

INTEGRATING SUSTAINABILITY IN SUPPLY CHAIN.

(A CASE STUDY OF NAIVAS SUPERMARKET).

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**A RESEARCH PROJECT SUBMITTED TO SCHOOL OF MANAGEMENT AND
LEADERSHIP IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE
AWARD OF DIPLOMA IN SUPPLY CHAIN MANAGEMENT AT THE
MANAGEMENT UNIVERSITY OF AFRICA.**

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DECLARATION.

This project is my original work and has not been presented for Degree or Diploma in any other University.

Signature.....

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DSM/11/00073/2/21.

This project has been submitted for examination with my approval as University Supervisor.

Signature.....

Date.....

James Simel

DEDICATION.

I dedicate this research to my parents, siblings and others for the moral support and encouragement during this study.

ACKNOWLEDGEMENT.

This research project is a result of support from several sources; first I would like to give praise and Honor to the Allah Almighty for giving me sufficient grace and power to write this project. I would also, like to take this opportunity to thank my supervisor James Simel whose comments and advice have been very useful. Lastly, I would like to acknowledge the entire entity Management University of Africa for the good and conducive learning environment during my study period.

ABSTRACT

This study is aimed at establishing strategies and tools being applied in Naivas supermarket for sustainable supply chains in Kenya. The study is intended to achieve the mentioned goals. First to demonstrate level to which Naivas supermarkets in Kenya adopted sustainable supply chain strategies and tools to integrate sustainability in its supply chain. Second is to illustrate the link that corelates sustainability in supply chain and strategies adopted to integrate sustainability among Naivas supermarkets in Kenya. Third to determine if Naivas supermarket has successfully or unsuccessfully integrated sustainability in its supply chain. Using a cross sectional descriptive research sketch, a observation was done number of 43 Naivas supermarket branches across the country in Kenya. Quantitative results were collected by using questionnaires from supply chain officers or their equivalents, the employees and the people living around their premises. It was examined by utilizing statistical package for the social science (SPSS). However, percentages and frequencies were employed to scan the degree to which Naivas supermarket adopted sustainable supply chain strategies to integrate sustainability. In addition to that, regression played a major governing the relationship between sustainability in supply chain and supply chain strategies adopted to determine if Naivas supermarket has successfully or unsuccessfully integrate sustainability in its supply chain. The findings indicate that to a larger extent, most of the supermarket branches in Kenya have embraced strategies for sustainable supply chains such as involving other firms to develop sustainable products that are eco-friendly. Although, the research came across limitations like short time frame as well as lengthy process of obtaining information.

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ACRONYMS AND ABBREVIATIONS.

SPSS – Statistical package for the social sciences.

SCM- Supply chain management.

CSM- Centre for sustainability management.

SCC- Supply chain collaboration.

OPERATIONAL DEFINITIONS OF TERMS.

Supply chain Collaboration- this is when two or more firms come together to plan and successfully perform supply chain operations.

Risk management- this is when an organization predicts and evaluates the financial crisis the that the firms may face and to come up with ways in which it can reduce the damages before it gets out of hand.

Cost minimization- has to do with the decreasing of useless or inefficient products or items.

Supplier engagement- it's the communication approaches put in place to ensure there is accountability when it comes to dealing with suppliers and all.

CHAPTER 1: INTRODUCTION.

1.1 Background of the study.

For the longest time movements like that of globalization which keep reoccurring from time and again, the rise of competition, the urge of security, environmental preservation, resource scarcity and the need for reliable, cost-efficient, and flexible business systems which are considered to have the ability to maintain and aid in customer differentiation amid many have proven to rather be of a threat to supply chain. Hence, managers are required to be qualified and skilled to have an insight and pinpoint new sustainability issues within their firms and business environment. In today's globalized economy, if one wants to maintain integrity they must bear in mind that sustainable supply chain management is the key that guarantees one business continuity.

Whilst conducting this academic work I read an article by Seuring and Mueller (2008), and based on their opinion they believe that sustainability their brand or handle operational costs is seen as quite critical in supply chain management as businesses speak up about the external pressure, they face from policy makers and consumers in addition to the internal pressure from their commanders' values and sense of responsibility. Also, there was another article by Elkington (2004). Whereby, he called attention on the consumption of resources, taking advantage of child labor due to lack or no support from agencies, environmental damage, extinction of certain species due to their skin or horns, and global warming which as a result changed the ancient ways of handling operations within the firms across the globe. Hence, firms beginning to be anxious about the economic, environment and social sustainability of their operations.

