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# **EFFECTS OF SUPPLY CHAIN DISRUPTIONS** ON CUSTOMER SERVICE PERFORMANCE IN BEVERAGE INDUSTRY: A CASE OF EAST AFRICAN BREWERIES, KENYA

Evans Kipkorir Langat



Zetech University, Kenya langatevans07@gmail.com

# Prudence Wambui Karanja

Zetech University, Kenya prudencekaranja2000@gmail.com

#### **Abstract**

The susceptibility of supply chain disruptions around the world has become a growing concern over the last few years. The emergence of the novel corona virus pandemic in Wuhan, China in late 2019 that has so far spread all around the world is a cause of supply chain disruptions globally. The main objective of the study is to establish the effects of supply chain disruptions on customer service performance in beverage industry in Kenya with specific reference on the East African Breweries Limited. The study considered the following variables; supply chain risk, supply chain trends, government policy and supply chain sustainability. The research targeted around 200 employees of the company for data collection. The research also considered a sample of 60 employees equally chosen from the production, procurement and finance departments of the company. Questionnaires were used to collect primary data and secondary data was collected by use of journal, reports, books and the internet. Descriptive statistics method was applied to analyze quantitative data. The study concludes that a lot needs to be done by the management of EABL in ensuring implementation of green supply chain practices within their operations. The study recommends that manufacturing firms within the beverage

industry in Kenya should come up with strategies to help reduce the possibility of supply chain disruptions through creation of risk tolerant and resilient supply chains. The study further recommends that more research be conducted in the area of supply chain disruptions in other forms of industries in Kenya apart from the beverage industry so as to examine if the same case applies to all industries in Kenya

Keywords: Customer service performance, Supply chain risk, Supply chain trends, Government policy, Supply chain sustainability

#### INTRODUCTION

According (Rehman Khan & Yu, 2019) Supply chain management (SCM) is the combination of art and science that goes into improving the way your company finds the raw components it needs to make a product or service and deliver it to customers. The underlying principle of supply chain management is to create an end to end integration between the organization and its suppliers so as to ensure timely flow of quality goods and services to the end users. Many organizations find their supply industry exposed to various forms of risks that results into its disruptions. Supply chain risks can be described risks as internal risks, which either are inherent or arise more directly from management decisions, risks within the supply chain, or risks in the external environment (Wildgoose, 2016)

Chopra and Sodhi, (2014) define Supply chain disruption as any occurrence which has negative consequences for regular supply chain operations and hence, causes some degree of "confusion/disorder" within the supply chain. For example, long lead times for materials can result in production stoppage that may lead to supply chain disruptions within an organization. The occurrence of supply chain disruptions results in decline of the organization customer service performance levels to their end users. This is because various factors such as long lead times will lead to longer delivery time than previously agreed between the organization and its customers.

Chopra and Sodhi, (2014) continue to argue that there is a great need for smooth supply chain operations within organizations, since it results to numerous advantages such as reliable supply to customers at cost effective means therefore increasing the organization customer service performance. It also ensures the organization is able to gain a competitive-advantage over its competitors therefore attracting a new customer base which increases its market share, sales margin and profit margin.

According to (Li et al., 2010) Supply chain disruptions (SCD) has emerged as a distinct topic of supply management research over the past few years. Supply chain disruptions can be

referred to as any occurrence which has negative consequences for regular supply chain operations and hence, causes some degree of "confusion/disorder" within the supply chain. Supply chain risks (SCR) can be urged to be the major cause of supply chain disruptions among various companies within the world. This is because current supply chains accentuate efficiency rather than resilience (Kim, Chen, and Linderman, 2015), thus making them vulnerable to disruptions with increased exposure points. This is because managers are concerned with increasing their supply chain efficiency at any cost without thinking of the effects of their decisions which increases their supply chain vulnerability to disruptions. Therefore, supply chain risks can be referred to as the unpleasant things that might occur within the supply chain that will result into disruptions or stoppage of normal supply chain activities within companies.

According to (Heckmann et al., 2015) there are various factors that can led to supply chain disruptions such as pandemics; like the current pandemic; natural disasters like floods, earthquakes and tsunamis; transport failures and delays such as long lead times and long delivery cycles and price fluctuations. Supply chain disruptions have numerous impacts on companies such as effects on long-term shareholder value, effects on organizational performance, effects on corporate performance among many other impacts. This study focuses on assessing the effects of supply chain disruptions on customer service performance in beverage industry in Kenya with specific reference to the East African Breweries Limited company.

