in the supply chain to deliver the value responsively (Maestrini, Luzzini, Maccarrone & Caniato, 2017).

Supply Selection and Evaluation: Supply selection and evaluation process entails the process of evaluating and approving potential suppliers by quantitative assessment (Luthra, Govindan, Kannan, Mangla & Garg, 2017).

LIST OF ABBREVIATIONS AND ACRONYMS

AGOA:	African Growth Opportunity Act
COMESA:	Common Market for Eastern and Southern Africa
EAC:	East African Community
EDI:	Electronic Data Interchange
GDP:	Gross Domestic Product
GSCM:	Green Supply Chain Management
IS:	Information Sharing
IT:	Information Technology
JDM:	Joint Decision Making
POS:	Point of Sale
SCC:	Supply Chain Collaboration
SCP:	Supply Chain Performance
SMEs:	Small and Medium Sized Enterprises
SPSS:	Statistical Package for Social Sciences
SRM:	Supplier Relationship Management

ABSTRACT

Supplier Relationship Management (SRM) aims to ensure that there is collaborative interaction between the entity and its suppliers for the success of the enterprise. When evaluating performance of the supply chain, emphasis is placed on activities like delivery and product availability and the capacity of the inventory to yield greater performance. Manufacturing firms deal in products that are of similar attributes with a high degree of competition. Thus, to survive, entities in the manufacturing sector are forced to undertake strategic options so as to remain competitive. The essence of the inquiry was to bring out the link between SRM and the ability of supply chains to perform with focus on Kenyan alcoholic beverage entities. Specifically, the study sought to establish the effect of supply chain collaboration, supplier development and supply selection and evaluation on supply chain performance of the alcoholic beverage companies in Kenya. The relationship marketing theory and the agency theory were used to support the inquiry. With adoption of descriptive design, 48 alcoholic beverage manufacturing entities in Kenya were targeted and the respondents were the supply chain managers. Census was used and thus 48 respondents were included in the study. The views of the respondents were gathered with aid of the questionnaire that were closed ended. There was piloting of the questionnaire prior to actual data to ensure that it is valid and reliable. It was SPSS tool that helped in processing the gathered views from the respondents with aid of means, standard deviation, and correlation and regression analysis. Both figures and tables helped in presentation of the findings. The study noted that while supply chain collaboration and supply selection and evaluation had significant effect on supply chain performance of the alcoholic beverage companies in Kenya, supplier development was not significant. The study concluded that supply chain collaboration and supply selection and evaluation had significant effect on supply chain performance of the alcoholic beverage companies in Kenya. The study recommended that supply chain managers of the alcoholic beverage companies in Kenya should improve on their supply selection and evaluation criteria and the supply chain collaboration practices so as to enhance supply chain performance of their firms. The study was limited with a relatively small sample size of 48 supply chain managers. The study recommended further research to be conducted in other nonalcoholic beverage companies in Kenya.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

The origin of the concept of cultivation of relationship with suppliers extends for several decades down the line. There has been evolution in this concept with emergence of such terms as supplier alliances and reverse marketing (Govindan, Azevedo, Carvalho & Cruz-Machado, 2014) as well as strategic partnership in sourcing aspects (DTI/CBI/PS, 1998). A paradigm shift had been witnessed where focus of such relationship has extended to supply chains away from individual suppliers (Hohenstein, Feisel & Hartmann, 2014).

Before 1980s, it was the purchasing department that handled all activities relating with suppliers. By this time, even the purchasing department did not have a clearly established role. Initially, purchasing was a tactical function in the entity with a focus on low prices and transactional interactions. However, as time went by, there has been significant variations in the role that the purchasing department and purchasers play with the present views regarding it as a strategic function that an entity can leverage on to remain competitive (Chin, Tat & Sulaiman, 2015). At the end of 1890s, purchasing was hardly used as a varied function in the entity with the only exception being the railway networks. The start of 1900s saw purchasing being viewed as clerical work.

The first and second World wars heightened the essence of purchasing function especially with the need to have access to the raw materials and other suppliers to sustain the mining fields. The period between 1950s all through to 1960s refined purchasing as a function although it was still considered from a clerical point of view (Mitra & Datta, 2014). By the end of 1960s and start of 1970s, there was the introduction of the integrated systems for materials. It was during this period that materials were regarded as part of strategic planning in the entity with the heightened importance of this department. For the period 1970s, there was an oil embargo with a general scarcity of some materials and this increased the attention on purchasing. The

period of 1980s saw the evolution of such systems like just-in-time for managing of inventories in the firm (Govindan, Azevedo, Carvalho & Cruz-Machado, 2014). The emphasis placed on purchasing during 1990s was on saving of costs and this went on till late 1990s where there was evolution of purchasing to strategic aspects like sourcing and contracts covering longer periods. It was during this point that there also emerged supplier relationship management (Chin, Tat & Sulaiman, 2015).

Starting from 2000, there was a general shift of purchasing from costs into multidimensional terms. This period saw various developments in the purchasing function covering the technologies for carrying procurement activities like e-sourcing and enterprise resource planning (ERP), lean purchasing and data mining. The forces of globalization gave pressure for firms to ensure that their internal processes have been improved to be successful (Chardine-Baumann & Botta-Genoulaz, 2014). There was also expansion in the degree of competition within the market place both domestically and internationally established markets (Ngetich, 2014). During this time, the purchasers moved away from discussion on prices towards sharing of information, collaboration and interacting with their suppliers with regard to the total costs as well as how to lower down the costs. This requires an emphasis on how to improve on the processes as opposed to short term established relationships and reduction in prices. However, scholars have paid little attention on the contribution that SRM play in the firm as far as supply chains are concerned and thus the motivation of the present study.

1.1.1 Supplier Relationship Management

SRM entails collaborative interaction between the firm and its suppliers and this is critical for the success of the entity that wishes to remain competitive. SRM helps the entity to engage with its suppliers on the extent that covers that priorities that the end users have in mind and in the best manner which such priorities can be attained (Forkmann, Henneberg, Naude & Mitrega, 2016). Although much attention is registered on suppliers and customers, the products (goods and services) that the firm is procuring are of greater importance that determine how the firm relates with the its suppliers and customers. Therefore, a clear understanding and appreciation of this

triangulation would create more value to the firm. As seen through the products in place (Teller, Kotzab, Grant & Holweg, 2016).

Because of its holistic approach, the concept of SRM requires engagement and consent of the entire enterprise. Realization of SRM requires the procurement function in the firm to work in close collaboration with other functions in the entity with a high level of team work. It also requires coordinated functioning of the various departments in the entity to ensure that the firm is not disorganized (Teller, Kotzab, Grant & Holweg, 2016). Because of these complexities, it is important that SRM is viewed as part of the procurement resources in the entity to help the entity yo be competitive and thus perform (Forslund, 2015).

There are various components and users of the SRM with different tools that firms can leverage on to ensure that the relationships in place have been managed well across the entire life cycle Forslund (2015) shared that SRM is an approach that is highly integrated that seeks to address the side of the buyers and the suppliers in the firm. All these are aimed at ensuring that there are mutual benefits to the organization as the firm seeks to invest in resources including time. One of the critical dimension of SRM is identification and contracting of the suppliers which is largely realized through the process of sourcing. Involving the suppliers when the entity is developing products helps the entity to optimally utilize the capabilities of its suppliers including technologies such the final products developed are competitive. Mitra and Datta (2014) argued that the components of SRM include coordination of the activities at an operational level as seen through formulation of joint plans. These activitie4s result into significant benefits to the entity including the need to improve the quality of the products and lowering of lead times contributing to lowering of uncertainties.

SRM aims to create value to the entity, establish communication platforms that are open and form collaborations with suppliers of the entity. SRM seeks to help the buying entity to leverage on the capabilities that suppliers have in place for better performance. This is because firms do not have adequate resources in place for financing all the activities and thus the need to depend on suppliers (Oghazi, Rad, Zaefarian, Beheshti & Mortazavi, 2016). The growing forces of globalization in the

market have created challenges to firms that strive to fit well in the environment. These issues are in addition to the increasing changing perceptions of the end users, reduction in the lifecycle of the products and pressure for costs reduction and for the firm to perform responsibly. Because of outsourcing, supplier management and procurement have emerged as strategic and important activities in the firm that strive to remain competitive (Satyendra & Bhat, 2014).

1.1.2 Supply Chain Performance

Performance is a multidimensional term that covers the outputs and the inputs of the processes in the entity. Although the share of the market is a key term that describes performance of the entity, supplementing this with variation in the revenues from sale helps the management to evaluate demand within the market place (Balfaqih, Nopiah, Saibani & Al-Nory, 2016). At the same time, customers are able to provide judgment not only for the market but also on the market trends. In essence, the growth in the revenues of the firm from sales through primary demand has least expenses to the firm as compared to the need to increase the share in the market by outdoing the rivals.

Supply chain performance is the extended activities within the supply chain aimed at enabling the firm to meet the requirements of the end users covering availability of the products and delivery of products on time (Hohenstein, Feisel & Hartmann, 2014). It extends the boundary of the enterprise to include materials and finished products and the means of their distribution top reach the end users. Furthermore, it extends within the traditional functions of the enterprise like marketing and procurement. For better performance, the entity should continuously improve on its supply chain practices.

Measuring of supply chain performance requires some indicators and proxies like productivity, financial, time and quality issues. Of all the measures, quality dimension is easy to measure and implement in the entity. These proxies of supply chain performance provide information that show how the firm is carrying out some specific activities. Supply chain performance can be reflected in the level of accuracy in

processing of orders including packaging. The indicators of time place more emphasis on the required time to carry out some specified activities (Qrunfleh & Tarafdar, 2014). Such proxies covering time indicate the activities that can result into time saving for improvement in the overall supply chain. The financial indicators help the management to come up with the drivers of supply chain costs while enhancing the level of efficiency within the supply chain. The indicators of productivity cover the resources and how well they are utilized in the entity.

1.1.3 Manufacturing Sector in Kenya

There are many manufacturing entities operating in Kenya to produce products that meet both local as well as external demands. Most of the players in the manufacturing sectors are subsidiaries that operate under multinational firms and it contributes to about 13% to the gross domestic product (GDP) for the year 2004. Several factors like an increase in the supply power and liberalization have expanded the manufacturing sector on average (Private Sector Alliance, 2005). About 95% of the manufactured products in Kenya do comprise of food including the beverages as well as the chemicals and the materials for construction.

The share of manufacturing to the overall economic output in Kenya has been fluctuating at 10 (Kenya Economic Report, 2013) with a reducing contribution to the overall wages. Kenyan manufacturing sector is pursued with a broad range of main objectives: rapid industrial growth to meet domestic demand, improving the economy's export output, creating employment and economic diversification, and developing a diversified technological base. With such goals to be accomplished, the government's active involvement was very significant, especially in establishing a policy framework through which the sector operates. There were also several direct and indirect interests in industry by the Government.

1.1.4 Beverage Industry in Kenya

The Kenyan beverage industry is classified into alcoholic and soft drinks beverages. The key industry players include the East African Breweries Limited and Keroche Breweries. On the other hand, Coca Cola is one of the key players in soft drink (non-

alcoholic beverages) in Kenya besides Delmonte and Keringet (Gichuru, Iravo & Arani, 2015). There are about 1200 businesses within the food and beverage industry in Kenya covering the small to large firms with some of them operating as MNCs (Coca Cola, Nestle and Cadbury). The beverage industry in Kenya is expected to grow over the coming period due to the increasing population and the levels of income. However, variation in innovation of products may have a favorable effect on the overall beverage sector in Kenya. On the contrary, increasing regulatory pressure from the government and variability in the prices of the raw materials may have an adverse effect on the growth of the market share of this sector.

The increasing number of restaurants and growing forces of technology have resulted into the rise in different applications for food including caviar and grub hub. The resultant effect of this has been on the growth of the beverage industry in Kenya. This is coupled with a rise in the demand of the end users of the products. The increase in health awareness with the need to have fresh food deliveries is also expected to see rapid growth in the beverage market. The beverage and food sector is among the major industries in the economy around the globe. It is estimated that by 2020, the demand for beverage and food would be at \$7 trillion. The changes in the preferences of the customers, a rise in demand of organically established foods and changes in the pattern of demand are the key trend around the globe that have continued to shape entire beverage sector.

1.2 Problem Statement

Most of the well-established enterprises place key emphasis on development of close relationship with other entities in order to remain competitive while improving on their positions in the market. This has ignited the debate and need for establishment of excellent relationship with the suppliers so as to improve on performance of their supply chains. This has brought a lot of competition in the market and most of the firma must now look for better strategies that will help them establish positive relationships which will help them grow and achieve their set goals. Over 70 % of public sector organizations in Kenya are facing supply chain management problems and this has a negative impact on successful service delivery. This means that an

entity that does not the strategy to manage its suppliers cannot be able to realize efficiency in operations.

Several studies have been done on the effect of supplier relationship management on supply chain performance for instance; Prabusankar (2017) researched on how the practices of supply chain management interact with the ability of the entity to remain competitive. It was shared that partnership with suppliers, the quality of information and lean practices in the firm all have a direct link with competitive positioning of the entity. Kosgei and Gitau (2016) looked at supplier relationship management and its link with the ability of the entity to perform. The specific reference of the inquiry was on Kenya Airways and it was shared that cultivation of the relationship with suppliers has a direct link with performance of the firm. Nyamasege and Biraori (2015) studied supplier relationship management and its link with effectiveness within the supply chains. The specific focus of the study was on the Kenyan public entities where lack of relationship with suppliers is seen to enhance the effectiveness of the supply chain. Tangus, Oyugi, Rambo and Rono (2015) did a study on supplier relationship management and its link with the ability of Kenyan manufacturing entities to perform where a direct link was noted between SRM and the ability of the entity to perform.