1.1.1 Sustainability supply chain.

Scholars like Carter and Rogers (2008) detail sustainable supply chain as the strategic achievement and combination of an organization's social, environmental, and economic target through a structured key of inert-organizational business actions to enhance an everlasting economic performance of the individual company and its value of network. While a report by the United Nations (2000) illustrated sustainable supply chain as the management of economic, environmental, and social effects and not to mention the reassurance of good governance practices, all through the lifecycles of goods and services.

The principal intent of it all is to generate care as well as to provide long-term environmental social, and economic value to the participants called upon to bring products and services to

the vendors. Alongside embodying the sustainability notion into supply chain relationships organizations may proceed to corporate sustainability. Hence, aiding in a vast sustainable development objective and safeguarding the continuity of their businesses as well as obtaining a social license to operate. The concept of sustainable supply chain is regarded as an operation that demands the management of information, material, and capital flow whilst acquiring objectives from all three aspects of sustainable development according to Seuring and Muller (2008). Elkington (2004) wrote an essay on how the three elements of sustainable development are economic, environmental, and social which are obtained from clients and the contributors needs. In order for sustainable supply chains to occur the environmental and social basis have to be gratified by the members to stay within the supply chain. Although, competitiveness is anticipated is to be kept up while meeting the consumers' needs and economic standards.

1.1.2 Naivas Supermarket.

A supermarket is a self- serviced outlet which provides a broad variation of, beverages, food, and household products etc. arranged in an orderly manner. However, it is during the mid-1900s that the sector started to experience a swift development providing a route to initiating several supermarkets all over the country.

In the olden days Naivas was known as Naivasha self-service store and but as time went by it changed it to name the Naivas back in 2007. Naivas limited is a company that belongs to Kenyan family. The administrators are Mr. Simon Gashwe Mukuha and Mr. David Kimani Mukuha (Ngige 2014). The company began as a small retail outlet service and grew from there. It established its branches in Eldoret, Embu, Kapsabet, Kitui, Kisii, Machakos, etc. to the present 74 branches found countrywide. The firm's headquarters is in Nairobi's industrial area. Due to its vast development, Naivas is has become the fastest growing supply chain in the Kenyan market. Despite, the challenges throw at it or faces Naivas never fails to provide the best of the best to its consumers falling under the low and medium earning groups. Hence, why it requires to inspect its sustainability.

1.2 Statement of the problem.

In this part one will learn why sustainable supply chain is considered a prime concern for businesses, governments, and other organizations around the global and why it has expanded. One is due to the rise of green consumerism. This tends to occur when clients request items that are seen as more eco- friendly. Second, is stress that comes from the administrations,

institutions and other contributors enhance why businesses to need to contemplate about the economic, social, and environmental outlook of their performance. The three fore mentioned standpoints give way to sustainability in the supply chain. It is no secret that, general stores worldwide are frequently faced with challenges guaranteeing that their suppliers ought to be mindful of social responsibilities as them. However, that has proven to be rather difficult especially for Naivas supermarket where their suppliers come from diverse backgrounds. There is also, the issue recycling of the packaging materials and making sure safety of its associates among others in its branches across the nation. Therefore, it's important supermarkets need to accept sustainability in the supply chain as it brings benefits. Moreover, it generates new opportunities for firms permits specialization and concentration of efforts etc. . It also, leads to product, process, and supply quality improvement.

There are quite a number of scholars that have looked into sustainability of supply chains. For instance, Fitzgerald, Luck and Morgan (2007) conducted academic research that centers' on supplier interaction devices. The discoveries indicate that to adopt sustainability in a business supply chain, the used strategy should give insights on sustainability, on how to plan and develop it. Another study was conducted by Mwirigi (2010) on the challenge of building sustainable supply involving among small companies. The study centered on Faulu Kenya a microfinance institute and through that one can easily determine that there is a link between a firm and its customers and its suppliers. It is evident that several contributions have been provided concerning sustainable supply chain management. Through that the research was able to fill the space by examining plans for integrating sustainability in supply chains among Naivas supermarkets in Kenya. In addition to that, the analysis conducted look for answer to the following questions: to what degree did Naivas supermarkets in Kenya adopt to supply chain strategies to integrate sustainability in its supply chain and what is the correlation of sustainability in supply chain and supply chain strategies adopted among Naivas supermarkets in Kenya?

1.3 General Objectives.

The sole purpose of this study is to learn about the sustainability of supply chain at Naivas Supermarket.

1.4 Research Questions.

The focus of this study is to attain the following objectives:

To establish the extent to which Naivas supermarkets adopted sustainable supply chain strategies.