According to (Marley et al., 2014) Supply chain disruptions and related issues are considered the most pressing concerns facing firms competing in today's global marketplace. A disruption can be defined as an unplanned and unanticipated situation in comparison with normal supply-demand coordination risks. Supply chain disruptions have been defined as "unplanned and unanticipated events that disrupt the normal flow of goods and materials within a supply chain".

According to Braziotis et al., (2013) argue that global supply chain networks face unforeseen and uncontrollable disruptions and there is substantial evidence that catastrophic events are on the rise, with an increased frequency. The average cost of disruptive events has grown more than 1000% since the 1960s. Due to this increased complexity and the interrelationship of modern supply chains, the impact of uncertainty has become difficult to predict. (Rehman Khan & Yu, 2019). The implications of supply chain disruptions in the entwined global operations have been evidenced in different kinds of industries over the last decade. Take, for example, the impact of the tsunami catastrophe that struck Japan in March 2011, one of the largest disruptions to global supply chains in modern history, which had important consequences for the electronics industry.

Academics and practitioners argue that in the last few years supply chains have become more vulnerable to disruption. This is supported by findings coming from organizational scientists which indicate that accidents become inevitable or even normal in complex and tightly coupled technological systems. Given this theory, it is not surprising that lengthy and complex supply industry, working with faster speeds, have become more prone to disruptions. (Snyder et al., 2016). Supply chain disruptions can affect companies in two primary ways: financial and service impacts. Financial impact refers to the monetary cost incurred as a consequence of the disruption. Service failures tend to occur during disruptions because companies cannot devote as much attention to meeting customer demand as they can in a normal operating environment (Melnyk et al. 2005). This clearly shows the numerous effects of supply chain disruptions on customer service performance such as failure to meet customer demands.

According to (Pettit et al., 2013) several academic articles and industry reports have highlighted the different disruptions that the world as a whole, organisations and supply chains face. From these sources, it is shown that disruptions can take place in various locations relative to the organisation, starting with intra-organisational disruptions, such as strikes; interorganisational disruptions, such as customs delays; and within the extra-organisational environment, such as new regulations and natural disasters. In an international survey on the sources and consequences of supply chain disruptions, the Business Continuity Institute (2014) only reported the top five disruptions for organisations in sub-Saharan Africa. These include transport network disruptions as number one, followed by the volatility of currency exchange rates, civil unrest and/or conflict, loss of talent and/or skills and finally, outsourcing service failure.

The Business Continuity Institute (2014) also reported the five top-ranked disruptions in 11 regions across the world. The top disruption in six regions, including Europe, the United Kingdom, Canada and Australia, was information technology (IT) or telecommunication outages. Four regions, including the Middle East, North Africa and Asia, listed adverse weather as the biggest disruption. Only sub-Saharan Africa listed transportation network disruptions as their top-ranked disruption. After examining the above report, it can be argued that the disruptions in sub-Saharan Africa differ from all the other regions mentioned in the report. A thorough search on specialist databases such as Google Scholar and SABINET revealed no academic work that focusses on supply chain disruptions in Southern Africa, a subset of sub-Saharan Africa, highlighting the need for such a study.

The context of this study is the 3PL industry, particularly the disruptions that 3PLs and their clients face. Organisations based in South Africa tend to parallel the global trend of increasingly outsourcing non-core activities such as logistics. Third-party logistics are involved in supply chains across numerous industries; thus, this study can provide a holistic picture of supply chain disruptions faced by 3PLs and clients based in South Africa (Vakharia & Yenipazarli, 2008). A variety of academic research has focused on disruptions in different industries, including retail chemical automotive (Thun & Hoenig 2011:242–249), industrial (Wagner & Bode 2008:307–325), fast-moving consumer goods (FMCG) (Agigi, Niemann & Kotzé 2016:1-15; Simba et al. 2017:1-13),petrochemical (Botes, Niemann & Kotze 2017:183–199) and the toy industry (Johnson 2001:106-124). However, no research focusing on specific disruptions within the 3PLindustry was found. In addition, disruptions and the associated risk differs between industries, therefore generalisability cannot be applied. This study on 3PL industry shows an example of the African regional perspective on supply chain disruptions. This shows the adverse effects of the 3PL supply chain disruptions to not only its operations but also its customer service performance. Therefore, contributing insight on the need for further research on effects of supply chain disruptions, such as on customer service performance as this study will focus on.