All the above studies were based on different conceptual, contextual and demographic backgrounds with different study variables and findings. None of them specifically looked at the effect of supplier relationship management on supply chain performance of the alcoholic beverage companies in Kenya hence creating the need of carrying out the current study.

1.3 Objectives of the Study

1.3.1 General Objective of the Study

To investigate the effect of supplier relationship management on supply chain performance of the alcoholic beverage companies in Kenya

1.3.2 Specific Objectives of the Study

- i. To assess the effect of supply chain collaboration on supply chain performance of the alcoholic beverage companies in Kenya
- ii. To determine the effect of supplier development on supply chain performance of the alcoholic beverage companies in Kenya
- iii. To establish the effect of supply selection and evaluation on supply chain performance of the alcoholic beverage companies in Kenya

1.4 Research Questions

- i. What are the effects of supply chain collaboration on supply chain performance of the alcoholic beverage companies in Kenya?
- ii. What is the influence of supplier development on supply chain performance of the alcoholic beverage companies in Kenya?
- iii. How does supply selection and evaluation affect supply chain performance of the alcoholic beverage companies in Kenya?

1.5 Justification of the Study

This study may contribute to the knowledge of supply chain performance of the alcoholic beverage companies in Kenya which can be considered representative of different contributors to economic growth. The would enhance the theories available on supplier relationship management and its link with the ability of the supply chains to perform.

This research study may be of great importance to Government of Kenya as it would provide information on the role of supply chain performance of alcoholic beverage companies in Kenya. Therefore, policymakers in both the national and county government may benefit a great deal, as the study may provide information that can be used to formulate sound economic policies.

The study may provide information that can be used as empirical evidence by researchers covering relationship with suppliers and how it links with the ability of

the supply chains to perform. It may also extend existing knowledge on supplier relationship management practices and supply chain performance among alcoholic beverage companies in the Country. This may also help in extending the application of various schools of thought to help grow their application.

1.6 Scope of the Study

The focus of the inquiry was SCR and the extent which supply chains systems perform. The specific point of the reference of the inquiry was supply chain collaboration, supplier development and supply selection and evaluation in relation to the ability of the supply chains to perform. The inquiry was conducted among alcoholic beverage companies. The adopted approach was quantitative with the collection of primary data supported by questionnaire. The study was conducted in the 2020 in the month of August.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The theories that will be used to anchor the study are discussed in this study. The past empirical studies are also reviewed with the conceptual framework. There is a section of how the variables of the inquiry are operationalized as well as the hypothesis.

2.2 Theoretical Review

This section is a discussion of the theories that will be used to support the inquiry

2.2.1 Agency Theory

It was Jensen and Meckling (1976) who developed this agency theory. The theory is used to present the interaction between the principal and the agent and how they relate with each other. In a typical organization, the organization is owned by the shareholders while the management is responsible for the activities on a daily basis. There is a board of directors that has the responsibility of checking the actions of the managers. The theory places emphasis on the need to engage other professionals on behalf of other individuals.

The essence of this agency theory is to bring a description of the interaction between the agent and the principal. In this relationship, the agent acts on behalf of the principal. However, not all times will the agent act in the interest of the principal, as some may be motivated to undertake other activities that are not in line with the principal's interests. This brings in the conflict of interest which is the hurt of this agency theory (Arora & Sharma, 2016).

Thus, the management as agent are required to undertake all activities that are in line with the aim of maximizing the wealth of shareholders and thus organizational performance of an organization. However, conflict of interest usually arises when the management undertakes activities and decisions that are for their personal gain (Hussain, Rigoni & Orij, 2018). In order to check and control activities of the

management, shareholders usually appoint the directors in the annual general meeting who constitute the board. The role of the board is to provide a check and balance on activities of the management of the entity that carry out the day to day operations and decisions of the firm (Abdallah & Ismail, 2017). Apart from the board of directors, external auditors also come in to play the monitoring role on how the management operates.

The agency theory has been criticized on several grounds based on its inherent assumptions. Rowe (1982) argues that the agency presupposes incompatibilism this is the view that freedom and responsibility of individuals are not logically compatible. Eisenhardt (1989) argues that agency theory helps in explaining the information systems in an organization. The implication of this theory is that an entity is in position to subcontract some of the operations and activities that are not core. Such activities are outsourced to other third parties. It allows the firm to concentrate on those activities that are central for better performance. The theory argues that although there are some activities that can be conducted in-house in the entity, subcontracting some of the activities to other third parties would enhance performance of the firm. This theory is relevant to the study as it supports the objective of supply chain collaboration in that it shows how effective interaction and collaboration between the agents and the principal play a key role in coming up with planned decisions that are geared towards improving the supply chain performance.

2.2.2 Relationship Marketing Theory

It was Waters (1989) who developed this theory and it provides the rationale as to why the firm should establish relationship in the economy including the need to interact with customers, how well top attract and retain the end users. The theory concerns with how an entity can cultivate the link with its customers and such relationship should be over a long term horizon. The relationship should aim at ensuring that all parties mutually gain from it. The views are consistent with Westch (2005) who shared that management of relationship includes relationship marketing and a focus on customers. All these issued are aimed at enhancing the level of trust and loyalty of the en users by establishing a fit with the demands of the customers.

Additionally, Christopher, Payne and Ballantyne (1991) shared that the evolution of relationship marketing from 1950s where the focus was on consumer goods, in 1960s where the focus was on industrial marketing, for the period of 1970s, the focus was on societal and nonprofit marketing with relationship marketing emerging in 1990s. According to Gronroos (1994), there has been evolution in the marketing aspects from the initial 4Ps (promotion, place, price and product). Relationship marketing helps the entity to establish long term link with the clients that is profitable for each parties. The essence of relationship marketing is to enhance the level of satisfaction of the end users of the products while driving the revenues which the entity generates. Muchangi (2014) indicated that relationship marketing enables the entity to focus on how best to retain the end users with the need to establish contact with the customers and this generates profits to the entity. It also enables the entity to enjoy profits on a longer time horizon.

Ernst and Young (2005) indicated that functioning of such relationship is a key challenge for most entities. There has been evolution of the business environment into a complicated landscape that has heightened the need for relationship marketing presently. Presently, there has been evolution of technologies that have attracted the focus on relationship marketing. Such software enables the firm to track and analyze every customer on the basis of their preferences and tastes. For the entity to be successful there is need for relationship marketing to give support to the whole functions in the entity. Thus, it enable the entity to understand the end users, their needs and preferences and how best to attract and retain them for long term mutual gain. This enables the entity to remain competitive in the industry which it operates from. This can be actualized through value addition practices so that the repurchase behavior of the end users is supported. This theory is relevant to the study as it supports the objectives of supplier development and supply selection and evaluation in that it emphasizes on the need of creating strong relationship between the firms and the suppliers to help in improving the flow and performance of the supply chain.

2.2.3 Network Theory

This theory was developed by Leonhard (1736) and its essence to provide a description of the relationships the firm develops with its supply chain partners including the customers and suppliers. From its original focus of the relationship between two parties (strategic alliances) during inception in 1970s, the network had undergone development to cover multiple relationships among various parties in the supply chain. The term network as viewed by Harland (1996) is a given form of relation that links predetermined sets of individuals or events. On the other hand, Thorelli (1986) consider network as two or more firms that have entered into relationship to cover a long term horizon.

The theory is premised on a number of factors including the fact that the centrality of the firm in the network shapes its competitive positioning and that there is inter-firm sharing of knowledge and information (Håkansson & Ford, 2002). The limitations of this theory include the fact that collaborating with other firms may involve sharing of strategic information that may have an adverse effect on competitive advantage. Despite its limitation, this theory is relevant to the study since it focuses on the relationship that the firm develops with its partners in the supply chain which is the foundation of supplier relationship management in an entity.

2.3 Empirical Review

The review of literature on the variables of the inquiry is provided in this section. The review is done as informed by relevant literature.

2.3.1 Supply Chain Collaboration and Supply Chain Performance

An inquiry was conducted by Agyei-Owusu, Asamoah, Andoh-Baidoo and Akaribo (2016) to bring out the link between collaborations in the supply chains and the ebaillity of logistics in the entity to perform. The focus of the inquiry was on the downstream segment of the petroleum sector in sub-Saharan context. The results of the study revealed a relatively higher level of external collaboration compared to internal collaboration among the firms surveyed, while internal collaboration had a

greater effect on the logistics output of a company. The study also showed a positive effect on external collaboration. Supply chain collaboration is considered to be one of the most effective measures used by firms in improving their level of performance. Collaboration requires two or more companies to pool resources for a common, mutually beneficial project to be carried out. Throughout these cases, there is clear consensus between the parties to exploit joint resources so that each party benefits with emphasis on productivity of the supply chain systems and the areas of competitiveness.

Al-Doori (2019) researched on how supply chain collaboration affects performance in the automotive industry. The study findings revealed that information sharing (IS) and joint decision making (JDM) significantly affects the operational performance while Electronic Data Interchange (EDI) does not have a significant effect on operational performance. Each party is believed to preserve its autonomy in collaboration agreements, but succeeds in looking for avenues. For example, through a strategically established agreement, it is possible to have an organization with clearly established processes which are more efficient. This also helps the entity to enter and exploit newly established markets while remaining competitive as opposed to rivals. Success in most business organizations becomes impossible without a collaborative pull of resources and skills from partners in the supply chain. Supply chain collaboration has been promoted as offering mutual benefits to both retailers and suppliers.

Doganay and Ergun (2017) investigated on the effect of supply chain collaboration on supply chain performance. The findings of the study revealed that supply chain collaboration (SCC) significantly and positively affects supply chain performance (SCP). Supply chain collaboration has continued to play a major role in helping most of the business organizations increase the performance of their supply chains which are aimed at attaining the competitive advantage of their businesses. Companies collaborate with their suppliers, distribution partners, customers and even their rivals in partnerships. Supply chain collaboration requires effective team work. Team leaders are to trust each other and support each other. There needs to be transparent contact and ability to consider other people's feedback. Brand

development priorities frequently clash with one another. The process of making decisions must therefore be based on a collaborative approach.

Ali, Bentley and Cao (2016) conducted an inquiry into collaborations in the supply chains and the role it play as far as the ability of the entity to perform is concerned. The investigation covered the smaller entities operating in United Kingdom. Accordingly the major determinants of mutual collaboration are believed to be trust, dependence, knowledge and information sharing. Supply chain collaboration is very important as it helps most firms to successful practice supply chain performance which brings sustainability and improves the overall performance of the firm. Supply chain collaboration is two or more separate organizations that form long-term partnerships and work together towards mutual interests in planning and conducting supply chain operations, thereby gaining more benefits than operating independently.

Botes, Niemann and Kotzé (2017) did an inquiry into collaboration between the buyers and suppliers and the link with resilience within supply chains. The focus of the study was on petrochemical entities and it was shared that it was shown that such collaborations have no direct contributions towards resilience of the supply chains. Companies enter into collaborative inter-company agreements to share risks and rewards among partners. The collective goal is to achieve higher efficiency than would be achieved by working as an independent organization. Organizations are now looking for ways to work with supply chain partners to ensure supply chain quality and responsiveness, so as to utilize their suppliers and customers' expertise and knowledge. If independent companies cooperate and share expertise with others, they will reap the benefits beyond what might be accomplished through the sharing at arm's length.

Um and Kim (2019) researched on how supply chain collaboration affects performance and transaction cost advantage. The study was aimed at identifying the underlying factors that constitute collaboration and transaction cost advantage, how supply chain collaboration affects the performance of a firm and transaction cost advantage, and the moderating effect of governance mechanisms in the proposed relationships. Data collection was done through use of web survey of Korean

manufacturing firms across different industry sectors. The study findings revealed that supply chain collaboration improves the performance of a firm and transaction cost advantage. A further study of the moderating impact of governance structures suggested the performance of a firm with contractual governance yields better transaction cost advantage and that the collaboration of the supply chain with contractual governance improves transaction cost advantage than with relational governance. Clear concept of supply chain cooperation provides guidance in the design of suitable and efficient joint activities that can lead to improved results. Efficient and responsible managers should define situations where it is possible to use either contractual governance or relational governance.

Liu, Yan, Si, Xie and Wang (2020) conducted a study on how buyer-supplier supply chain strategic collaboration affect operating performance using a case study of Chinese companies. The study's purpose was to investigate how the implementation of supply chain strategic collaboration (SCSC) affects the operating performance of companies. The study analyzed the changes in the operational performance of the sample companies in the 20 quarters based on Based on 181 SCSC announcements of listed companies in China. Before the announcement the improvements in various operating performance metrics are measured for the sample firms against their metrics. A self-control model based on past experience and a mix of percentage adjustment changes and changes in adjustment percentage are used by the study to assess performance changes. The study findings reveal that supply chain strategic collaboration (SCSC) plays a major role in improving the operating performance of a firm; however this is affected only after two years. Companies collaborating on the development of a product positively and effectively improve the performance of a firm that is at the fore front of implementing market collaboration. Buyer companies' operating performance is better than supplier companies'. Strategic cooperation in the supply chain of services increases efficiency and performance of the supply chain in general.