To settle the relationship between sustainability in supply chain and supply chain strategies that were taken on to integrate sustainability among Naivas branches.

To determine if Naivas supermarket has successfully or unsuccessfully integrate sustainability its supply chain.

1.5 Significance of the Study.

The discovery of this research is meant to assist the individuals how are interested in pursuing or carrying on a similar investigation and will come across numerous materials for reference. In addition to that, it shall assist Naivas supermarket and other retail outlets in Kenya to gain better knowledge relating to strategies for sustainable supply chain that have been utilized by other organizations elsewhere. This will not only authorize them to gauge but to acquire the best practices in the sector.

The review found here is meant to assist policy makers to work out sustainable supply chain approaches that are formed on empirical evidence. This will give administrations a deeper understanding on how to deal with strategies for sustainable supply chains and their influence on the economic, social, and environmental aspects of the economy.

1.6 Scope of the study.

The study is directed at establishing Integrating sustainability in supply chain. A case study of Naivas Supermarkets. The study was carried out from January 31st to October 2nd, to find out how Naivas supermarket has been integrating sustainability in their supply chain and procurement department.

1.7 Chapter Summary.

This basically summarizes what has been discussed in chapter one. For instance, the background of the study which helps one to gain knowledge on the effects of Integrating sustainability in supply chain a case study of Naivas Supermarkets. This chapter also, looks at the objectives that the study will use to carry out the research as well the research questions on how the study will achieve the results. The study also, looks at the significance of how it impacts other upcoming researchers and assists them on how to go about the topic.

CHAPTER 2: LITERATURE REVIEW.

2.0 Introduction.

This portion of the work talks about the relevant literature that has been evaluated concerning sustainable supply chain. However, that shall not be all that will be debated on as I will be going deep into the theoretical literature review, empirical literature review and the conceptual framework.

2.1 Theoretical Literature Review.

Supply chain is defined as the systems of firms, individuals, resources, technologies etc. associating with the making and sell of a product. One of the purposes sustainable supply chains wishes to attain are some of the objectives that I heard mention while bearing in mind the society value and actions for sustainability to others as well.

Fitzgerald, Luck and Morgan (2007) regarded sustainable supply chain as a complex system of organizations that swap resources but in a manner that takes care of the economic, environmental, and social affairs. Also, it tells an individual on how to live life, how operate in the business world as well as how to recycle materials without clashing with future generations to meet their own needs. In addition, firms are increasingly taking actions that result in better social, economic, and environmental impacts. In the similar manner, the sustainability of the goods and services a company provides is also, the sum of all the environmental, ethical, and social impacts of these goods and services along the supply chain. Due to that outcome, firms have noticed and begun to understand sustainability issues within their organizations and those included in the supply chain to see to it that these concerns are executed in well-mannered way throughout the supply chain.

A report stated how Fitzgerald, Luck and Morgan (2007) claim that in a competitive business environment there is need for planning and transformation to upgrade and have actual sustainable supply chain can aid address global, social, and ecological sustainability. When it occurs it opens doors that bring about a variation of change towards a sustainable future. As a result, firms have started to recognize sustainability as an opportunity to create competitive advantage. Hence, why it shows one why it is important to have it if they want their businesses to grow.

2.2 Empirical Literature Review.

This is standardly established on the findings and observations that procures knowledge from actual incidents that have taken place and relates to the study variables. The core supply chain sustainable plans spoken of part are the supply chain collaboration, risk management, cost minimization and supplier engagement.

2.2.1 Supply Chain Collaboration.

As these networks grow in scale and complexity the chances for firms to protect the environment, improve labor conditions, promote human rights, and support ethical business activities tends to grow with it as well. For, buyers and suppliers to work with each other they should first unite as one to see to it that the key standard of business performance are met and to join forces to boost the outcome of the business operations. Organizations can combine forces to make sure that they lower the levels of carbon dioxide emissions been used within the supply chain. In addition, to designing products that meet the environmental standards.

Moreover, whilst the items are being manufactured under good social working conditions and at fair costs, there should be need of cooperation within the individuals involved in that sector of the supply chain. Furthermore, commercials undertaking supplier collaboration on sustainability matters are in better position of adding new features and discarding options than traditional products. Firms, therefore, ought to join forces with other competitors across the supply chain to ensure that they carry out sustainable goals. The life cycle of a business's product has multiple social and environmental complications on the environment as well as the individuals within it. As a result, providing a route for growth and development of sustainability throughout the business community.