According to (Hendricks & Singhal, 2005) Kenya's economic growth remains vulnerable to external shocks, especially developments in the global economy, regional stability and security, and weather-related supply shocks. On the domestic front, political stability and national cohesion are essential for improved business confidence and policy predictability. Kenyan authorities should develop mechanisms to respond flexibly to macroeconomic risks and shocks (Republic of Kenya, 2013). For example, in the Kenyan context oil and gas supply chains, many of the security threats identified are attacks perpetrated while oil and gas are transported by sea (for example sea piracy, hijacking), in pipelines (for example theft, sabotage and vandalism) or while it is being extracted from platforms or stored in facilities. For instance, the entire offshore areas of Yemen and Somalia extending to Oman and Kenya have been frequently associated with endemic piracy. Attacks on ships increased by 10 per cent in 2010, mostly by Somali based pirates (Luciani, 2011). This has increased vulnerability of Kenya's supply chain in various sectors.

The Kenya floricultural supply chains have been unable to display consistency and stability in performance (World Bank, 2010). The supply chains have frequently experienced costly discontinuities in the current dynamic markets and vastly-changing technological environments. According to Mckinnon et al. (2007) the floriculture supply chains are inflexible and susceptible to disruption since they are unable to swiftly and suitably respond to emerging international protocols, certification requirements, and to governmental and regulatory changes. All these signs are symptomatic of supply chains typified by disruption (Toigo, 2006). When the floriculture supply chains are disrupted, the economic fundamentals are affected since horticulture is one of Kenya's chief exports (World Bank, 2010). Therefore, a study to investigate the causes of supply chain disruption in the industry was critical in the quest to identify, manage and reverse the negative growth experienced. The two scenarios were aimed at shedding a light on the need for further research on this area of supply chain disruption within the various industries in Kenya. As they clearly show the numerous risks for exposure to supply chain disruptions among various industries in Kenya. Therefore, this study on the effects of supply chain disruptions on customer service performance in beverage industry in Kenya will act as a sample for all industries in Kenya that are susceptible to supply chain disruptions within their day-to-day supply chain operations.

While still the dominant producer in Kenya, East African Breweries Limited (EABL, a subsidiary of Diageo) has seen competition intensify in recent years from small local brewers and imports of international brands such as Heineken and SABMiller. That said, East African Breweries Limited still controls around 90% of the Kenyan beer market, and continues to expand into the rest of East Africa. With breweries, distilleries, support industries and a distribution network across the region, the group's diversity is an important factor in delivering the highest quality brands to East African consumers and long-term value to East African investors. Proficiency and excellent customer service are proof of their commitment to be the market leader. These attributes have placed them at the forefront in the beer industry, and positioned them to continue increasing the scope of their customer solutions, services and performance (Juma, 2016).

### Statement of the problem

According to (Ambulkar et al., 2015) Supply chain disruptions can result into poor customer service performance. For customer satisfaction to be achieved, aspects of the supply chain relationships that include communication, trust, conformity, dependence, commitment and cooperation which connects all the players in the supply chain need to be enhanced. (Rajabzadeh, Khadivar, Kazemi, 2007). Any factor(s) that violate these dimensions of supply chain relationships will most likely result into poor customer service performance which arises from customer dissatisfaction. A number of studies have been done in the area of supply chain disruptions. A study by Kevin Hendricks, Vinod R. Singhal (2005) on the effects of supply chain disruptions on long-term shareholder value, profitability and share price volatility. The study revealed the long-term effects of supply chain disruptions on corporate performance. The findings were based on a study of nearly 800 instances of supply chain disruptions experienced by publicly traded firms. It provided the estimates on the effect of disruptions on long-term shareholder value, profitability, and share price volatility (a measure of the risk of the firm). The study presented the most comprehensive and detailed analysis published to date on the performance effects of supply chain disruptions. The analysis used objective data and rigorous

estimation methodologies to isolate the effect of disruptions on different measures of corporate performance. The study revealed that: disruptions increases the risk of the firm; disruptions have a significant negative effect on profitability; disruptions have a debilitating affect on performance as firms do not quickly recover from disruptions and disruptions have a negative implication across the board effect on stock price, profitability, and share price volatility. The study clearly showed that it does not matter who caused the disruption, what was the reason for disruption, what industry a firm belonged to, or when the disruption happened. This is because disruptions devasted the firm's corporate performance.

Paul Jackton Ambayo, (2012) did a research study on supply chain vulnerability and customer satisfaction on petroleum products in Kenya. The study involved a cross sectional survey of the registered distributors of petroleum products in Kenya. It adopted a descriptive approach in establishing the impact of Supply chain vulnerability and customer satisfaction on petroleum products in Kenya. The research employed a census of 54 firms out of which, 30 responded. This study revealed that there is a positive relationship between the causes of supply chain vulnerability and customer dissatisfaction. The factors targeted as the causes of supply chain vulnerability were like focus on efficiency rather than effectiveness, globalization of supply industry, focused factories and centralized distribution systems, trends to outsourcing, reduction of supplier base, volatility of demand, lack of visibility and control, natural calamities, just in time production system and regulations have negative elements on customer satisfaction elements studied like price, speed, quality, delivery time and flexibility.