Singhry and Abd Rahman (2019) investigated on supply chain performance enhancement through collaborative planning, forecasting, and replenishment. The study's aim was to investigate the antecedence of SCP through CPFR and SCIC. The

study was analyzed through use of a cluster and stratified random sampling where 286 responses from top managers of 1,574 Nigerian manufacturing companies were chosen. Data analysis was performed using structural equation modeling with AMOS graphics. The study findings revealed that SCIC has a full mediating effect on how CPFR and SCP relates to each other. Specifically, CPFR significantly relates with both SCP and SCIC, and SCIC also relates significantly to SCP. Supply chain collaboration (SCC) can be characterized as two or more independent companies working together to combine their supply chain processes to generate value for more efficient end customers and stakeholders than operating alone. The underlying explanation for cooperation is that a single business cannot compete effectively on its own, because consumers are more demanding and there is escalation of competition. Hence most of the firms are on the run of seeking coordination between their activities so that they can work reciprocally to produce superior performance.

Panahifar, Byrne, Salam and Heavey (2018) researched on supply chain collaboration and performance of the firm. The study was aimed at identifying and assessing how the various characteristics of information sharing interrelate with each other and their criticality for effective information-centred supply chain collaboration initiatives and, in turn, its criticality to overall performance of the firm. The study conducted a survey of 189 executives from different firms and the resulting data were analyzed to investigate how collaboration enablers affect effective collaboration and how it impacts the performance of an organization. The study used structural equation modeling through partial least squares to establish how the four enablers (trust, information readiness, and information accuracy and information security), perceived collaboration success, and two outcomes (sales growth and overall operational performance) relate to each other. It was revealed that three collaboration enablers including trust, information readiness and secure sharing of information improve the collaboration of a supply chain. The study also revealed that secure sharing of information was the most important factor in fostering information sharing-centered collaboration. Effective collaboration therefore affects the performance of a firm in a positive manner.

Liao, Hu and Ding (2017) assessed on how supply chain collaboration value innovation, supply chain capability and competitive advantage affect Taiwan's networking communication industry. The study was aimed at assessing how supply chain collaboration value innovation, supply chain capability and competitive advantage affect Taiwan's networking communication industry. The study selected 74 firms and 465 questionnaires from the upstream, middle and downstream manufactures of Taiwan networking communication industry for research subjects, and uses structural equation modeling (SEM) in verifying the theoretical model. The findings of the study revealed that the relationships among supply chain collaboration value innovation, supply chain capacity and competitive advantage positively impact performance. SCC is believed to bring many benefits to all partners, reducing risk and expense and increasing efficiency, output and profit. Sharing of information in an SCC supply chain shortens the lead time, decreases production costs and increases the quality of the product.

2.3.2 Supplier Development and Supply Chain Performance

Wachiuri, Waiganjo and Oballah (2015) did an inquiry into development of the suppliers and the role it plays as far as the ability of the entity to perform is concerned. The key emphasis of the inquiry was on the EABL and it was shared that providing rewards and financially established support all greatly shape the ability of the firm to perform. Supplier development basically entails the process of working on a one - to-one basis with some suppliers to enhance their efficiency to the benefit of the purchasing organization. This means accepting supplier knowledge and aligning it with the business needs of the buying organization, and vice versa where possible. Supplier development is aimed at reducing the costs, improving quality and delivery, developing new routes to supply, developing new products in the market and also educating suppliers in a systematic process to keep driving continuous improvement. To optimize the potential of their supply chain performance, any organization must be in a position of maintaining and establishing relationships with a capable and competent supplier network and draw maximum value from these relationships

Musyoki and Ngugi (2017) did a study on development of the suppliers and the role it plays as far as the ability of the firm to perform is concerned. The key focus of the inquiry was on pharmaceutical entities in Kenyan context. It was shown that training of the suppliers, sharing information with them and provision of managerial support all have a direct link with how the buying entity perform. Most manufacturing companies depend on able suppliers to contribute to their overall marketplace competitiveness. Further, resilience on suppliers means that the buying entities should continuously leverage on the capabilities of their suppliers.

Mwesigwa and Nondi (2018) investigated on how supplier development affects procurement performance of World Food Programme. The findings of the study established that supplier development significantly and positively affected procurement performance at WFP in Kenya. The specific skills that reside with suppliers will affect the innovativeness, efficiency and capacity of a buying agency to deliver high quality goods. At the other hand, inconsistent quantity can be related to lack of confidence between supplier and buyer in a supply chain network. Poor supplier development can result in low supplier's performance and inflexibility to change, lack of coordination and training, poor motivation and fragmentation of information between supplier and buyer. The effect of this on any company is reduced efficiency in the supply chain, high inventory and decreased capacity to satisfy consumer demands, decreased market share, long lead times and decreased income.

Yegon, Kosgei and Lagat (2015) did an inquiry into development of the suppliers and the role it has on the performance of the buying entity. The specific focus of the inquiry was entities in Western Kenyan that engage in milling of sugar. While leveraging on explanatory design and selection of the participants purposively, it was shown that offering support to the suppliers in technical and financial terms has direct link with the ability of the buying entities to perform. Business need to constantly aim to match the resources, efficiency and activities of their vital suppliers with the purchasing organization's operations through the growth of suppliers, in order to achieve superior overall efficiency and improved customer satisfaction and also gain a strong competitive advantage over its rivals.

Chebss, Namusonge and Nambuswa (2017) did an inquiry into development of the suppliers and its link with the ability of the procurement function to perform. The specific point of reference of the inquiry was on Nzoia Sugar Company Ltd. The study's main purpose was to determine how supplier development affects purchasing performance. The study adopted the use of descriptive research design and the target population included 116 respondents. The findings of the study revealed that supplier incentive and procurement performance positively related to each other. Companies need to try, develop and sustain relationships with capable suppliers in order to compete and thrive, and realize the full value of these relationships. Good supplier relationship and development programs, allow for organizations to enhance their supply chain performance.

Oromo and Mwangangi (2017) researched on how supplier development affects procurement performance in public sector in Kenya using a case of Kenya electricity generating company limited (Kengen). The aim of the study was to determine how supplier development affects procurement performance in public sector in Kenya, a case of KenGen. The study adopted the use of a descriptive research design and a sample size census of all 160 staff from KenGen who were provided with the questionnaires. The findings of the study revealed that the creation of supplier incentives was used as a way of ensuring that they remain committed towards quality improvement strategy. Incentives may be in the form of a preferred supplier category with its rewards. With regard to the growth of suppliers, the study recommended KenGen to make cooperative efforts to help in improving supplier capabilities in terms of technology, efficiency, distribution and cost, as this also improves continuous improvement and the capability of the supplier.

Lubale and Kioko (2016) researched on how supplier development affects the performance of an organization Kenya Power and Lighting Company Limited. The study's objective was to investigate how supplier development affects the performance of an organization. The study adopted the use of a descriptive research design. The target population of the study included 474 members. A cluster sampling procedure and a sample size of 142 respondents was employed by the researcher. Data

collection was done through use of structured questionnaire. The study findings revealed that supplier evaluation, supplier incentives and supplier partnership positively affected organizational performance at Kenya Power. It was recommended that Kenya Power intensify and expand the supplier assessment and supplier incentivization aspects of its supplier growth practices and that the GoK follow policies through ERC and MoEP that help to foster competition among Kenya Power's supply base. Any organizational initiative, including supplier development, should ultimately lead to the enhancement of the organizational performance. Supplier development is an essential activity for any company and it is one of the tasks carried out by procurement personnel and one whose successful implementation determines the success or failure in the performance of the procurement.

Chemjor (2015) researched on supplier evaluation criteria and procurement performance in parastatals in Kenya. The study employed the use of a descriptive research design. The target population for the study included all the 187 parastatals under the state corporations' act of Kenya as at September 2015. A sample of 53 respondents was selected from the target population. Data collection was done through use of questionnaires. The results of the study revealed that Kenyan parastatals' selection criteria were based on the quality of the supplier services during, the supplier's financial status, supplier versatility, supplier efficiency in service delivery, supplier fees, constitution and PPOA guidelines, knowledge sharing between the organization and the supplier, technical capability and profile of the supplier, supplier's ability to in sharing confidential information, supplier's experience in offering certain services/products as well as compliance with procurement procedures. The study recommended that the management and the supply chain management for the Kenyan parastatals need to effectively evaluate the most effective evaluation criteria that would help the facilitation its procurement performance. There is need also to ensure that competent personnel are in place to help in the management of organizational supply chain processes.

Humphreys, Cadden, Wen-Li and McHugh (2011) investigated on supplier development activities and their influence on performance in the Chinese electronics industry. The study conducted a survey of companies in the Hong Kong electronics

industry examining the role of supplier development activities in the context of buyer–supplier performance (BSP). The findings of the study revealed that effective communication, direct supplier involvement and trust proved to be directly related, whereas supplier evaluation and supplier strategic objectives proved significant when mediated via direct supplier involvement. Supplier development strategy is critical because it can enable an organization to ensure the right skills among procurement staff and the right resources to support efficient administration, such as eprocurement; support the achievement of organizational objectives by linking them to procurement objectives;

2.3.3 Supply Selection and Evaluation and Supply Chain Performance

Krop and Iravo (2016) looked at selection of the suppliers and the role it plays as far as performance of the procurement function of the entity is concerned. It was indicated that all the supplier selections dimensions significantly and positively affect procurement performance. Supplier selection involves a process by which businesses identify, evaluate, and contract with suppliers. The procurement process for suppliers deploys a large amount of financial capital from a company. In return, businesses receive substantial benefits from working with high value suppliers. It describes the usual steps of selecting suppliers, identifying suppliers, soliciting supplier details, coming up with the terms of the contract, making negotiations with the suppliers and assessing them. Each of these steps has an important role and the interaction of these step will contribute to the improvement in efficiency in the supply chain performance.

Manyega and Okibo (2015) did an investigation into selection of the suppliers and its role as far as performance of the procurement function is concerned. It was shown that selection of the supplier can give an entity an opportunity to enhance its efficiency and effectiveness. To prevent the catastrophic consequences of non-performance of suppliers, buyers usually take reasonable measures to check the credentials of a supplier before granting a contract to them. Supplier selection is aimed at reducing the risk of non-performance of suppliers, such as late delivery, non-distribution or distribution of non-compliant faulty products. Selection of suppliers means the manufacturer can be a responsible and sensitive partner in the everyday

business relationship with the purchaser. This will play a major role in improving the supply chain performance.

Mutai and Okello (2016) did an inquiry into evaluation of the suppliers and its link with ability of the Kenyan Universities to perform. It was noted that engagement of the suppliers on issues of quality, the ability of the suppliers in financial terms and their competencies have an interlink with how the function of procurement in the entity performs. It was shown that performance of the entity is informed by how the suppliers are selected. Effective selection of suppliers is one of the essential techniques to enhance the efficiency of any organization's production, which has a direct effect on the productivity and credibility of the business. Supplier selection is one of the methods used by companies to find the best suppliers. Evaluation of suppliers is the quantitative and qualitative assessment of suppliers to ensure a list of the best in class suppliers is available for use. Buyers should carefully pick their suppliers and review them periodically to maintain efficient and reliable sources of supply. Supply selection is a crucial strategic driver for enhancing operational performance and achieving corporate objectives such as increased productivity, improved customer service and increased profitability. SCM's key objectives are aimed at reducing non-value - added activities and related acquisition costs and operational costs, increase consumer responsiveness and flexibility in the supply chain, and boost efficiency at the bottom line performance and cost competitiveness.

Kamath, Barkur and Naik (2018) conducted a study to find out whether supplier evaluation impact process improvement. The study showed that the quality and cost considerations are irrelevant to the evaluation of suppliers. Management of the supply and manufacturer partnership has a major impact on supplier evaluation. The study also showed that evaluation of suppliers has a major impact on process improvements. Suppliers are significant stakeholders whose activities can affect the overall performance of a particular supply chain. The choice of the supplier of a company should be driven by a detailed evaluation of the possible suppliers because the suppliers will affect the performance of any role or method of supply chain. Overdue deliveries, low quality goods or services, the inability to complete orders and even

lawsuit risks related to overdue payments are a typical scenario faced by most of the public organizations as a result of ineffective supplier evaluation.

Obinda and Gichure (2017) researched on how supplier selection affects supply chain performance using a case of Nairobi City County. The study was aimed at evaluating how supplier selection affects supply chain performance in the County of Nairobi City. The study adopted the use of a descriptive research design. The population of the study included 11 departments of the county government. The study found that coordination between supplier selection and supplier selection staff and inadequate communication networks affects productivity in the procurement department and ensures the right supplier is selected to meet evolving and expected needs. According to the study, procurement efficiency in public bodies relies on the selection of suppliers, contact between procurement and consumer departments on quality control of goods. Supplier selection is the process by which firms identify, evaluate, and contract. The supplier selection process deploys a large amount of financial capital from a company. In exchange, businesses expect substantial benefits from working with high value suppliers. This describes the typical steps of supplier selection processes, classify suppliers, solicit supplier details, set contract conditions, negotiate with suppliers and evaluate suppliers. To prevent the catastrophic consequences of non-performance of suppliers, buyers usually take reasonable measures to check the credentials of a supplier before granting a contract to them. The primary aim of supplier certification screening is to reduce the risk of non-performance of suppliers, such as late delivery, non-distribution or distribution of non-compliant defective products. A secondary objective is simply to ensure the supplier remains a responsible and attentive partner in the everyday business relationship with the customer.

2.4 Conceptual Framework

Figure 2.1 is the conceptual framework showing the relationship between the variables.