2.2.2 Risk Management.

This main deals with estimating supply chain operations in terms of recognizing the risks connected with the non-sustainable practices. Risk management deals direct financial penalties which are caused by not obeying the environment and social regulations. Hence, leading to a negative exposure that can bring about the down fall of a company. This permits firms to protect themselves from likely supply chain break ins or hold ups associated with suppliers' practices by guaranteeing supply chain players observe the strategies and maintain a strong management system which covers

up for the sustainable supply chain issues. In addition to that, firms allowed to request or demand for their suppliers' labels and certificates confirming that they do as a matter of fact act in accordance with the social and environmental obligations.

2.2.3 Cost Minimization.

In sustainability minimization is perceived as technique of decreasing cost in the supply chain while at the same time maintaining a positive image. Minimizing the cost of a firm's objective helps improve the environment. There are quite a few examples that prove the fact that there is a direct relationship between lowering the environmental burdens and decreasing its costs by increasing in efficiency. Pearce and Barbier (2000) elaborated on how businesses must deal directly or indirectly with environmental pressures. For instance, by lowering prices to steer away from dealing with costly individuals and groups. Also, I stumbled over an article whereby Pearce and Barbier (2000) stated that its very much likely to minimize costs by paying more attention to the interest of employees. For example, doing away with overly priced work disruptions, steering away from bad external image, and providing long-term flow of staff specifically skilled ones.

2.2.4 Supplier Engagement.

This sort of enterprise tends to bring about golden opportunities driven to move organizations past conformity and straight into the planning phase by simply putting use to custom devices and at times asking suppliers to generate their own goals and actions for sustainability. At times suppliers are asked to present to the buying firm on their sustainability issues they come across as noted by Fitzgerald, Luck and Morgan 2007. There are various ways a company can employ sustainability in the supply chain. One way of it putting it to use is simply by raising awareness and inspiring its suppliers to integrate and drive sustainability into their business.

2.3 Challenges of Adopting Strategies to Integrate Sustainability in Supply Chain.

One of the challenges is by pushing business practices to align it with sustainability. I have come to realize that the challenges allocated to the adoption of strategies to sustainability are due to organizational forces and difficulties of corporate culture

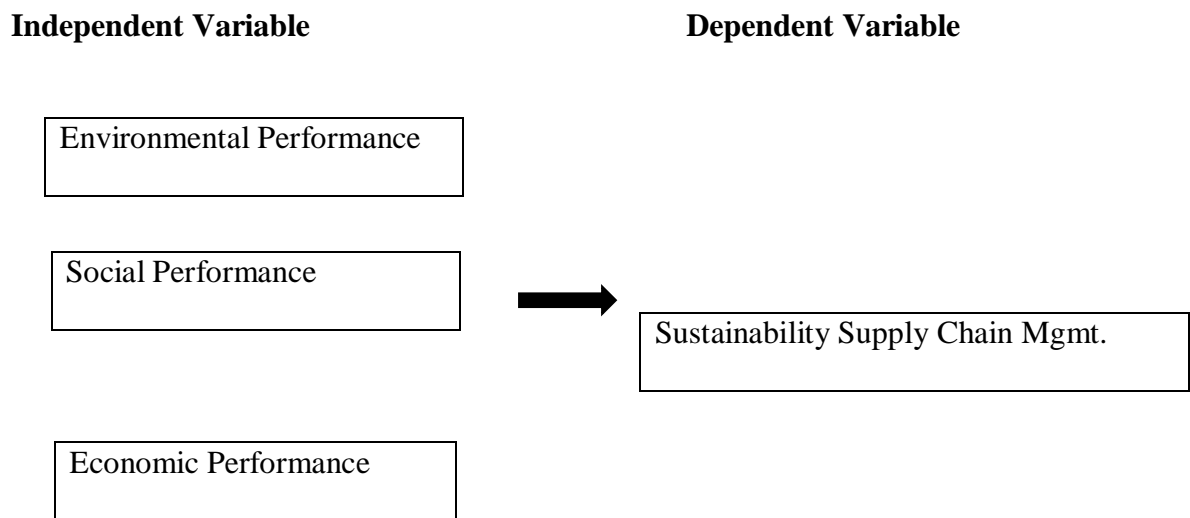
change. The key problem that lies within here is that various organizations people perform in restricted channels which are only associated with their field of specialty. However, that is not all there is capital investment commitments which plays a major. Also, when one does not acquire an understanding of the complex interplay between economic, environmental, and social activities it can lead to it having negative outcomes.