Although a number of studies have been done on causes of supply risk, supply chain disruption and supply chain vulnerability. There is no study that has given an indication on how supply chain disruptions effects on customer service performance in the beverage industry in Kenya with specific reference to the East African Breweries Limited. This is the gap the current study seeks to fill.

# **General Objective**

To establish the effects of supply chain disruptions on customer service performance in beverage industry in Kenya with specific reference on the East African Breweries Limited.

# **Specific Objectives**

- To establish the effects of supply chain risks on customer service performance in beverage industry in Kenya.
- To examine the effects of supply chain trends on customer service performance in ii. beverage industry in Kenya.



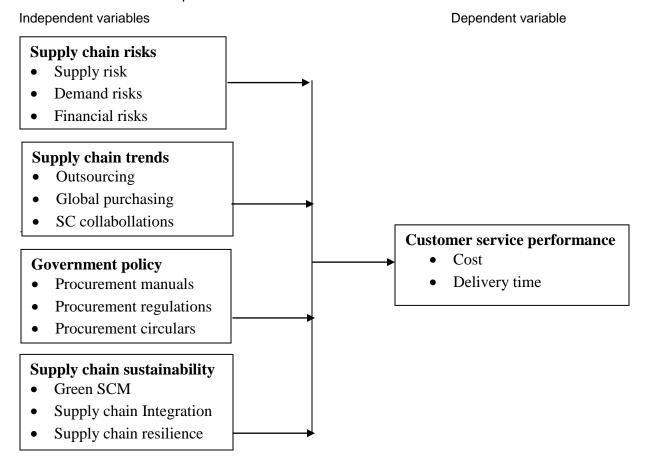
- iii. To find out the effects of government policies on customer service performance in beverage industry in Kenya.
- iv. To assess the effects of supply chain sustainability on customer service performance in beverage industry in Kenya.

#### Research Questions.

- i. To what extend does supply chain risks affect customer service performance in beverage industry in Kenya?
- ii. How do supply chain trends affect customer service performance in beverage industry in Kenya?
- iii. To what extend does government policies affect customer service performance in beverage industry in Kenya?
- iv. How does supply chain sustainability affect customer service performance in beverage industry in Kenya?

# **Conceptual Framework**

The relationship between supply chain disruptions and customer service performance can be summarized in the conceptual framework below:



# Supply Chain Risks

Supply chain risk management (SCRM) is extensive and spans all areas of the supply chain. At the tactical level, risk management is the continual activity of detection, measurement and evaluation of potential supply chain disruption caused by all varieties of supply chain risk, emanating both from within or outside the supply chain. Supply chain risk management seeks to manage, control, reduce or eliminate real or potential risk exposure to supply chain performance. Risk is the actual or potentially negative impact on supply chain performance. Effective risk management decreases cost by reducing the probability and impact of supply chain disruption while improving performance of the supply chain. Effective supply chain risk solutions depend on compatibility with an organization's business strategy and mission statement, product families, markets and supply chain partners. There is a great need for incorporation of SCRM within companies polices by the management so as to reduce the likelihood of their supply chain exposure to risks that lead to supply chain disruptions, which results into negative results for these companies.

# Supply Chain Trends

Supply chains around the world are evolving making various companies to re-evaluate their supply chain models and structures so as to ensure up to date compliance with new changes within their supply chain operations. External pressures, technology trends and increase in the need for customer satisfaction can be said to be some of the major factors that have led to the need for determination of how future supply chains will be structured. This will ensure that the full capabilities of supply chains are met effectively and efficiently so as to meet the company's goals and objectives. Some of the recent supply chain trends include: the block chain technology in supply chains that has enabled more transparent and accurate end-to-end tracking with supply chains; supply chain collaboration among various stakeholders within the supply chain so as to enjoy numerous advantages for both parties; adaptation of supply chain digitalization and building of customer responsive supply chain through adaptation of agile supply chains. These trends have transformed supply chain structures worldwide.