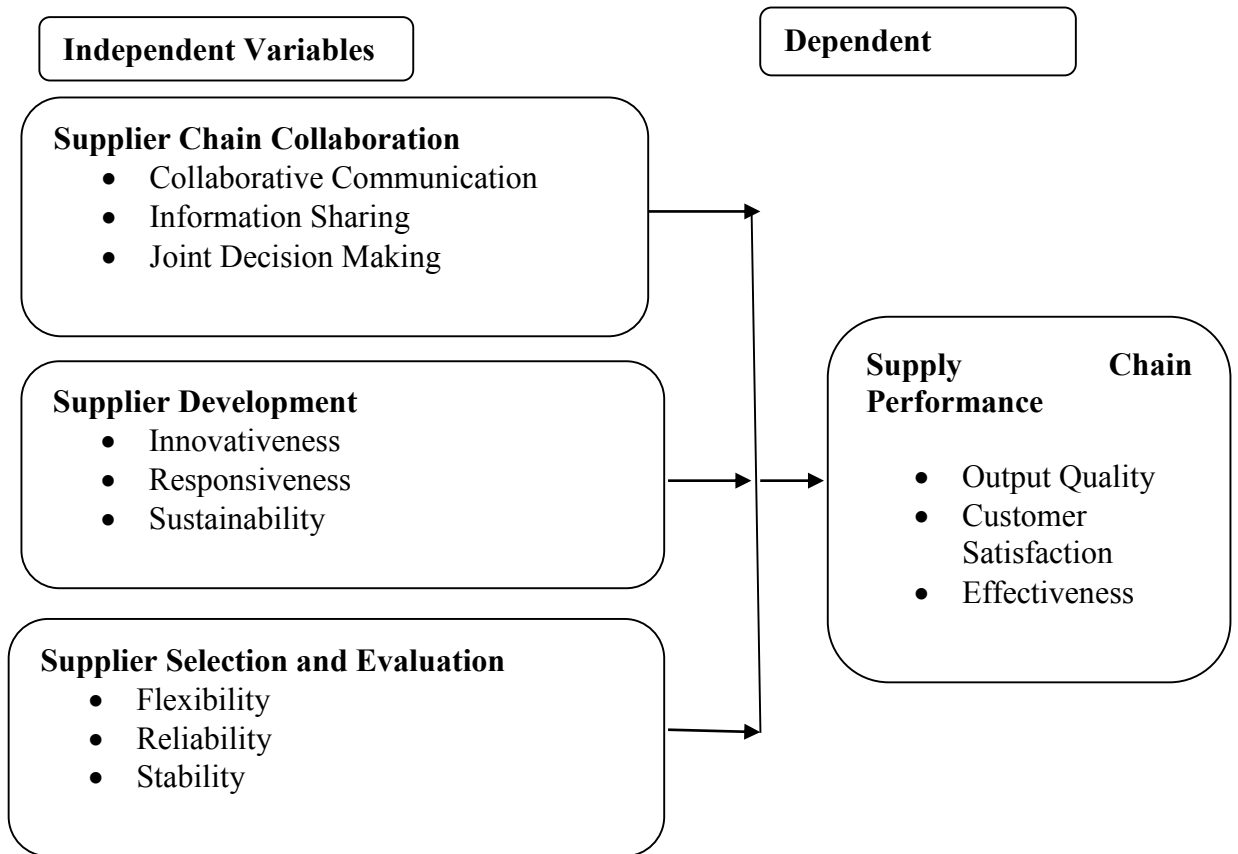


Figure 2.1: Conceptual Framework

Source: (Author, 2019)

2.4.1 Supply Chain Collaboration

Supply chain collaboration is where two or more independent companies work together to plan and conduct supply chain operations (Herczeg, Akkerman & Hauschild, 2018). It can give its partners considerable benefits and advantages. According to Zhang and Cao (2018), supply chain collaboration is aimed at lowering the levels of inventory and increasing inventory turns, lowering transportation and operation costs, lowering out- of stock levels, reducing lead times, improving the metrics of customer service and also enhancing the process of decision making regarding the performance of the supply chain and the overall organization. Success in most business organizations becomes impossible without a collaborative pull of resources and skills from partners in the supply chain (Pradabwong, Braziotis, Tannock & Pawar, 2017).

2.4.2 Supplier Development

Supplier development is the process of working one - to-one with other suppliers to improve their efficiency to the advantage of the purchasing organization (Chen, Ellis, Suresh, Brown & Hill, 2016). Supplier development is about generating a new capability or competency in suppliers. Supplier development is aimed at enhancing the level of transparency between the entity and its suppliers, ensuring that there is an interlink between the firm and its suppliers, lowering the lead times, enhancing the quality and ensuring there is responsiveness in the supply chain systems.

2.4.3 Supply Selection and Evaluation

Supply selection and evaluation process entails the process of evaluating and approving potential suppliers by quantitative assessment (KhanMohammadi, Talaie, Safari & Salehzadeh, 2018). The process is aimed at ensuring that there is a portfolio of best in class suppliers hence making it effective to select potential suppliers. Supply selection and evaluation also helps in measuring and monitoring their performance to basically ensure that there is a contract compliance, cost reduction, risk mitigation and continuous improvement. Effective selection of suppliers is one of the essential techniques to enhance the efficiency of any organization's production, which has a direct effect on the productivity and credibility of the business (Galankashi, Helmi & Hashemzahi, 2016).

2.4.4 Supply Chain Performance

Supply chain performance is the degree which the entity is able to attain the requirements of the final end users. This includes the quality issues of the product, ensuring that there is delivery on time all aimed at delivering value (Mani, Gunasekaran & Delgado, 2018). Supply chain performance helps in protecting and improving the brand quality, improving the internal process, enhancing collaborations with suppliers, ensuring that cost effectiveness is maintained, ranking vendors, customer satisfaction and that there is quality of suppliers when it comes to product delivery (Hong, Zhang & Ding, 2018).

2.5 Summary of the Literature

The chapter has reviewed the theories that provided anchorage to the variables. The theories reviewed include agency theory, the network theory and relationship marketing theory. Empirical review has also been reviewed on the variables of the study. For instance, on supply chain collaboration and supply chain performance an inquiry was conducted by Agyei-Owusu et al (2016) to bring out the link between collaborations in the supply chains and the ability of logistics in the entity to perform. Al-Doori (2019) researched on how supply chain collaboration affects performance in the automotive industry. Doganay and Ergun (2017) investigated on the effect of supply chain collaboration on supply chain performance. Ali, Bentley and Cao (2016) conducted an inquiry into collaborations in the supply chains and the role it play as far as the ability of the entity to perform is concerned. Botes, Niemann and Kotzé (2017) did an inquiry into collaboration between the buyers and suppliers and the link with resilience within supply chains.

The studies reviewed on supplier development and supply chain performance include Wachiuri, Waiganjo and Oballah (2015) who did an inquiry into development of the suppliers and the role it plays as far as the ability of the entity to perform is concerned. Musyoki and Ngugi (2017) did a study on development of the suppliers and the role it plays as far as the ability of the firm to perform is concerned. Mwesigwa and Nondi (2018) investigated on how supplier development affects procurement performance of World Food Programme. Yegon, Kosgei and Lagat

(2015) did an inquiry into development of the suppliers and the role it has on the performance of the buying entity.

On supply selection and evaluation and supply chain performance, Krop and Iravo (2016) looked at selection of the suppliers and the role it plays as far as performance of the procurement function of the entity is concerned. Manyega and Okibo (2015) did an investigation into selection of the suppliers and its role as far as performance of the procurement function is concerned. Mutai and Okello (2016) did an inquiry into evaluation of the suppliers and its link with ability of the Kenyan Universities to perform. Kamath, Barkur and Naik (2018) conducted a study to find out whether supplier evaluation impact process improvement. Obinda and Gichure (2017) researched on how supplier selection affects supply chain performance using a case of Nairobi City County.

2.6 Research Gaps

Table 2.2 indicates the gaps that the present study sought to address.

Table 2.1: Research Gaps

Author	Study	Key Finding	Gaps	Addressing the Gap
Al-Doori (2019)	how supply chain collaboration affects performance in the automotive industry.	information sharing (IS) and joint decision making (JDM) significantly affects the operational performance while Electronic Data Interchange (EDI) does not have a significant effect on operational performance	The study focused on the automotive industry	The present study focused on alcoholic beverage companies
Ali, Bentley and Cao (2016)	collaborations in the supply chains and the role it play as far as the ability of the entity to perform	Supply chain collaboration is very important as it helps most firms to successful practice supply chain	The investigation covered the smaller	The current study covered alcoholic beverage companies in Kenya

	is concerned	performance	entities operating in United Kingdom	
Botes, Niemann and Kotzé (2017)	collaboration between the buyers and suppliers and the link with resilience within supply chains	such collaborations have no direct contributions towards resilience of the supply chains	The focus of the study was on petrochemical entities	The present study covered alcoholic beverage companies
Liu, Yan, Si, Xie and Wang (2020)	how buyer-supplier supply chain strategic collaboration affect operating performance	supply chain strategic collaboration (SCSC) plays a major role in improving the operating performance of a firm	The inquiry used a case study of Chinese companies	The present study was on Kenyan firms
Liao, Hu and Ding (2017)	how supply chain collaboration value innovation, supply chain capability and competitive advantage	relationships among supply chain collaboration value innovation, supply chain capacity and competitive advantage positively impact performance	The inquiry focused on Taiwan's networking communication industry	The present study focused on alcoholic beverage companies in Kenya
Mwesigwa and Nondi (2018)	how supplier development affects procurement performance of World Food Programme	supplier development significantly and positively affected procurement performance at WFP in Kenya	This was a case study of World Food Programme	The present study was cross sectional in nature
Yegon, Kosgei and Lagat (2015)	development of the suppliers and the role it has on the performance of the buying entity.	offering support to the suppliers in technical and financial terms has direct link with the ability of the buying entities to perform	The specific focus of the inquiry was entities in Western Kenya that engage in milling of	The present study focused on alcoholic beverage companies in Kenya

			sugar	
Cheboss, Namusonge and Nambuswa (2017)	development of the suppliers and its link with the ability of the procurement function to perform.	supplier incentive and procurement performance positively related to each other.	The specific point of reference of the inquiry was on Nzoia Sugar Company Ltd.	The present study was cross sectional in nature
Krop and Iravo (2016)	selection of the suppliers and the role it plays as far as performance of the procurement function of the entity is concerned	Supplier selection involves a process by which businesses identify, evaluate, and contract with suppliers	The study looked at procurement performance as the dependent variable	The present study looked at performance of the firm in general
Mutai and Okello (2016)	evaluation of the suppliers and its link with ability of the Kenyan Universities to perform	performance of the entity is informed by how the suppliers are selected	The focus of the inquiry was on Kenyan Universities	The current study was conducted among alcoholic beverage companies in Kenya
Kamath, Barkur and Naik (2018)	Whether supplier evaluation impact process improvement.	quality and cost considerations are irrelevant to the evaluation of suppliers	The study focused on process improvement as the dependent variable	The present study looked at performance of the firm in general
Obinda and Gichure (2017)	how supplier selection affects supply chain performance	coordination between supplier selection and supplier selection staff and inadequate communication networks affects productivity in the procurement department	This was a case study of Nairobi City County	The present study focused on alcoholic beverage companies in Kenya

2.7 Operationalization of the Variables

Consider Table 2.1

Table 2.2: Operationalization of the Variables

Type of Variable	Indicators	Scale of Measurement	Data Analysis
Independent supplier chain collaboration	<ul style="list-style-type: none"> • Collaborative Communication • Information Sharing • Joint Decision Making 	Ordinal	<ul style="list-style-type: none"> • Descriptive statistics (means and standard deviations) • Inferential statistics
Independent supplier development	<ul style="list-style-type: none"> • Innovativeness • Responsiveness • Sustainability 	Ordinal	<ul style="list-style-type: none"> • Descriptive statistics (means and standard deviations) • Inferential statistics
Independent Supplier selection and evaluation	<ul style="list-style-type: none"> • Flexibility • Reliability • Stability 	Ordinal	<ul style="list-style-type: none"> • Descriptive statistics (means and standard deviations) • Inferential statistics
Dependent supply chain performance	<ul style="list-style-type: none"> • Output Quality • Customer Satisfaction • Effectiveness 	Ordinal	<ul style="list-style-type: none"> • Descriptive statistics (means and standard deviations)

Source: Author (2020)

2.8 Research Hypotheses

H₀₁: Supply chain collaboration has no significant effect on supply chain performance of the alcoholic beverage companies in Kenya

H₀₂: Supplier development has no significant effect on supply chain performance of the alcoholic beverage companies in Kenya

H₀₃: Supply selection and evaluation has no significant effect on supply chain performance of the alcoholic beverage companies in Kenya

CHAPTER THREE

METHODOLOGY

3.1 Introduction

The chapter focuses on the methodologies that helped in gathering of the views of the respondents and how the analysis was conducted. It covers the design that was adopted, the targeted participants of the inquiry and how their views will be gathered. The chapter also details how the gathered views will undergo processing to make them meaningful and the means of presentation of the analyzed responses. All these will be conducted as informed by the objectives of the study.

3.2 Research Design

A research design can be viewed as a scheme or plan that provides answers to some given problems under investigation. Yin (2017) provide a summary of the research design to be including such attributes as a plan that is established on the basis of time as guided by some formulated questions of the inquiry while guiding how the views of the participants are to be gathered and processed. It can also be viewed as a framework that establish the link between the study variables awhile laying foundation on how every action is undertaken by an inquiry.