2.4 Summary of the Literature Review and Knowledge Gap.

In short, the academic work here I have conducted tells one how sustainable supply chain needs strategic achievement and integration of an organization's economic, environmental, and social goals. To better the long-term economic production of a firm there needs to be a systematic coordination of key inter-organizational business participation. The strategies being employed here define how the supply chain ought to run to achieve the organization's social environmental and economic purposes. The fundamentals sustainability integration strategies discussed in this are supply chain collaboration, risk management, cost minimization and supplier engagement.

2.5 Conceptual Framework.

Figure 1.01: Conceptual Framework.



Sustainability of a business's supply chain relies upon three variables. First one been economic performance, While the second been environmental performance and lastly, social performance as explained by Carter and Rogers who states, that firms ought to come together as one to participate in social and environmental projects that will profit or try to reduce negative impacts on the environment, community, and economic performance.

In figure 1.01 it crystal clear that, sustainable supply chain management in this case, is the dependent variable whereas economic performance, social performance and environmental performance are seen as the independent variables. So, if an organization were to decide to combine the three variables, it will be too able achieve sustainable supply chain management.

2.6 Operationalization of Variables Indicators.

This tends to accurately show how the study variables are measured and its purpose of defining each variable for it to become measurable and all.

2.7 Chapter Summary.

In this chapter the framework indicates or shows the relationship between the independent variables such as the economic, social, and environmental performance and the dependent variable which is known as sustainability in supply chain management. To attain the dependent variable a firm is expected to combine all three independent variables.

Also, this chapter tackles the challenges of integrating sustainability in supply chain one prime example, being capital investment commitments. Although, that's not all that was discussed in this chapter. In this chapter, I have broken down the independent variable and the dependent variable into a conceptual framework and explained as to how each variable is measured. The variables have been illustrated ahead in a section called operationalization.

CHAPTER 3: RESEARCH METHODOLOGY.

3.1 Research Design.

In this phase, I acquired a cross sectional research design in exploring strategies for integrating sustainability in supply chains among Naivas supermarkets(branches) in Kenya. I conducted a survey at Naivas supermarkets based in Kenya. I managed to get a breakthrough by use, of descriptive research design which enabled me to review the elements in their natural habitats without making any changes to them. Furthermore, the design provided me with details about the set of variables that were examined as well as permitting the researcher to put large sample sizes and figuring out the results.

3.2 Target Population.

The total number of Naivas supermarket branches that were operating in Kenya throughout the course of this period as stated by the Official Yellow Pages Kenya was seventy-four (74) (yellowpageskenya.com,2012). The 74 supermarkets therefore, formed the population target of this study. Due to that, I found myself in a position which enabled I to choose the ones that were needed for the research in order to proceed.

3.3 Sample Design.

According to Copper and Schindler (2008), the ideal sample design is seen by selecting the essential quality that is required to or supposed to be present. Slovin provides a simplified formula to calculate sample sizes. In this study, I applied Slovin's method which is given below to work out the sample size of this analysis.

$$n = \frac{N}{1 + N(e^2)}$$

n here is used to indicate is the sample size

N is shown tell one the population size

e acceptable error value

The study assumed an error value of 10%.

{ }

Therefore, $n = 74 / (1 + 74 \cdot (0.1)^2) = 42.5287 = 43$

Thus, a sample size of forty-three (43) branches was deemed sufficient and was adopted for this study.

3.4 Data Collection.

When it comes to the data collection part primary quantitative data plays a major role in assembling from one supply chain officer to the other in addition, to the employees and the people living around the premises by randomly choosing branches. In here, the statistics given are designed in form of a questionnaire. Although, it carried not only open questions but closed ended questions too, which was luckily managed operating a drop and pick method.

This survey form was divided into two segments. Whereby, segment A held questions on supermarkets profile and segment B looked for details that were seen applicable. The first aim was to demonstrate the degree to which Naivas supermarkets embraced sustainable supply chain strategies. The second, was to learn about the relationship between sustainability in supply chain and supply chain strategies taken to integrate sustainability in Naivas supermarkets.

3.5 Data Analysis.

The study collected quantitative data by making use of statistical packages for social sciences (SPSS). However, that was not all that was worked with as descriptive statistics like percentages and frequencies were also, employed to tell the extent to which Naivas supermarkets adopted sustainable supply chain strategies to integrate sustainability in its supply chain. Besides, that regression analysis played a part in establishing the relationship between sustainability in supply chain as well as these other strategies. Tables were used to explain the findings of the data as to exhibit the levels of respondents' concurrence.

Regression Equation:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e$$

Y acts as Sustainability in supply chain,

A tells one when Y- Intercept x assuming a value of zero,

b1-b5 is the mass connecting with supply chain to integrate sustainability,

X1 shows supply chain collaboration,

X2 tells Risk management

X3 indicates Cost minimization,

X4 is Supplier engagement and

e= error term.