#### **Government Policies**

Government policies are rules or a principle that hopefully guides better decision making that will result into positive outcomes that enhance the community or country. A government policy contains the reasons for how things are to be done, that is, in a certain way and why that policy must be used. This leads to the development of procedures and protocols that ensure policies are conducted in an appropriate manner. Procedures and protocols dictate the "how," "where,"

and "when" of how policies will be executed. Government policy also describes a course of action, creating a starting point for change within normal operations so as to ensure effective changes are met to ensure compliance with the new regulations within various sectors of the economy. These new regulations can influence: how much tax the community pays; immigration status and laws; pensions; parking fines; and even where one may go to school. While policies are driven to be non-discriminatory, they can affect specific groups of individuals, businesses and certain countries that want to operate in a given foreign country. Policies are not laws, but they can lead to laws when signed into law by the relevant bodies. Therefore, government policies have key influence within companies' operations within the economy.

# Supply Chain Sustainability

Supply chain sustainability involves incorporation of environmental-friendly measures and practices into the day-to-day operations of supply chain activities. The major reasons for adaptation of sustainable practices within supply chain operations can be urged to be: customer demand for incorporation of sustainable practices by companies within their operations; the need for compliance with set government legislations on sustainable practices adaptation by companies within their operations; the realization of great cost savings advantage as a result of adaptation of sustainable practices within the company operations; the ability to access greater market share by companies as a result of incorporation of sustainable practices such access to the global marketplace and enjoyment of competitive advantage by companies as a result of adaptation of sustainable practices within their supply chains, are some of the reasons that have enhanced the adaptation of sustainable practices within supply chains.

There are various key requirements for successful incorporation of supply chain sustainability such as the adaptation of supply chain integration, green supply chain management, building of resilient supply chains and supply chain collaborations within stakeholders. There are also numerous advantages that result from adaptation of supply chain sustainability such as protection against reputational damage, reduced environmental impact, increased profitability and attraction of new customers and retention of customers as a result of adaptation of sustainable practices by companies within their operations.

#### RESEARCH METHODOLOGY

A research design is a detailed outline of how an investigation will take place. Descriptive research design will be used in the study. According to Kothari (2004), descriptive research design will be concerned with describing, recording, analyzing and reporting conditions that existed or were to exist. De Mast (2013) argued that this method will be widely used to obtain data useful in evaluating present practice in providing basis for decision.

Nachmias and Nachmias (2012) assert that research design refers to the master plan that will be used in the study in order to answer the research questions. This will be a descriptive study that will be concerned with finding out the effects of supply chain disruptions on customer service performance in the beverage industry in Kenya with specific reference on the East African Breweries Limited. According to Mugenda and Mugenda (2008), the purpose of descriptive research is to determine and report the way things are and it helped in determining the current status of the study population. Descriptive design is considered suitable since the core interest is to examine the relationship then analyse how the supply chain disruptions affects customer service performance of beverage industry in Kenya.

# Target population

According to Borg (2009), population in a research has always been defined as the total of all the individuals who have certain characteristics and are of interest to a researcher. A "population" consisted of all the subjects one would wish to study. Explorable statistics (2011) views target population as generally a large collection of individuals or objects that is the main focus of a scientific query. The research will be done for the advantage of the targeted population. Target population refers to the entire group of individuals or objects to which researchers are interested in generalizing the conclusions. The target population usually varies in characteristics and it is also known as the theoretical population.

In this study the target population will be 200 employees of the East African Breweries Limited company. The sample for the study will be drawn from a population consisting of procurement department, production department and the finance department. Before citing the East African Breweries Limited company for sampling a general survey will be done which will involve the three departments. Then the researcher will interview each of the employees in every department including the departmental managers by the use of the questionnaires.

# Sample size and sample procedure

A sampling technique involves a procedure used to obtain a smaller sample from a large target population which is believed to have similar characteristics as the population (Wilson, 2014).

Based on Mugenda and Mugenda, (2010) recommendation of a sample of at least 30% of social studies. The sample size of the study will be 60 employees (30% of 200) employees in each department. The study will be employed by stratified sampling technique which will ensure that each member of the target population has an equal and independent chance of being included in the sample. Stratified random sampling will also be used to ensure that subgroups are proportionately represented.

#### Instrumentation

Parahoo (2014) defines a research instrument as a tool used to collect data. An instrument is a tool designed to measure knowledge attitude and skills. The instrument used in the study for data collection was a questionnaire. The respondents were asked to give different aspects of the various supply chain disruptions variables that were: supply chain risks, supply chain trends, government policies and supply chain sustainability on how they affect customer service performance in the beverage industry. The questionnaire was rated with the aid of five point Likert scaled subjects ranging between one and five; 1=Strongly Disagree, 2=Disagree, 3= neutral, 4=Agree, 5= Strongly Agree.