Creswell and Creswell (2017) shared that the formulated questions of the inquiry will inform the design to be selected. This is meant to provide true answers that would provide solution to the research questions. The adopted design by the inquiry was descriptive that is viewed by Yin (2017) to be concerned with providing answers to questions regarding how, where, what and when on given events. The design helps the researcher to gather relevant views from the participants that would support generation of conclusions. The rationale of the design was from the fact that it was easier for the researcher to gather the views of the participants with regard to SRM and the ability of the supply chains to perform.

3.3 Target Population

It is from the target population that one is able to generalize the results of the inquiry. The study targeted alcoholic beverage manufacturing entities in Kenya. The information from the Kenya Manufacturers Association (KMA) (2012) indicates a total of 48 alcoholic firms in Kenya and all of them will be targeted. The supply chain manager from each of these firms will be the respondents and hence the target population was 48 respondents. The respondents were chosen because they have the right information regarding the operation of their companies.

3.4 Sampling Technique and Sample Size

It is from the targeted respondents that a sample is drawn for representativeness (Creswell & Creswell, 2017). Through sampling, one is able to deliberately select elements from the targeted respondents and this permits the degree which the results of the inquiry can be generalized. Given the fact that only 48 respondents were targeted, which was relatively small, census was adopted. The use of census ensures that all the targeted respondents are included in the undertaking. Bryman and Bell (2015) shared that census is particularly ideal when the targeted respondents are less than 200 elements.

3.5 Research Instrumentation

The views from the participants were gathered with aid of the questionnaire. There was need to structure the questionnaire to cover the contents of the objectives beginning with the general information of the participants. The items on the questionnaire were closed to ease the process of administration. The items on the study objectives will be constructed on the basis of the five-point Likert scale.

3.6 Pilot Study

A pilot study is usually done before the real inquiry to validate the processes and procedures before the actual inquiry (Yin, 2017). It checks for the flaws and ensure that the provided responses are valid and reliable. The need to pilot test the instrument of the inquiry emerged and this was meant to identify and prepare to all

the possible constraints in handling of the tools during the actual data gathering in the field. Bowling (2014) recommends that 5-10 respondents can be engaged in the piloting of the tools. In total, 10 respondents from nonalcoholic beverage entities in Nairobi were used for piloting the tools of the inquiry. All those participants in the piloting of the tools were excluded from the real inquiry and this was meant to limit incidences of biasness.

3.6.1 Validity of the Instrument

Valid tools measure that which it is designed to measure (Pickard, 2012). The supervisor reviewed the items on the questionnaire to check for content and construct validity. This was realized by comparing the constructs indicated in the conceptual framework with the items on the questionnaire to establish a link between them. Furthermore, the supervisor carried out a comparison of the reviewed literature including the theories with the contents on the questionnaire to ensure they are well aligned with each other.

3.6.2 Reliability of Instrument

A study tool is deemed to be reliable in the event that it gives results that are consistent (Soy, 2015). The degree of consistency should be established over a given time period. The questionnaires from the pilot test were coded into SPSS tool for determining reliability. An internal gauge of consistency referred to Cronbach Alpha coefficient was adopted to test for reliability. The rule of thumb was taken as 0.7 as recommended by Taber (2018).

3.6 Data Collection Procedure

Before carrying out the actual study, piloting was conducted among 10 respondents from non-beverage manufacturing firms in Nairobi. According to Tefferi, Lasho, Begna, Patnaik, Zblewski, Finke and Gangat (2015), the aim of the pilot study will be to test for reliability and validity of the instruments of the study. Once the research instruments have been found to be valid and reliable, the researcher sought for an introductory letter from the University which stated the purpose of the study as being

for academic reason. An authorization letter from the National Commission for Science, Technology and Innovation (NACOSTI) was also sought for collecting data in the field from respondents. The questionnaire was self-administered so as to increase on the response rate.

3.7 Data Analysis and Presentation

On completion on data collection, the collected data was checked for completeness and consistent before being entered in the SPSS tool. The values of means and standard deviation were established to summarize the findings. To establish the relationship between supplier relationship management and supply chain performance, inferential statistics covering correlation and regression analysis were performed. Pearson Moment of Correlation was applied to help establish the strength and direction of relation while multiple regression analysis was used to estimate the changes in project performance of the alcoholic beverage companies in Kenya that can be explained by the discussed variables of supplier relationship management.

The Multiple Regression Model followed this format:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

Where Y= supply chain Performance

β_0 = Constant

β_1 , β_2 , and β_3 are Coefficients

E = error term

X_1 = Supply Chain Collaboration

X_2 = Supplier Development

X_3 = Supplier Selection and Evaluation

The presentation of the findings was done with the use of tables and figures.

3.7.1 Diagnostic Tests

There was need to test the assumptions of regression before the actual inferential analysis hence diagnostic tests. These are summarized in Table 3.1.

Table 3.1: Diagnostic Tests

Diagnostic Test	Specific Test	Rule of thumb
Normality	Kurtosis and Skewness	Kurtosis and skewness values of +2 and -2 show normal distribution (Kotharim 2004).
<u>Multicollinearity</u>	Variance Inflation Factor VIF	VIF is between 1-10 show that the variables are not correlated
<u>Heteroscedasticity test</u>	Scatter plots.	Clearly established data points with no pattern show absence of <u>heteroscedasticity</u>

3.8 Ethical Considerations

The researcher ensured that the study upholds quality. First an introduction letter was obtained from KCA University authorizing the research. It was then forwarded to the National Commission of Science, technology and Innovations for issuance of research permit. On collection of the research permit, the researcher assured the respondents of confidentiality and anonymity. The research was done on free consent basis where no one was forced or coerced to participate in the study.

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION AND DISCUSSION

4.1 Introductions

This chapter is set out to provide an analysis of the findings based on the research questions. Once data had been collected from the field, it was cleaned and entered into SPSS tool in readiness for analysis. The findings were summarized using descriptive statistics covering means and standard deviations. Inferential statistics covering the use of correlation analysis and regression analysis were also used to make relevant deductions and inferences. The presentation of the results was done with the aid of tables and figures.

4.2 Response Rate

The researcher administered 48 questionnaires to the alcoholic beverage manufacturers licensed and operating in Kenya. From these, 32 of them were completely filled and returned giving a response rate of 66.7%. The response is consistent with the assertion of Mugenda and Mugenda who regarded a rate of above 60% as being good for analysis of the findings.

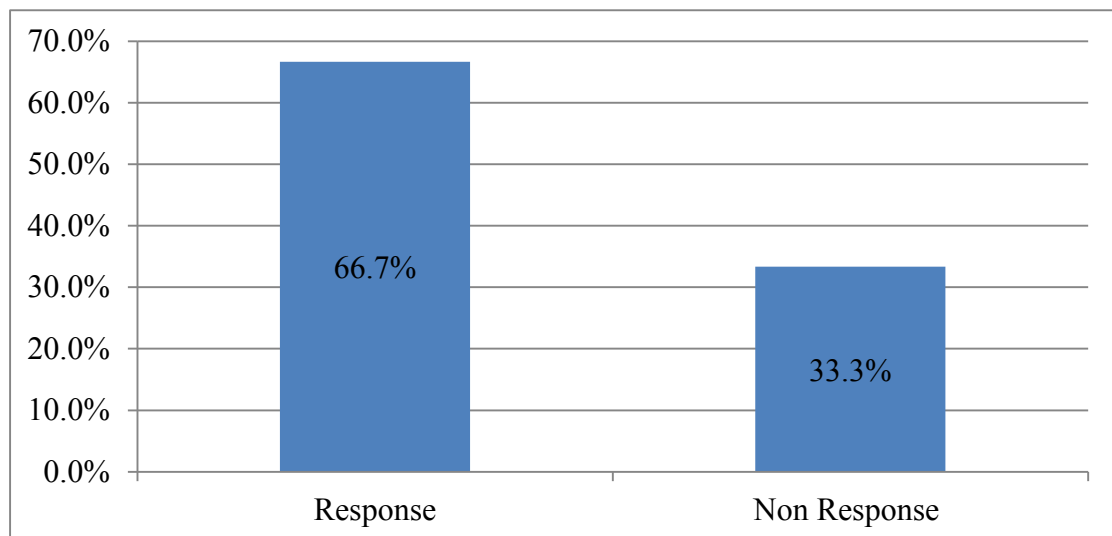


Figure 4.1: Response Rate
Source: Field Survey Data (2020)

Figure 4.1 indicate that the response rate recorded in the study was above 60% but less than 70%. The study had expected a relatively higher response rate than the one that was recorded. This relatively low response rate that was recorded in the study could be attributed to challenges that had been posed by Corvid-19 pandemic where it was hard to collected information from the respondents.

4.3 Reliability Results

Reliability of the questionnaire was established from the piloted results. In this regard, 10 questionnaires were piloted among non-beverage manufacturing firms operating in Nairobi. The respondents who took part in the study were excluded from the final sample size of the study. From the ten questionnaires administered to the respondents during the pilot study, 8 of them were completely filled up and returned. The dully filled questionnaire from the pilot exercise was coded and the values of Cronbach Alpha determined. Table 4.1 gives the findings of reliability of the questionnaire.

Table 4.1: Reliability Results

	Cronbach's Alpha	No. of Items
Supply Chain Collaboration	.946	5
Supplier Development	.938	5
Supply Selection and Evaluation	.962	5
Supply Chain Performance	.941	4

Source: Field Survey Data (2020)

The study adopted an internal measure of consistency called Cronbach Alpha. In this regard, the values of Cronbach Alpha coefficient from the dully completed questionnaire in the pilot study were determined and presented as indicated in Table 4.1. From the findings, it can be shown that the value of Cronbach Alpha Coefficient for supply chain collaboration was given as 0.946, supplier development had 0.938, supply selection and evaluation had 0.962 while supply chain performance had 0.941. These results are echoed by Taber (2018) who argued that the values of Cronbach Alpha Coefficients above 0.7 indicate that the tools of the study are reliable.

4.4 General Information

The general information of the respondents was determined covering their years of operation, age brackets, level of education and years of experience. The findings on each aspect of the general information are summarized in subsequent sections.

4.4.1 Years of Operations

The study sought to establish the number of years which the firms had operated. Table 4.2 gives a breakdown of the results.

Table 4.2: Years of Operations

	Frequency	Percent
Below 5 years	2	6.3
6-10 years	16	50.0
More than 10 years	14	43.8
Total	32	100.0

Source: Field Survey Data (2020)

From the results in Table 4.2, it can be shown that while 50% of the firms had operated for 6-10 years, 43.8% had operated for over 10 years and 6.3% for less than 5 years. Thus, the studied firms had operated for a relatively longer period of time and

4.4.2 Age Bracket

Table 4.3 details the results on the age of the respondents

Table 4.3: Age Bracket

	Frequency	Percent
21-30 years	4	12.5
30-40 years	22	68.8
41-50 years	6	18.8
Total	32	100.0

Source: Field Survey Data (2020)

Table 4.3 indicates that while 68.8% of the respondents were 30-40 years, 18.8% were 41-50 years and 12.5% were 21-30 years. This shows that the respondents of

the study were drawn from different age categories and thus diverse findings were sought from them regarding supplier relationship management.

4.4.3 Level of Education

The levels of education of the respondents were established and summarized as indicated in Table 4.4

Table 4.4: Level of Education

	Frequency	Percent
Certificate	2	6.3
College	2	6.3
University	18	56.3
Postgraduate	10	31.3
Total	32	100.0

Source: Field Survey Data (2020)

The findings in Table 4.4 show that while 56.3% of the respondents were university graduates, 31.3% were postgraduates with a tie between those respondents who had college education and certificates. This means that the respondents of the study had general education and probably could read and interpret the research questions that were sought by the study.

4.4.4 Years of Experience

Table 4.5 is a summary of the years respondents had worked in their firms.

Table 4.5: Years of Experience

	Frequency	Percent
Less than 1 year	4	12.5
1 - 3 years	8	25.0
4 - 5 years	14	43.8
5 - 8 years	6	18.8
Total	32	100.0

Source: Field Survey Data (2020)

The results in Table 4.5 indicate that while 43.8% of the respondents had worked in their organization for 4-5 years, 25.0% had worked for 1-3 years, 18.8% for 5-8 years and 12.5% for less than a year. This implies that majority of the study respondents

had worked in their organizations for a relatively longer period of time and thus probably had gained relevant information on supply chain performance of their firms as sought by the study.

4.4 Supply Chain Performance

Table 4.6 gives the findings on supply chain performance as reported by means and standard deviations.

Table 4.6: Supply Chain Performance

	Mean	Std. Dev
The organization ensures that there is cost effectiveness	4.18	1.029
Right quality of goods and services have been supplied consistently	4.43	.618
Right quantity of goods and services have been consistently supplied	4.37	.707
The organization ensures that its customers are satisfied with the available products	4.50	.622
Composite Score	4.37	.744

Source: Field Survey Data (2020)

The findings in Table 4.6 indicate the overall mean score as 4.37, which means that majority of the studied firms were doing well in terms of their supply chain performance. As shared by Hohenstein, Feisel and Hartmann (2014), supply chain performance is the extended activities within the supply chain aimed at enabling the firm to meet the requirements of the end users covering availability of the products and delivery of products on time. It extends the boundary of the enterprise to include materials and finished products and the means of their distribution top reach the end users. Furthermore, it extends within the traditional functions of the enterprise like marketing and procurement. For better performance, the entity should continuously improve on its supply chain practices.