3.6 Ethical Considerations

3.6.1 Informed Consent

This is the act of the researcher seeking permission before conducting a researcher. The researcher will first obtain the authorization letter form the management of the Management University of Africa before conducting this study.

3.6.2 Voluntary Participation

This is when the respondents participate themselves in a study without being forced. The researcher will promote this by not forcing any respondent who will be unwilling to participate in this study to do so.

3.6.3 Confidentiality

This is when the researcher does not disclose the information to any other person. To promote this, the researcher will only apply the information for only academic purposes.

3.6.4 Privacy

This is an act of upholding the respondents' privacy. This will be enhanced through responds not writing their names on the questionnaires.

3.6.5 Anonymity

This is the act of the responds not wanting to be known. To enhance this, no names or contacts of the respondents will be written on the questionnaires.

3.7 Chapter Summary.

In short, this chapter gives one input on the research methodology that was employed during this review. For instance, the sample design, data analysis, data collection, population and more. This gives one insight and an understanding of how the research project is to be taken and what techniques are to be used to come up with clear and accurate results.

CHAPTER 4: DATA ANALYSIS, RESULTS, AND INTERPRETATIONS.

4.0 Introduction.

This section mainly tackles, the findings, the analysis and interpretation of the academic work in line with its aims. These are details gathered from the supermarket branches in the above-mentioned counties, examined and the information that was come across is displayed by use of frequencies and percentages to give the reader clear picture of what is been discussed.

4.1 Business Outlook.

Data on business duration, the total of suppliers, the standard contract length between the suppliers and the supermarket was solely conducted to learn about the general profile of the 27 branches of Naivas supermarkets across the country. The information that was got from the research are indicated and described in the sub-sections as below.

The study sought to establish the duration (in years) the branches of Naivas supermarkets in the country had been operating in business.

I found that the researcher sought to ascertain from the study the number of suppliers among the Naivas supermarkets. This as a result, tells one that the plan for sustainable supply chain is quite important among Naivas supermarkets to successfully run the supply chains with multiple suppliers.

Table 1.1: Number of suppliers.

Response	Frequency	Percentage
1-10	7	5%
11-20	10	10%
21-30	20	12.5%
31-40	30	17.5%
Above 40	33	55%
	100	100%

From that, one can notice or see that, 5% of Naivas branches have 1-10 suppliers, 10% have 11-20 suppliers, 12.5% have 21-30 suppliers, 17.5% have 31-40 suppliers and 55% have 40 and above suppliers. Like I had mentioned previous, this clearly shows that strategies for sustainable supply chain are of importance among Naivas branches for it to successfully run supply chains with various suppliers.

The study also, sought to establish the average contract length in years the Naivas supermarkets worked hand in hand with their respective suppliers. As it is obvious from the findings of the study.

Table 1.2. Changing of Supplier.

Response	Frequencies	Percentages
Increased	75	75%
Decreased	25	25%
Total	100	100

According to the study findings, many of the respondents shows or tells one that the number of suppliers among Naivas branches has been increasing in the last couple of years.

4.2 Sustainable Supply Chain Strategies.

In this section, I sought to find out strategies used by Naivas supermarkets in Kenya for sustainable supply chains. The results of the research were gathered and presented in the following subsections.

I first began off, by trying to establish the extent to which Naivas supermarkets in Kenya called for other firms to try and take part in expanding sustainable products that met environmental requirements. During that period, I discovered that Naivas supermarket joined other firms in doing so, to advance sustainable products that met environmental requirements. For example, it does not buy its product from a firm that uses polythene bags and wrappers. This, therefore, implies that the sustainable products developed by Naivas supermarket can hardly have any social and environmental impacts on the environment and on its people.

Here I tried to find out and demonstrate from the respondents as to whether suppliers among Naivas branches normally met requirements put in place by the supermarkets such as abiding to the guidelines that were placed on product quality. It was noted that they indeed follow the guidelines set. This is an indication that majority of the branches require compliance from the suppliers concerning the standards of business operations before contracting them. This helps in decision-making as well as risk avoidance and performance improvements along the supply chain. This was made possible by Naivas having a team to always observe the quality.

The study also, sought to find out from the respondent whether Naivas supermarkets supported local communities. It was found that it does. For instance, the local boda-boda riders were trained and given jobs of delivering items within towns. Naivas also, the community by providing full time security in the community. It partnered with other organizations sponsor certain activities taking place in the community.