#### **Data Collection**

Burns and Grove (2010) define data collection as the precise, systematic gathering of information relevant to the research problems, using methods such as interviews. Both primary and secondary data was used in the study. Primary data was collected using structured questionnaire while Secondary data was gathered from organizations records.

#### **Analytical Approach**

Data analysis is an instrument for reducing as well as organizing data to yield findings that need to be interpreted by the researcher, Yin (2013). Both quantitative and qualitative data will be collected. Once the questionnaires will be received, the responses will be coded and edited for wholeness and uniformity.

Qualitative data will be analysed using content analysis while quantitative data will be analysed by employing descriptive statistics using statistical package for social science (SPSS). Data presentation will be in the form of graphs, frequency distribution tables, and pie charts to facilitate description and explanation of the study findings. The study will use descriptive statistical techniques such as percentages, frequencies and weighted averages to analyze the data. The analyzed data will be presented in frequency tables and graphs.

#### **ANALYSIS AND DISCUSSION**

# **Supply Chain Risk On Customer Service Performance**

From the findings there was a positive correlation between supply chain risks and customer service performance within the beverage industry. From the data collected majority of the respondents reported that demand risk had an influence on customer service performance where they strongly agreed with a mean score of 4.09 and with a standard deviation of .853, other respondents reported that financial risk had an influence on customer service performance where they agreed as was shown by a mean score of 3.9630 and with a standard deviation of .95093. Consequently, on the same scale others reported that supply risk had an influence on customer service performance which was agreed with a mean score of 3.85 with a standard deviation of 1.188.

# **Supply Chain Trends on Customer Service Performance**

Based on the findings the respondents strongly agreed that global purchasing had an influence on customer service performance with a mean score of 4.1296 and a standard deviation of .89118 Consequently in the same scale the respondents agreed that outsourcing had an influence on customer service performance with a mean score of 3.9815 and a standard deviation of 1.14085. Finally, other respondents agreed that supply chain collaborations had an influence on customer service performance as it was shown by a mean score of 3.7778 and a standard deviation 1.05806.

#### **Government Policies on Customer Service Performance**

As per the findings, the respondents strongly agreed that procurement manuals had an influence on customer service performance; this was shown by mean of 4.1296 with a standard deviation of 1.04694. The findings postulate that procurement regulations had an influence on customer service performance, which was strongly agreed with a mean of 4.1296 and a standard deviation of .91211. The respondents also agreed that procurement circulars had an influence on customer service performance, shown by a mean score of 3.8704 and standard deviation of .97218.

# **Supply Chain Sustainability on Customer Service Performance**

As per the findings, majority of the respondents strongly agreed that green supply chain management had an influence on customer service performance with a mean score of 3.8704 and with a standard deviation of 1.21386. Others strongly agreed that supply chain integration had an influence on customer service performance was shown by a mean score of 3.8519 with a standard deviation of 1.08866. The respondents also agreed that supply chain resilience had an influence on customer service performance as was shown by a mean score of 3.6667 with a standard deviation of 1.09888.

# **Summary of Findings**

The general objective of this research study was to establish the effects of supply chain disruptions on customer service performance in beverage industry in Kenya with specific reference on the East African Breweries Limited. This chapter therefore presents results of the main findings from the analysis of data collected from respondents at East African Breweries limited. Data was collected from respondents using questionnaires. The scope of the data presentation was limited to frequencies, percentages and statistics tables. SPSS was used to analyze the data statistically. The study therefore established the following based on the study factors that includes; supply chain risks, supply chain trends, government policy and supply chain sustainability.

# Supply Chain Risk

The study established that majority of the respondents were in agreement that supply chain risk played a pivotal role in ensuring that the company was able to increase the customer service performance by reducing costs and delivery time. The study concluded that majority of the respondents agreed that supply chain risk had a positive influence on customer service performance. The greatest emphasis was put on demand risk that is caused by unpredictable or misunderstood customer or end- consumer demand had a positive influence on customer service performance. Financial risk and supply risk were also key on influencing the company's customer service performance which would enhance and reduce cost and delivery time.

# Supply Chain Trends

The study was to examine the effects of supply chain trends on customer service performance in beverage industry in Kenya, a case of the East African Breweries limited company. The study ascertained that the company incorporated the use of outsourcing to transport its products using third-party logistics providers(3PL) to its various customers which allowed them to focus on their core function which has enabled them to increase their customer service performance to higher performance levels. The company also embraced supply chain collaborations by working closely with their key suppliers, which resulted with them reducing their delivery time and cost thus boosting their customer service performance margins. Finally, the company has put up new strategies to boost their global purchasing activities so as to ensure greater benefits that will boost their customer service performance as well as reduce cost and delivery time.