More specifically, respondents strongly agreed (M=4.50) that their organization ensured that its customers were satisfied with the available products and that right quality of goods and services had been supplied consistently (M=4.43). These findings are consistent with the relationship marketing theory where Waters (1989) indicated that the theory is linked with how the entity establish and relate with other parties in the environment. Respondents further shared that right quantity of goods

and services had been consistently supplied (M=4.37) and that the organization ensured that there was cost effectiveness (M=4.18). The aspect of cost effectiveness is consistent with Qrunfleh and Tarafdar (2014) who indicated that through the financial proxy of the supply chain, the managers of the enterprises are able to come up with the key factors that drive costs in the entity.

4.5 Supply Chain Collaboration

Supply chain collaboration was the first independent objective variable covered in this study. The findings of descriptive statistics covering means and standard deviation are as indicated in Table 4.7.

Table 4.7: Supply Chain Collaboration

	Mean	Std. Dev
The organization ensures that the enhancement of the decision making process	3.93	.913
The organization effectively controls the inventory turnover	4.43	.715
The organization ensures that there is sustainability when it comes to handling the supplier collaborations	4.18	.737
The organization improves its overall performance by creating collaborations with its key suppliers	4.00	.803
The organization ensures that there is a continuous competitive growth through the establishment of positive supplier collaborations	3.93	.913
Composite Score	4.09	.816

Source: Field Survey Data (2020)

As indicated in Table 4.7, the overall mean score was 4.09; this was interpreted to infer that supply chain collaboration was highly practiced among the studied organizations. In other words, this implies that majority of the studied firms collaborated with their suppliers. As argued by Oghazi et al. (2016), the essence of SRM is to create value on a joint basis in the entity while cultivating a sense of communication with the suppliers. The result is also consistent with Agyei-Owusu et al. (2016) who conducted a study on the effect of supply chain collaboration on logistics performance using a case study of Sub-Saharan Nation's petroleum downstream and revealed a relatively higher level of external collaboration compared to internal collaboration among the firms surveyed, while internal collaboration had a greater effect on the logistics output of a company.

Respondents agreed (M=4.43) that their organization effectively controlled the inventory turnover besides ensuring that there was sustainability when it came to handling the supplier collaborations (M=4.18). There were embargoes on oil within the period of 1970s and this heightened the need for purchasing as an activity in the entity (Govindan, Azevedo, Carvalho & Cruz-Machado, 2014). According to Mitra and Datta (2014) one of the elements of SRM is coordination of the activities at an operational level by coming up with plans that are joint. Respondents further agreed that their organization improved its overall performance by creating collaborations with its key suppliers (M=4.00), it ensured that there was enhancement of the decision making process (M=3.93) besides ensuring that there was a continuous competitive growth through the establishment of positive supplier collaborations (M=3.93). The results are consistent with Mitra and Datta (2014) indicated that involving suppliers during the development of the products helps the entity to effectively leverage on the capabilities of its suppliers. Al-Doori (2019) revealed that entering into agreements with strategic dimension allow the entity to establish processes that are efficient while exploiting new markets.

4.6 Supplier Development

The second independent objective variable of the study was supplier development. The various statements established on this variable rated on a five point Likert were summarized using descriptive statistics covering means and standard deviations as indicated in Table 4.8.

Table 4.8: Supplier Development

	Mean	Std. Dev
The organization ensures that there is transparency in its supply chain operations	4.62	.609
The organization is competent towards improving the performance of its supply chain	4.37	.707
The organization maintains supplier responsiveness when it comes to product delivery	4.25	.672
The organization has established string relationships with most of the suppliers	4.12	.870
The organization establishes new products the help of its suppliers	3.43	.877
Composite Score	4.16	.747

Source: Field Survey Data (2020)

The results in Table 4.8 show an overall mean score of 4.16, this means that supplier development was highly practiced among the studied organizations as an aspect of their supplier relationship management. The finding is supported by Wachiuri, Waiganjo and Oballah (2015) who noted that supplier development basically entails the process of working on a one - to-one basis with some suppliers to enhance their efficiency to the benefit of the purchasing organization and it involves accepting supplier knowledge and aligning it with the business needs of the buying organization, and vice versa where possible. Mwesigwa and Nondi (2018) established that poor supplier development can result in low supplier's performance and inflexibility to change, lack of coordination and training, poor motivation and fragmentation of information between supplier and buyer.

More specifically, respondents strongly agreed (M=4.62) that their organization ensured that there was transparency in its supply chain operations which is consistent with Doganay and Ergun (2017) who indicated that there is need to be transparent contact and ability to consider other people's feedback. It was shown that the organization was competent towards improving the performance of its supply chain (M=4.37) and that the organization maintained supplier responsiveness when it came to product delivery (M=4.25). Supply chain performance enables the entity to meet the requirements of the end users through such efforts as timely delivery, being responsive and ensuring that products are often available (Hohenstein, Feisel & Hartmann, 2014).

Respondents further agreed that their organization had established strong relationships with most of the suppliers (M= 4.12). This is consistent with the relationship marketing theory that was advanced by Waters (1989) and it argues that the entity is established to interact with other parties in the environment for mutual benefit. On the other hand, most of the respondents moderately agreed (M=3.43) on the fact that their organization established new products with the help of its suppliers.

4.7 Supplier Selection and Evaluation

The descriptive statistics on supplier selection and evaluation were established with a summary indicated in Table 4.9.

Table 4.9: Supplier Selection and Evaluation

	Mean	Std. Dev
The organization ensures that there is efficiency when it comes to supplier evaluation	4.37	.491
The organization is effective in selecting and evaluating its suppliers	4.18	.895
The organization evaluates its suppliers at the right time	4.12	.707
The organization monitors its supply chain performance through supplier selection and performance	4.12	.870
The organization maintains its production level by ensuring continuous evaluation of its suppliers	4.37	.609
Composite Score	4.23	0.714

Source: Field Survey Data (2020)

The results in Table 4.9 indicate an overall mean score as 4.23; this means that majority of the studied firms did practice supplier selection and evaluation as a way of supplier relationship management. The finding is supported by Krop and Iravo (2016) who indicated that supplier selection involves a process by which businesses identify, evaluate, and contract with suppliers. Mutai and Okello (2016) shared that effective selection of suppliers is one of the essential techniques to enhance the efficiency of any organization's production, which has a direct effect on the productivity and credibility of the business. Supplier selection is one of the methods used by companies to find the best suppliers. Evaluation of suppliers is the quantitative and qualitative assessment of suppliers to ensure a list of the best in class suppliers is available for use (Mutai & Okello, 2016).

Respondents agreed that the organization ensured that there was efficiency when it came to supplier evaluation (M=4.37) besides maintaining production level by ensuring continuous evaluation of its suppliers (M=4.37). The finding is consistent with Mutai and Okello (2016) who researched on how supplier evaluation affects procurement performance of public universities in Kenya and shared that effective selection of suppliers is one of the essential techniques to enhance the efficiency of

any organization's production, which has a direct effect on the productivity and credibility of the business. Respondents further agreed that the organization was effective in selecting and evaluating its suppliers (M=4.18), the organization evaluated its suppliers at the right time (M=4.12) besides monitoring its supply chain performance through supplier selection and performance (M=4.12).

4.8 Diagnostic Tests

The assumptions of regression analysis were tested before the actual modeling. This was meant to ensure that accurate findings have been sought. The subsequent sections detail the findings.

4.8.1 Normality Test

The essence of the normality test is to check and verify whether the data is normally distributed. Kurtosis and Skewness were adopted in testing whether the data was normal. Consider Table 4.10 that offers the findings.

Table 4.10: Normality Test

	N	Skewness		Kurtosis	
	Statistic	Statistic	Std. Error	Statistic	Std. Error
Supply Chain Performance	32	-.782	.414	-.304	.809
Supply Chain Collaboration	32	-1.331	.414	2.831	.809
Supplier Development	32	-1.478	.414	2.744	.809
Supplier Selection and Evaluation	32	-.260	.414	-.287	.809

Source: Field Survey Data (2020)

The values of Skewness and Kurtosis on the variables of the study were generated for the purpose of testing for presence of normality in the data. From the results, all the variables had values within the threshold of +2 or -2 (Kothari, 2004). This could be an indication that the data used in the study was normally distributed. Being normally distributed, it can be inferred that the data was suitable for regression analysis as it did not violate the key assumption of normality.

4.8.2 Heteroscedasticity test

The essence of Heteroscedasticity as a test is to project and validate whether there exists variability in residual from a given time to another (Godfrey, 2008). Scatter plots were used for running this Heteroscedasticity test.

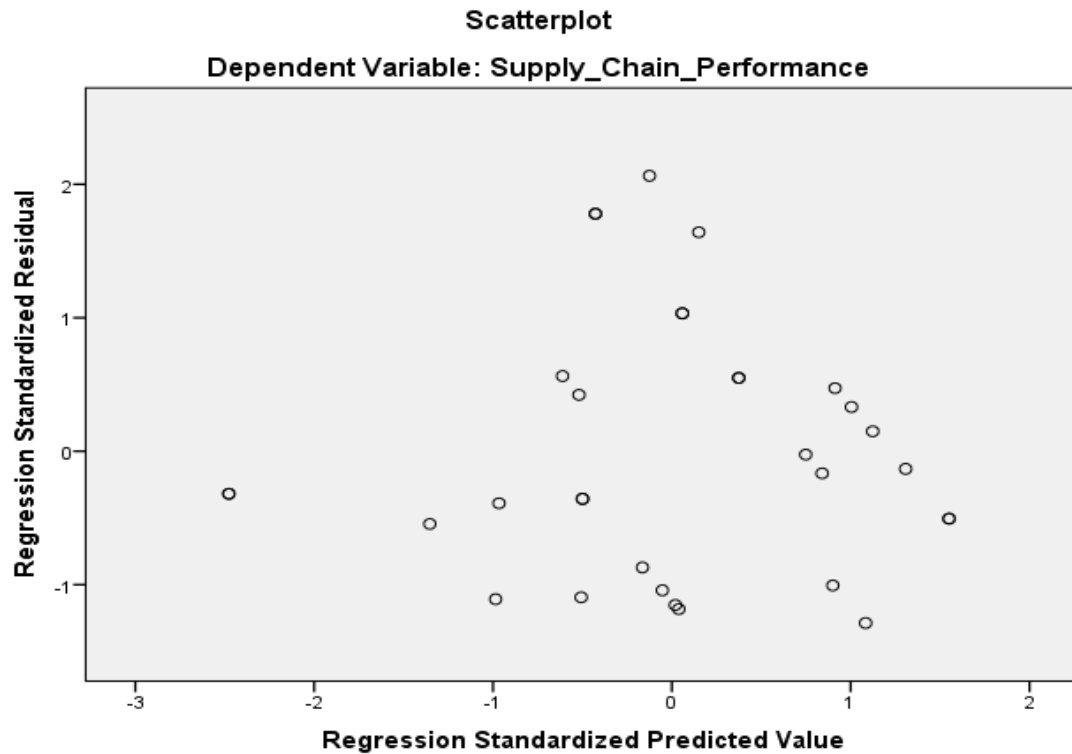


Figure 4.2: Scatter Plot
Source: Field Survey Data (2020)

The study used graphical method to test for the presence of Heteroscedasticity in the data. The interpretation of the scatter plot is usually done by a close examination of the data points. From the results of the spread of the data points, there is well established pattern as they are spread evenly. This finding is in line Godfrey (2008) and it is an indication that there was no heteroscedasticity. As such, the data was suitable for the researcher to carry out regression analysis.

4.8.3 Multicollinearity

Whenever one of the independent study variables are linked with another one, such a situation would be viewed as multicollinearity. This should not be the case as such

variables should only be linked with the dependent study variable. Variance Inflation Factor VIF helped in testing multicollinearity as shown in Table 4.11.

Table 4.11: Test for Multicollinearity

	Collinearity Statistics	
	Tolerance	VIF
Supply chain collaboration	.168	5.954
Supplier development	.254	3.944
Supplier selection and evaluation	.445	2.246

a. Dependent Variable: Supply Chain Performance

Source: Field Survey Data (2020)

The results in Table 4.11 indicate that supply chain collaboration had VIF of 5.954, supplier development had 3.944 and supplier selection and evaluation had 2.246. Thus, the value of VIF for the three independent variables of the study was within the threshold of 1-10. The inference drawn from this finding was that there was no severe multicollinearity in the data which meant that analysis could proceed.

4.9 Correction Results

Correlation analysis was conducted to establish the relationship between supplier relationship management and supply chain performance. The findings are as indicated in Table 4.12.

Table 4.12: Correction Results

		Supply Chain Performance	Supply Chain Collaboration	Supplier Development	Supplier Selection and Evaluation
Supply Chain Performance	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	32			
Supply Chain Collaboration	Pearson Correlation	.756**	1		
	Sig. (2-tailed)	.000			
	N	32	32		
Supplier Development	Pearson Correlation	.547**	.855**	1	
	Sig. (2-tailed)	.001	.000		
	N	32	32	32	
Supplier Selection and Evaluation	Pearson Correlation	.806**	.726**	.535**	1
	Sig. (2-tailed)	.000	.000	.002	
	N	32	32	32	32

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

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

Source: Field Survey Data (2020)

The value of Pearson Correlation Coefficient (r) was used to estimate the strength of the relationship between the variables of the study. In this study, it can be shown that supply chain collaboration ($r=0.756$) was found to have a strong positive relationship with supply chain performance. The findings are supported by Agyei-Owusu, Asamoah, Andoh-Baidoo and Akaribo (2016) who conducted a study on the effect of supply chain collaboration on logistics performance using a case study of Sub-Saharan Nation's petroleum downstream and showed a positive effect on external collaboration and that supply chain collaboration is considered to be one of the most effective measures used by firms in improving their level of performance. Al-Doorri (2019) researched on how supply chain collaboration affects performance in the automotive industry and revealed that information sharing (IS) and joint decision making (JDM) significantly affects the operational performance while Electronic Data Interchange (EDI) does not have a significant effect on operational performance.