Another, thing the study wanted to establish is whether Naivas supermarkets donated to charitable organizations and in this, I found that supermarkets in Nairobi contribute to charitable organizations. Hence, allowing the supermarkets to broaden and push on sustainability objectives throughout the business community. For instance, at the Naivas supermarkets across the country, there is a tin-like for donating to Red-cross

furthermore, the study sought to establish whether discussions or meetings with supply chain partners took place regularly and in a timely manner. This is an indication that Naivas works closely with suppliers to develop shared mindset about supply chain sustainability issues. This is since, Naivas has adopted the digital means of communication used by its suppliers.

Moreover, the study sought to establish whether Naivas supermarkets plays a part in the design of products for recycling or reuse. I noted that it does as a matter of fact participate in that by having its symbols in all its products which can easily be seen thus encouraging recycling and reuse.

In addition to that, I wanted to ascertain whether Naivas supermarket observed the environmental and social regulations. I found that it does indeed comply with the environmental and social regulations by having proper waste disposal sites, by putting efforts to do away with polythene wrappers and carrier bags while investing into the new carrier bags which are environmentally friendly.

4.3 Regression Analysis.

In this section, the study is aimed at finding out the relationship that exists between sustainability in supply chain and supply chain strategies among various Naivas branches. I was able to use a multiple linear regression model which assisted in surveying the relationship linking both strategies. The regression equation used in the model this:

$$Y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + b_4 x_4 + e.$$

Y is used to represent the dependent variable (sustainability in supply chain)

A indicates while Y- intercept when x read a constant value of zero,

b1-b5 is the force linking supply chain sustainable strategies.

x1 shows supply chain collaboration, x2 indicates the risk management, x3 exhibits cost minimization, x4 displays supplier engagement and e presents the error term which is signified by the model's significance.

Table 1.3: Model Summary.

Model	R	R ^ 2	Modified R ^ 2	the estimate
1	.758a	.574	.523	.394

The balanced R ^ 2 known as constant figure that is fixed exhibits how the variation in sustainability in the supply chain differ in contrast to supply chain. From the table, the value of adjusted R2 is 0.523. this makes one aware the variation of 52,3% in the level of sustainability in the supply chain amid Naivas branches not similar in variation.

4.4 Chapter Summary.

This chapter covers the data analysis, findings and interpretations that were used for this study. The data was collected using various Naivas supermarkets whilst using frequencies and percentages. This chapter has also, explained how each section has been achieved and explained. Moreover, this section has shown how the regression analysis has been calculated and explains how the independent and dependent variable have correlated with each other.

CHAPTER 5: SUMMARY, DISCUSSIONS, CONCLUSION AND RECOMMENDATIONS.

5.0 Introduction.

This last bit of the research project mainly focused and basically gives one a summary of the discovery that was stumbled upon whilst undertaking this academic work. For instance, the discussions, conclusions, and personally my recommendations based on what I had gathered and came across as well as making proposals on the parts and issues that I genuinely felt needed more inspection while I was conducting the research. The goal here was to come to know of the strategies for integrating sustainability in supply chains among Naivas supermarkets in Kenya. This section of the review had two purposes.

The first purpose been a able to prove and to compass whether supermarkets in Nairobi had acquired supply chain strategies for integration of sustainability and the second objective was to determine between sustainability in supply chain strategies among supermarkets in Nairobi.

5.1 Summary of Findings.

I was able to scan through numerous strategies for sustainable supply chains and constructed facts to establish the extent to which they had adopted among Naivas supermarkets. From the study findings, it was established that to a large extent, Naivas supermarkets entailed other agencies to expand sustainable products that fit the environmental criteria requirements. This is supported by the suppliers among the supermarkets who regularly meet demands that were place by the supermarkets in addition to following and respecting the guidelines on product

quality. Not to mention the supermarkets aided local communities and would make generous contributions to its institutions.

Furthermore, I found out that several Naivas supermarkets work with their suppliers to enhance the quality of their product in the end thus integrating sustainability into their basic business fundamentals strategy and performance. The work conducted showed that trading with supply chain partners takes place often among Naivas supermarkets. Hence, a sign that the supermarkets work closely with suppliers to share their idea and thoughts about supply chain sustainability issues.

The study also, found out that all the branches participate in the design of products for recycling and reuse by simply supplying the energy and material recycling as well as in waste minimization practices and making certain everyone abides by with human rights. For example, child labor laws that they can use to protect themselves from potential supply chain which can cause break up with suppliers. The retail outlet stores have decreased their respective total costs as sustainability method in supply chain and a major part of the respondents also agreed that Naivas supermarkets set environmental criteria that suppliers must meet, and that sustainability happens to have key role in scouting for suppliers among supermarkets.