# **Government Policy**

The objective of the study was to find out the effects of government policies on customer service performance in beverage industry in Kenya, a case of East African Breweries limited company. The study established that procurement manuals had an influence on customer service performance that majority of the respondents strongly agreed with. Majority of the respondents also strongly agreed that procurement regulations had an influence on customer service performance. Consequently, the respondents agreed that procurement circulars had an influence on customer service performance.

The East African Breweries top management respondents strongly agreed and stressed that government policy affected the business operation and environment for any company or firm. They emphasized on the need for every business to comply and act in accordance with set government policy such as procurement manuals, procurement regulations and procurement circulars while carrying out their operations. Therefore, this will ensure they are compliant and on the right side of the law hence they will enjoy smooth operations and numerous benefits within their business such as favorable working environment that will enable them reduce cost and delivery time for their products.

# Supply Chain Sustainability

The effects of supply chain sustainability on customer service performance in beverage industry in Kenya were examined by determining how sub factors had an independence influence. The study found out that green supply chain management had an influence on customer service performance; this is because customers or end-consumers were more concerned with eabl's focus and determination on protecting and safeguarding the environment within their operation. Supply chain integration was also found out to have key influence on customer service performance. This is because end to end integration of eabl activities with its key suppliers resulted into great benefits for the company such as increased customer service performance. Finally, supply chain resilience was also found out to have influence on customer service performance. This is because a resilient supply chain will enhance better collaboration between stakeholders and reduction of overhead costs and delivery time thus increasing customer service performance.

#### CONCLUSION

The study indicated that there were effects of supply chain disruptions on customer service performance in the beverage industry in Kenya. This was explained through the factors considered which included: supply chain risk, supply chain trends, government policy and supply chain sustainability. This clearly showed how these factors lead to supply chain disruptions and how they affected customer service performance. Government policy was found to have strong influence over business operations. This is because failure to comply with set policies would be detrimental to the business that would lead to supply chain disruptions. However, ensuring compliance with set policies would result into favorable working conditions for the business.

Green supply chain management implementation was found to be the game-changer for businesses. This is because an organization's determination to protect, safeguard and conserve its environment within its operation resulted into numerous benefits such as increased customer service performance and competitive advantage. This resulted from the demand by customers for environmental friendly products and operations from various organizations so as to ensure green operations are adopted. Supply chain integration and supply chain collaborations were also found to have key influence in increasing customer service performance. This is because they ensured creation of a win- win working relationship between the organization and its key stakeholders such as suppliers and third-party logistics providers(3PL) that resulted into successful accomplishing and meeting of their customers or end -consumer needs at favorable cost and on scheduled delivery time.

Finally, supply chain resilience was found to have key influence on customer service performance. This is because many organizations not only in Kenya but also around the world are susceptible to the risk of supply chain disruptions which has numerous impacts on their operations such as organizational performance and customer service performance. The need for developing and implementing strategies that will led to resilient supply chains was found to be of very great importance, as it would ensure quickly returning the supply chain to a previous state or move to an alternative or more desirable state in case of exposure to supply chain disruptions such as the current situation in the world that has a resulted from the emergence of the Novel Coronavirus pandemic which lead to disruptions of many supply chains.

#### Recommendations

On the basis of the findings of the study the following recommendations can be made:

East African Breweries should come up with new strategies that will ensure implementation of green supply chain practices within their operations so as to realize the positive effects of green supply chain management. In addition, the management should continue to devise new strategies to deal effectively with the ever-changing supply chain risks so as to continue enjoying a pro-active risk tolerant supply chain. Finally, the management should continue boosting its supply chain resilience capabilities so as to increase its customer service performance. A good example of their supply chain resilience capabilities is the 'Raising the Bar' recovery plan launched in July, 2020 to help bars and restaurants recover from the adverse effects of the Novel Coronavirus pandemic. This plan will also provide them the opportunity for their supply chain to recovery as they seek to rely on the rebounding to grow their sales. This will therefore ensure their end-consumers are able to easily and conveniently access their products like before thus boosting their customer service performance to greater performance heights than ever before.

Manufacturing firms within the beverage industry should come up with strategies to help reduce the possibility of supply chain disruptions through creation of risk tolerant and resilient supply chains. They should also ensure compliance with government policy while carrying out their operations so as to enjoy favorable working conditions. Consequently, they should strive to adopt key ever-changing supply chain trends within their supply chains that will boost their capabilities and allow them the advantage to enjoy numerous benefits. Finally, all firms should ensure implementation of green supply chain practices within their operations so as to enjoy numerous advantages such as competitive advantage and to boost their customer service performance levels.