The study established that supplier development ($r=0.547$) had a strong relationship with supply chain performance. This finding is echoed by Musyoki and Ngugi (2017) who researched on how the practices of supplier development affect performance of pharmaceutical suppliers for hospitals in Nairobi City County and revealed that supplier training, information sharing, management support, strategic partnership and performance of pharmaceutical suppliers for hospitals in Nairobi City County positively and significantly related to each other. Mwesigwa and Nondi (2018) investigated on how supplier development affects procurement performance of World Food Programme and it was established that supplier development significantly and positively affected procurement performance at WFP in Kenya.

The findings of the study indicated that supplier selection and evaluation ($r=0.806$) had strong relationship with supply chain performance. The finding is supported by Krop and Iravo (2016) who researched on how supplier selection affects performance of procurement function in the public sector using a case of West Pokot County government where it was indicated that all the supplier selections dimensions significantly and positively affect procurement performance. Mutai and Okello (2016) researched on how supplier evaluation affects procurement performance of public universities in Kenya and the findings revealed that the quality engagement of

suppliers, the financial ability of suppliers and the competence of suppliers have a major impact on the performance of procurement role of public university campuses in Kericho County.

4.10 Regression Results

Regression analysis was used to establish the effect of supplier relationship management on supply chain performance. This was meant to test the formulated hypotheses of the study. The results were established and summarized as indicated in subsequent sections.

4.10.1 Model Summary

Consider Table 4.13 that gives a breakdown of the model summary that offers a link between supplier relationship management and supply chain performance.

Table 4.13: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.850 ^a	.723	.693	1.33556

a. Predictors: (Constant), Supplier Selection and Evaluation, Supplier Development, Supply Chain Collaboration

b. Dependent Variable: Supply Chain Performance

Source: Field Survey Data (2020)

Table 4.13 indicates the value of R as 0.850; this means that there was a strong relationship between supplier relationship management and supply chain performance of the studied firms. The value of adjusted R square is given as 0.693, which implies that 69.3% variation in supply chain performance is jointly explained by supplier relationship management in the firm. The findings are supported by Prabusankar (2017) researched on how the practices of supply chain management affects competitive advantage of small manufacturing firms in Coimbatore District and revealed that strategic supplier partnership, information quality, internal lean practice, information sharing and customer relationship positively affected the competitive advantage of small manufacturing firms. Kosgei and Gitau (2016) found that understanding and practicing supply chain management with a key emphasis on supplier relationships is an important prerequisite for staying competitive in the global race and developing the market profitability. Nyamasege and Biraori (2015)

investigated on how supplier relationship management affects the effectiveness of supply chain management in the Kenya public sector and revealed that lack of supplier relationship management strategies lowered the effectiveness of supply chain management functions. Tangus, Oyugi, Rambo and Rono (2015) researched on how supplier relationship management practices affects performance of manufacturing firms in Kisumu County, Kenya and revealed that increase in the three supplier relationship management practices were associated with increased levels of performance.

4.10.2 Analysis of Variance

The results of the ANOVA are as indicated in Table 4.14. The essence of ANOVA was to test the overall significance of the regression model.

Table 4.14: ANOVA

	Sum of Squares	df	Mean Square	F	Sig.
Regression	130.056	3	43.352	24.304	.000 ^b
Residual	49.944	28	1.784		
Total	180.000	31			

a. Dependent Variable: Supply Chain Performance

b. Predictors: (Constant), Supplier Selection and Evaluation, Supplier Development, Supply Chain Collaboration

Source: Field Survey Data (2020)

From the finding in Table 4.14, the value of F calculated is 24.304 with $p < 0.05$. The implication of this finding is that the overall model was significant and the supplier relationship management has significant effect on supply chain performance. In this regard, the general objective will have been achieved. These findings are consistent with Prabusankar (2017) who researched on how the practices of supply chain management affects competitive advantage of small manufacturing firms in Coimbatore District and revealed that strategic supplier partnership, information quality, internal lean practice, information sharing and customer relationship positively affected the competitive advantage of small manufacturing firms. Kosgei and Gitau (2016) found that understanding and practicing supply chain management with a key emphasis on supplier relationships is an important prerequisite for staying competitive in the global race and developing the market profitability. Nyamasege and Biraori (2015) investigated on how supplier relationship management affects the

effectiveness of supply chain management in the Kenya public sector and revealed that lack of supplier relationship management strategies lowered the effectiveness of supply chain management functions. Tangus *et al.* (2015) researched on how supplier relationship management practices affects performance of manufacturing firms in Kisumu County, Kenya and revealed that increase in the three supplier relationship management practices were associated with increased levels of performance.

4.10.3 Regression Coefficients and Significance

The results on regression beta coefficients and significance that was determined using p-values are indicated in Table 4.15.

Table 4.15: Regression Beta Coefficients

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	2.318	2.579		.899	.376
Supply Chain Collaboration	.417	.178	.570	2.345	.026
Supplier Development	-.188	.177	-.210	-1.064	.296
Supplier Selection and Evaluation	.498	.147	.505	3.384	.002

a. Dependent Variable: Supply Chain Performance

Source: Field Survey Data (2020)

The following is the predicted model:

$$Y = 2.318 + .417X_1 - .188X_2 + .498X_3$$

Where Y is supply chain performance

X₁ is Supply Chain Collaboration

X₂ is Supplier Development

X₃ is Supplier Selection and Evaluation

The first hypothesis was H₀₁: Supply chain collaboration has no significant effect on supply chain performance of the alcoholic beverage companies in Kenya. To achieve this objective, the beta coefficients and p-values were appropriately interpreted. From

the results, when all the factors are held constant, a unit change in supply chain collaboration would increase supply chain performance of the alcoholic beverage manufacturing firms in Kenya by 0.417 units. The p-value was given as 0.026 which was less than 0.05. Thus, the first hypothesis H_{01} was rejected. The finding is supported by Agyei-Owusu, Asamoah, Andoh-Baidoo and Akaribo (2016) who showed a positive effect on external collaboration and that supply chain collaboration is considered to be one of the most effective measures used by firms in improving their level of performance. Al-Doori (2019) revealed that information sharing (IS) and joint decision making (JDM) significantly affects the operational performance while Electronic Data Interchange (EDI) does not have a significant effect on operational performance. Doganay and Ergun (2017) revealed that supply chain collaboration (SCC) significantly and positively affects supply chain performance (SCP). Ali, Bentley and Cao (2016) revealed that supplier collaboration is a key factor for a firm to practice green supply chain management (GSCM) in their operations especially in the small and medium sized enterprises (SMEs). Botes, Niemann and Kotzé (2017) revealed that collaboration between buyers and suppliers does not contribute directly to resilience in the supply chain, but instead helps the context to supply chain resilience.

The second hypothesis of the study was: H_{02} : Supplier development has no significant effect on supply chain performance of the alcoholic beverage companies in Kenya. Based on the results, it was shown that a unit decrease in supplier development when other factors are held constant would lead to 0.188 unit increase in supply chain performance of the alcoholic beverage companies in Kenya. It was also noted that the p-value was 0.296 which was above 0.05. Thus, the second hypothesis is accepted. The finding contradicts Musyoki and Ngugi (2017) revealed that the practices of supplier development and performance of pharmaceutical suppliers are positively and significantly related to each other. Mwesigwa and Nondi (2018) investigated on how supplier development affects procurement performance of World Food Programme and it was established that supplier development significantly and positively affected procurement performance at WFP in Kenya. Cheboss, Namusonge and Nambuswa (2017) researched on how supplier development affects procurement

performance in Bungoma County using a case study of Nzoia Sugar Company and revealed that supplier incentive and procurement performance positively related to each other. Companies need to try, develop and sustain relationships with capable suppliers in order to compete and thrive, and realize the full value of these relationships.

The third hypothesis of the study was H_{03} : supply selection and evaluation has no significant effect on supply chain performance of the alcoholic beverage companies in Kenya. From the results, the study noted when all the factors are held constant; a unit change in supply selection and evaluation would lead to 0.498 unit increase in supply chain performance of beverage alcoholic manufacturing firms. The p-value was 0.002 which was less than 0.05. Thus, the third hypothesis of the study was rejected. Krop and Iravo (2016) researched on how supplier selection affects performance of procurement function in the public sector using a case of West Pokot County government where it was indicated that all the supplier selections dimensions significantly and positively affect procurement performance. Mutai and Okello (2016) researched on how supplier evaluation affects procurement performance of public universities in Kenya and the findings revealed that the quality engagement of suppliers, the financial ability of suppliers and the competence of suppliers have a major impact on the performance of procurement role of public university campuses in Kericho County. Kamath, Barkur and Naik (2018) conducted a study to find out whether supplier evaluation impact process improvement and showed that evaluation of suppliers has a major impact on process improvements.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter is set out to provide a summary of the analyzed findings with the conclusions and the recommendations as informed by the specific objectives. The findings on the formulated hypotheses whether they were accepted or rejected are also provided in this chapter. The limitations and areas requiring further research are also indicated in this chapter.

5.2 Summary of the Findings

This section is set out to provide a summary of the findings from the analysis.

5.2.1 Supply Chain Collaboration and Supply Chain Performance

The study established that supply chain collaboration was highly practiced among the studied organizations. In other words, this implies that majority of the studied firms collaborated with their suppliers. As argued by Oghazi et al. (2016), the essence of SRM is to create value on a joint basis in the entity while cultivating a sense of communication with the suppliers. The result is also consistent with Agyei-Owusu et al. (2016) who conducted a study on the effect of supply chain collaboration on logistics performance using a case study of Sub-Saharan Nation's petroleum downstream and revealed a relatively higher level of external collaboration compared to internal collaboration among the firms surveyed, while internal collaboration had a greater effect on the logistics output of a company.

Respondents agreed that their organization effectively controlled the inventory turnover besides ensuring that there was sustainability when it came to handling the supplier collaborations. There were embargoes on oil within the period of 1970s and this heightened the need for purchasing as an activity in the entity (Govindan, Azevedo, Carvalho & Cruz-Machado, 2014). According to Mitra and Datta (2014)

one of the elements of SRM is coordination of the activities at an operational level by coming up with plans that are joint

Respondents further agreed that their organization improved its overall performance by creating collaborations with its key suppliers, it ensured that there was enhancement of the decision making process besides ensuring that there was a continuous competitive growth through the establishment of positive supplier collaborations. The results are consistent with Mitra and Datta (2014) indicated that involving suppliers during the development of the products helps the entity to effectively leverage on the capabilities of its suppliers. Al-Doori (2019) revealed that entering into agreements with strategic dimension allow the entity to establish processes that are efficient while exploiting new markets.

The value of Pearson Correlation Coefficient (r) was used to estimate the strength of the relationship between the variables of the study. In this study, it can be shown that supply chain collaboration ($r=0.756$) was found to have a strong positive relationship with supply chain performance. The findings are supported by Agyei-Owusu, Asamoah, Andoh-Baidoo and Akaribo (2016) who conducted a study on the effect of supply chain collaboration on logistics performance using a case study of Sub-Saharan Nation's petroleum downstream and showed a positive effect on external collaboration and that supply chain collaboration is considered to be one of the most effective measures used by firms in improving their level of performance. Al-Doori (2019) researched on how supply chain collaboration affects performance in the automotive industry and revealed that information sharing (IS) and joint decision making (JDM) significantly affects the operational performance while Electronic Data Interchange (EDI) does not have a significant effect on operational performance.

The first hypothesis was H_{01} : Supply chain collaboration has no significant effect on supply chain performance of the alcoholic beverage companies in Kenya. To achieve this objective, the beta coefficients and p-values were appropriately interpreted. From the results, when all the factors are held constant, a unit change in supply chain collaboration would increase supply chain performance of the alcoholic beverage manufacturing firms in Kenya by 0.417 units. The p-value was given as 0.026 which

was less than 0.05. Thus, the first hypothesis H_{01} was rejected. The finding is supported by Agyei-Owusu, Asamoah, Andoh-Baidoo and Akaribo (2016) who showed a positive effect on external collaboration and that supply chain collaboration is considered to be one of the most effective measures used by firms in improving their level of performance. Al-Doori (2019) revealed that information sharing (IS) and joint decision making (JDM) significantly affects the operational performance while Electronic Data Interchange (EDI) does not have a significant effect on operational performance. Doganay and Ergun (2017) revealed that supply chain collaboration (SCC) significantly and positively affects supply chain performance (SCP). Ali, Bentley and Cao (2016) revealed that supplier collaboration is a key factor for a firm to practice green supply chain management (GSCM) in their operations especially in the small and medium sized enterprises (SMEs). Botes, Niemann and Kotzé (2017) revealed that collaboration between buyers and suppliers does not contribute directly to resilience in the supply chain, but instead helps the context to supply chain resilience.

5.2.2 Supplier Development and Supply Chain Performance

The study established that supplier development was highly practiced among the studied organizations as an aspect of their supplier relationship management. The finding is supported by Wachiuri, Waiganjo and Oballah (2015) who noted that supplier development basically entails the process of working on a one - to-one basis with some suppliers to enhance their efficiency to the benefit of the purchasing organization and it involves accepting supplier knowledge and aligning it with the business needs of the buying organization, and vice versa where possible. Mwesigwa and Nondi (2018) established that poor supplier development can result in low supplier's performance and inflexibility to change, lack of coordination and training, poor motivation and fragmentation of information between supplier and buyer.