Through what I accumulated from the analysis; it is stated that top management among supermarkets are extremely ethical and in a socially fashionable way. These departmental stores control transport systematically with finer vehicle resources, and they adhere to the environmental and social regulations.

5.2 Discussions.

The study findings indicate that most of Naivas have taken on strategies for sustainable supply chains. This as a result made others to start sustainable items that align with environmental needs. Naivas supermarkets make contributions to local communities and charitable organizations.

According to a United Nations (2000) statement a partnership with suppliers on sustainability matters can stimulate changes resulting in products with fewer negative environmental problems compared to traditional ones. These retail outlets have placed requirements to make certain that their respective suppliers regularly adhere to the product quality. Although, Harms et al. (n.d) claim that performance are customary standards in serving as a benchmark when it comes to assessing and hand-picking suppliers to govern a lowest level of improvement to make sustainable products.

It has been demonstrated Naivas tasks their suppliers to upgrade their quality to integrate sustainability their business. They trade information with supply chain members and work closely bring about a shared mindset concerning supply chain sustainability.

5.3 Conclusions.

To a large extent, most of Naivas have acquired the following plans of action. One is encouraging other firms to employ sustainable products that are eco-friendly. Second is making certain that the suppliers adhere to set of rules set by the supermarkets. Third is aiding local communities to grow by setting up schools, public bathrooms etc. Fourth, is making contribution to charitable organizations that support human rights and others.

The department stores keep in touch and notify each other about the latest developments that has occurred with the supply chain. Not only that but the use the web to scan and anticipate the design of products for recycling and reuse as well as investing in energy and material recycling.

Furthermore, they see to it that all their own partners abide with human rights like that of child labor laws. Also, that participate in cost minimization practices as it is mandatory procedure. Not to mention, they ought to bear in mind sustainability issues while looking for suppliers and obey environmental and social regulations.

Therefore, it's worth concluding that Naivas supermarkets have successfully integrate sustainability in its supply chain and the community at large.

5.4 Recommendations.

There is need for Naivas supermarkets to increase their level of collaboration with other businesses to increase sustainability across the supply chain. Collaboration should also,

include national environmental watchdogs to draft policies that are supported by all parties, and which are not cruel to the business community such that they would seek means of evading them. The other players that the supermarkets should involve, other than the suppliers include the manufacturers and end users of the products.

Information sharing among supermarkets and other stakeholders should also, be encouraged since, it enables businesses to collaborate towards a common goal.

5.5 Limitations of the study.

The study faced both time and funding limited to personal resources. The duration that the study was conducted was limited. Hence, exhaustive, and intense research could not be carried out on integration of sustainable in supply chains among Naivas supermarkets.

The study would have been carried out on a wider scope given more time and resources. The lengthy process of obtaining information provided a difficulty, which delayed the project.

Furthermore, some of the information could not be found since it was considered confidential by the organization.

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APPENDIX II

QUESTIONNAIRE.

This research was carried to find out more about Integrating sustainability in supply chain (a study case of Naivas supermarket). The questionnaire was divided into a couple of sections.

Section A: Respondents Profile.

Gender.

Male () Female ()

Age.

18-25 () 26-40 ()

41& Over ()

Level of Education.

Secondary Education () Foundation ()

Diploma () Degree ()

Masters () PhD ()

Period serviced in the department.

1-2 yrs. () 3-5 yrs. ()

6 yrs. & over ()

Section B: Supply Chain Collaboration.

It's stated that businesses embarking on supplier collaboration on sustainability issues are in better positions of adding new features and discarding options than traditional products.

Using the True or False technique. Please provide a respond and if possible, a comment to support your True or False statement.

True () False ()

Comment.....
.....

Section C: Risk Management.

Is it wise to assume or say that risk management ranges from direct financial penalties from breaking environmental and social regulations to negative exposure that can have an enduring impact on a firm's image. Use the Yes or No technique and if possible, a comment to support it.

Yes () No ()

Comment.....
.....

Section D: Cost Minimization.

Does minimizing the cost of a company's objective assist with improving the environment.

Use the True or False technique and if possible, a comment.

True () False ()

Comment.....
.....

Section E: Supplier Engagement.

Do you reckon that the Engagement- based initiatives generate opportunities for proactive actions could move firms beyond compliance and into strategic upstream thinking. Use the Yes or No technique to provide a respond and if possible, a comment.

Yes () No ()

Comment.....
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