The government through its various agencies and ministry of industrialization, trade and enterprise development should come up with favorable policies and measures that will enhance good and favorable working conditions and environment for organizations within the beverage industry so as to help boost their capabilities and performance levels to greater heights.

# **Scope for Further Studies**

The main aim of this study was to determine the effects of supply chain disruptions on customer service performance in beverage industry in Kenya with specific reference on the East African Breweries Limited. This study was limited to four independent variables only. The researcher therefore suggests that further studies need to be done on the same topic and same variables but this time on all manufacturing companies within the beverage industry in Kenya. The study further recommends that more research be conducted in the area of supply chain disruptions in other forms of industries not only in Kenya but also from other countries in the world so as to examine if the same case applies to different industries in worldwide.

#### REFERENCES

Ali, M. J. (2014). Factors Influencing Marketing Of Alcoholic Beverages In Kenya (A Case Of East African Breweries) (EABL). European Journal of Business and Social Sciences.

Ambulkar, S., Blackhurst, J., & Grawe, S. (2015). Firm's resilience to supply chain disruptions: Scale development and empirical examination. Journal of Operations Management. https://doi.org/10.1016/j.jom.2014.11.002



Braziotis, C., Bourlakis, M., Rogers, H., & Tannock, J. (2013). Supply chains and supply networks: Distinctions and overlaps. In Supply Chain Management. https://doi.org/10.1108/SCM-07-2012-0260

Bode, C., Wagner, S. M., Petersen, K. J., & Ellram, L. M. (2011). Understanding responses to supply chain disruptions: Insights from information processing and resource dependence perspectives. Academy of Management Journal, 54(4), 833-856

Chopra, S., & Sodhi, M. S. (2014). Reducing the risk of supply chain disruptions. MIT Sloan Management Review.

Clemons, R., & Slotnick, S. A. (2016). The effect of supply-chain disruption, quality and knowledge transfer on firm strategy. International Journal of Production Economics, 178, 169-186.

Heckmann, I., Comes, T., & Nickel, S. (2015). A critical review on supply chain risk - Definition, measure and modeling. In Omega (United Kingdom). https://doi.org/10.1016/j.omega.2014.10.004

Hendricks, K. B., & Singhal, V. R. (2005). An empirical analysis of the effect of supply chain disruptions on long-run stock price performance and equity risk of the firm. Production and Operations Management. https://doi.org/10.1111/j.1937-5956.2005.tb00008.x

Juma, R. W. T. I. O. A. D. (2016). Influence of Organisational Culture on Employee Performance: A Case Study of African Breweries Limited. International Journal of Science and Research https://doi.org/10.21275/ART20161665

Thun, J. H., & Hoenig, D. (2011). An empirical analysis of supply chain risk management in the German automotive industry. International journal of production economics, 131(1), 242-249.

Moffat Gichuru (2015) Collaborative Supply Chain Practices on Performance of Food and Beverages Companies: A Case Study of Del Monte Kenya Ltd.

Li, F., Hou, J. Q., & Xu, D. M. (2010). Managing disruption risks in supply chain. Proceedings - 2010 IEEE International Conference on Emergency Management and Management Sciences, ICEMMS 2010. https://doi.org/10.1109/ICEMMS.2010.5563408

Lilian Nanjala Wabwile (2015) Determinants of Outsourcing as a Competitive Strategy in Supply Chain Management of Manufacturing Companies in Kenya: A Case Study of East African Breweries Limited.

Marley, K. A., Ward, P. T., & Hill, J. A. (2014). Mitigating supply chain disruptions - a normal accident perspective. Supply Chain Management. https://doi.org/10.1108/SCM-03-2013-0083

Omai, K. M., Ngugi, P. K., & Kiarie, D. M. (2018). Effect of supply chain practices on sustainable supply chain performance in Kenyan textile and apparel industry.

Ochieng, Amos O (2018) Supply Chain Resilience and Organizational Performance of Pharmaceutical Manufacturing Companies in Nairobi.

Ouro Linah Mongina (2015) Green Supply Chain Performance Management Practices in Large Manufacturing Firms in Nairobi, Kenya.

Pettit, T. J., Croxton, K. L., & Fiksel, J. (2013). Ensuring supply chain resilience: Development and implementation of an assessment tool. Journal of Business Logistics. https://doi.org/10.1111/jbl.12009

Rehman Khan, S. A., & Yu, Z. (2019). Introduction to supply chain management. In EAI/Springer Innovations in Communication and Computing. https://doi.org/10.1007/978-3-030-15058-7\_1