More specifically, respondents strongly agreed that their organization ensured that there was transparency in its supply chain operations which is consistent with Doganay and Ergun (2017) who indicated that there is need to be transparent contact and ability to consider other people's feedback. It was shown that the organization

was competent towards improving the performance of its supply chain and that the organization maintained supplier responsiveness when it came to product delivery. Supply chain performance refers to the extended supply chain's activities in meeting end-customer requirements, including product availability, on-time delivery, and all the necessary inventory and capacity in the supply chain to deliver that performance in a responsive manner (Hohenstein, Feisel & Hartmann, 2014). Respondents further agreed that their organization had established strong relationships with most of the suppliers. This is consistent with the relationship marketing theory that was advanced by Waters (1989) and it argues that the entity is established to interact with other parties in the environment for mutual benefit. On the other hand, most of the respondents moderately agreed on the fact that their organization established new products with the help of its suppliers.

The study established that supplier development ($r=0.547$) had a strong relationship with supply chain performance. This finding is echoed by Musyoki and Ngugi (2017) who researched on how the practices of supplier development affect performance of pharmaceutical suppliers for hospitals in Nairobi City County and revealed that providing training to suppliers, sharing information with them all positively and significantly related to each other. Mwesigwa and Nondi (2018) investigated on how supplier development affects procurement performance of World Food Programme and it was established that supplier development significantly and positively affected procurement performance at WFP in Kenya.

The second hypothesis of the study was: H_{02} : supplier development has no significant effect on supply chain performance of the alcoholic beverage companies in Kenya. Based on the results, it was shown that a unit decrease in supplier development when other factors are held constant would lead to 0.188 unit increase in supply chain performance of the alcoholic beverage companies in Kenya. It was also noted that the p-value was 0.296 which was above 0.05. Thus, the second hypothesis is accepted. The finding contradicts Musyoki and Ngugi (2017) who researched on how the practices of supplier development affect performance of pharmaceutical suppliers for hospitals in Nairobi City County and revealed that supplier training, information sharing, management support, strategic partnership and performance of

pharmaceutical suppliers for hospitals in Nairobi City County positively and significantly related to each other. Mwesigwa and Nondi (2018) investigated on how supplier development affects procurement performance of World Food Programme and it was established that supplier development significantly and positively affected procurement performance at WFP in Kenya. Cheboss, Namusonge and Nambuswa (2017) revealed that supplier incentive and procurement performance positively related to each other. Companies need to try, develop and sustain relationships with capable suppliers in order to compete and thrive, and realize the full value of these relationships.

5.2.3 Supplier Selection and Evaluation and Supply Chain Performance

It was noted that majority of the studied firms did practice supplier selection and evaluation as a way of supplier relationship management. The finding is supported by Krop and Iravo (2016) who indicated that supplier selection involves a process by which businesses identify, evaluate, and contract with suppliers. Mutai and Okello (2016) shared that effective selection of suppliers is one of the essential techniques to enhance the efficiency of any organization's production, which has a direct effect on the productivity and credibility of the business. Supplier selection is one of the methods used by companies to find the best suppliers. Evaluation of suppliers is the quantitative and qualitative assessment of suppliers to ensure a list of the best in class suppliers is available for use (Mutai & Okello, 2016).

Respondents agreed that the organization ensured that there was efficiency when it came to supplier evaluation besides maintaining production level by ensuring continuous evaluation of its suppliers). The finding is consistent with Mutai and Okello (2016) who researched on how supplier evaluation affects procurement performance of public universities in Kenya and shared that effective selection of suppliers is one of the essential techniques to enhance the efficiency of any organization's production, which has a direct effect on the productivity and credibility of the business. Respondents further agreed that the organization was effective in selecting and evaluating its suppliers, the organization evaluated its suppliers at the

right time besides monitoring its supply chain performance through supplier selection and performance.

The findings of the study indicated that supplier selection and evaluation ($r=0.806$) had strong relationship with supply chain performance. The finding is supported by Krop and Iravo (2016) who researched on how supplier selection affects performance of procurement function in the public sector using a case of West Pokot County government where it was indicated that all the supplier selections dimensions significantly and positively affect procurement performance. Mutai and Okello (2016) researched on how supplier evaluation affects procurement performance of public universities in Kenya and the findings revealed that the quality engagement of suppliers, the financial ability of suppliers and the competence of suppliers have a major impact on the performance of procurement role of public university campuses in Kericho County.

The third hypothesis of the study was H_{03} : supplier selection and evaluation has no significant effect on supply chain performance of the alcoholic beverage companies in Kenya. From the results, the study noted when all the factors are held constant; a unit change in supply selection and evaluation would lead to 0.498 unit increase in supply chain performance of beverage alcoholic manufacturing firms. The p-value was 0.002 which was less than 0.05. Thus, the third hypothesis of the study was rejected. Krop and Iravo (2016) researched on how supplier selection affects performance of procurement function in the public sector using a case of West Pokot County government where it was indicated that all the supplier selections dimensions significantly and positively affect procurement performance. Mutai and Okello (2016) researched on how supplier evaluation affects procurement performance of public universities in Kenya and the findings revealed that the quality engagement of suppliers, the financial ability of suppliers and the competence of suppliers have a major impact on the performance of procurement role of public university campuses in Kericho County. Kamath, Barkur and Naik (2018) conducted a study to find out whether supplier evaluation impact process improvement and showed that evaluation of suppliers has a major impact on process improvements.

5.3 Conclusion

Correlation results indicated that supply chain collaboration was found to have a strong positive relationship with supply chain performance. When all the factors are held constant, a unit change in supply chain collaboration would increase supply chain performance of the alcoholic beverage manufacturing firms in Kenya by 0.417 units. The p-value was given as 0.026 which was less than 0.05. Thus, the first hypothesis H_{01} was rejected. The study established that supply chain collaboration was highly practiced among the studied organizations. In other words, this implies that majority of the studied firms collaborated with their suppliers. Respondents agreed that their organization effectively controlled the inventory turnover besides ensuring that there was sustainability when it came to handling the supplier collaborations. Respondents further agreed that their organization improved its overall performance by creating collaborations with its key suppliers, it ensured that there was enhancement of the decision making process besides ensuring that there was a continuous competitive growth through the establishment of positive supplier collaborations.

The results of correlation analysis indicated that supplier development ($r=0.547$) had a strong relationship with supply chain performance. From regression results, it was shown that a unit decrease in supplier development when other factors are held constant would lead to 0.188 unit increase in supply chain performance of the alcoholic beverage companies in Kenya. It was also noted that the p-value was 0.296 which was above 0.05. Thus, the second hypothesis is accepted. The study established that supplier development was highly practiced among the studied organizations as an aspect of their supplier relationship management. More specifically, respondents strongly agreed that their organization ensured that there was transparency in its supply chain operations. It was shown that the organization was competent towards improving the performance of its supply chain and that the organization maintained supplier responsiveness when it came to product delivery. Respondents further agreed that their organization had established strong relationships with most of the suppliers. On the other hand, most of the respondents moderately agreed on the fact that their organization established new products with the help of its suppliers.

Based on correlation analysis, it was noted that supplier selection and evaluation ($r=0.806$) had strong relationship with supply chain performance. Regression results showed that when all the factors are held constant; a unit change in supplier selection and evaluation would lead to 0.498 unit increase in supply chain performance of beverage alcoholic manufacturing firms. The p-value was 0.002 which was less than 0.05. Thus, the third hypothesis of the study was rejected. It was noted that majority of the studied firms did practice supplier selection and evaluation as a way of supplier relationship management. Respondents agreed that the organization ensured that there was efficiency when it came to supplier evaluation besides maintaining production level by ensuring continuous evaluation of its suppliers. Respondents further agreed that the organization was effective in selecting and evaluating its suppliers, the organization evaluated its suppliers at the right time besides monitoring its supply chain performance through supplier selection and performance.

5.4 Recommendations of the Study

The results of regression analysis indicated that supplier selection and evaluation had the largest and significant effect on supply chain performance of alcoholic beverage manufacturing firms in Kenya. Based on this finding, the study recommends that the supply chain managers and the procurement managers of the alcoholic beverage companies in Kenya should optimize and improve on their supplier selection and evaluation criteria so as to maximize their supply chain performance.

Regression results showed that supply chain collaboration had the second largest and significant effect on supply chain performance of the alcoholic beverage companies in Kenya. In view of this finding, the study recommends that when making supplier relationship management decisions aimed at optimizing supply chain performance, the supply chain managers of the alcoholic beverage companies in Kenya should place more emphasis on supply chain collaborations.

In view of the regression results, it was shown that supplier development had the least and insignificant effect on supply chain performance of the alcoholic beverage companies in Kenya. The study therefore recommends for more improvement on

supplier development practices in place among the alcoholic beverage companies in Kenya to ensure that they significantly contribute towards supply chain performance.

5.5 Limitations of the Study

The study was limited to supplier relationship management as the independent variable with supply chain performance as the dependent variable. The three constructs of supplier relationship management that the study focused on include supplier collaboration, supplier development and supplier selection and evaluation. Contextually, the study was limited to 48 alcoholic beverage companies in Kenya. The adoption of census meant that all the firms were studied. However, this was a relatively low sample size which was a limitation since it limited generalization of the findings to other nonalcoholic beverage manufacturing firms in Kenya.

The study was also limited to primary data whose collection was done with the aid of the questionnaire. The challenge faced during collection of this primary data was occasioned by the Corvid-19 pandemic that meant social distancing and working from home among most respondents. Hence, it was a challenge to collect data from respondents at such a time when the rate of Corvid-19 infection rate was so high in the country.

5.6 Areas for Further Research

Based on the aforementioned limitations, this study recommends further studies to be conducted taking a relatively larger sample size. This can be achieved by focusing on the entire manufacturing firms in Kenya. Aside from the manufacturing firms, future studies can also be conducted in the service sector especially those firms dealing in first moving consumer goods (FMCGs). This will give more room for comparison of the findings. Future studies can also be conducted linking supplier relationship management with other aspects like operational performance aside from supply chain performance.

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APPENDICES

Appendix I: Questionnaire

INSTRUCTIONS:

Kindly answer the following questions by writing a brief answer or ticking in the space or boxes provided respectively.

PART A: BACKGROUND INFORMATION

Please tick (√) as appropriate

1. Name of your organization (Optional)
2. Number of year it has been in operations
 Below 5 years () 6-10 years () more than 10 years ()
3. Kindly indicate your age bracket.
 21-30 years () 30-40 years ()
 41-50 years () Above 51 years. ()
4. Level of education
 Certificate () College ()
 University () Postgraduate ()
 Others (please specify).....
5. How many years have you worked in the organization?
 Less than 1 year () 1 - 3 years ()
 4 - 5 years () 5 - 8 years ()

PART B: SUPPLY CHAIN COLLABORATION

6. For each of these statements on information sharing, kindly indicate the extent of you agree on how it affects supply chain performance in your organization. Use the Likert scale which ranges from 1 -5 where 1= Not at all; 2 = Little Extent; 3= Moderate Extent; 4= Large Extent and 5= Very Large Extent.

Statement	1	2	3	4	5
The organization ensures that the enhancement of the decision making process					
The organization effectively controls the inventory turnover					
The organization ensures that there is sustainability when it comes to handling the supplier collaborations					
The organization improves its overall performance by creating collaborations with its key suppliers					
The organization ensures that there is a continuous competitive growth through the establishment of positive supplier collaborations					

PART C: SUPPLIER DEVELOPMENT

7. For each of these statements on delivery time, kindly indicate the extent of you agree on how it affects supply chain performance in your organization. Use the Likert scale which ranges from 1 -5 where 1= Not at all; 2 = Little Extent; 3= Moderate Extent; 4= Large Extent and 5= Very Large Extent.

Statements	1	2	3	4	5
The organization ensures that there is transparency in its supply chain operations					
The organization is competent towards improving the performance of its supply chain					
The organization maintains supplier responsiveness when it comes to product delivery					
The organization has established string relationships with most of the suppliers					
The organization establishes new products the help of its suppliers					

PART D: SUPPLIER SELECTION

8. For each of these statements on supplier quality, kindly indicate the extent of you agree on how it affects supply chain performance in your organization. Use the Likert scale which ranges from 1 -5 where 1= Not at all; 2 = Little Extent; 3= Moderate Extent; 4= Large Extent and 5= Very Large Extent.

Statements	1	2	3	4	5
The organization ensures that there is efficiency when it comes to supplier evaluation					
The organization is effective in selecting and evaluating its suppliers					
The organization evaluates its suppliers at the right time					
The organization monitors its supply chain performance through supplier selection and performance					
The organization maintains its production level by ensuring continuous evaluation of its suppliers					

SECTION E: SUPPLY CHAIN PERFORMANCE

9. Kindly indicate the changes in your supply chain performance over the past five years on the following aspects.

Statement	1	2	3	4	5
The organization ensures that there is cost effectiveness					
Right quality of goods and services have been supplied consistently					
Right quantity of goods and services have been consistently supplied					
The organization ensures that its customers are satisfied with the available products					

*******THANK YOU FOR YOUR PARTICIPATION*******

Appendix II: Observation Checklist

Factor	Observation	
Available technology for information sharing	Yes	
	No	
Available tracking mechanisms to enhance delivery time	Yes	
	No	
Adequate information shared along supply chain to ensure supplier quality	Yes	
	No	
Available equipment for ensuring information sharing along supply chain	Yes	
	No	
	No	