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Influence of Supplier sustainability on Organizational Performance in Food and Beverage Manufacturing Companies in Kenya

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Abstract
The purpose of the study was to determine the influence of supplier sustainability on organizational performance in food and beverage manufacturing companies in Kenya. Supplier sustainability is part of emerging issues in the dynamic business world as it is part of the Triple Bottom Line approach that wants businesses to not only focus on their profitability and the planet, but is also in the people aspect-which in this study is the supplier in their business operations. Sustainability philosophy points at the importance of not only doing business now and succeeding, but also ensuring the business continues into the distant future. Supplier sustainability in the food and beverage manufacturing arena is important since most industries depend on the contracted farmers, in this study, the supplier for their input materials. The study employed a descriptive research design. The study used systems theory. The target population was 534 respondents comprising of 217 procurement managers and 217 procurement officers from 217 food and beverage manufacturing companies. Using Yamane's formula, a sample size of 230 respondents comprising of 115 managers and 115 procurement officers was selected from 115 food and beverage manufacturing companies in Kenya. Simple random sampling was used to get the sample for the study. Purposive sampling was used to get top procurement personnel in the food and beverage manufacturing firms. Primary data was collected by the use of a questionnaire. Analysis of data was done using descriptive and regression analysis. From the model, (R^2 = .490) shows that supplier sustainability accounts for 49% variation in organizational performance in food and beverage manufacturing companies in Kenya. There was a significant influence of supplier sustainability (β=.520) on performance of food and beverage manufacturing companies. The study concluded that supplier sustainability influences the performance of food and beverage manufacturing companies. The study recommends that Food and Beverage Manufacturing Industry in Kenya and also organizations that are non-manufacturing should ensure that their

suppliers are sustainable and have an environmental management system that both buyer and supplier understand. The study proposes further research in other manufacturing sectors and also proposes that data is collected from the supplier side to corroborate research in this area.

Keywords: Supplier Sustainability, Organizational, Performance, Food and Beverage, Manufacturing Companies.

Introduction

Organizational performance refers to how well a firm achieves its market-oriented goals and objectives as well as its financial goals. It is a powerful tool for prioritizing firms' goals and attaining them (Kirkendall, 2010). It usually informs the policy makers, implementers as to the position of the firm and some of the challenges that require attention and allows for progressive monitoring of the efficiency and effectiveness of the firms' operations. The manufacturing sector is lost immensely due to lack of benefit from the research and development initiatives conducted by the suppliers concerning the supplies (Muhia & Afande, 2015).

Kovacs (2014) opines that Supply chain sustainability is a holistic perspective of supply chain processes and technologies which go beyond the focus of delivery, inventory and traditional views of cost. This emerging philosophy is based on the principle that socially responsible products and practices are not only good for the environment, but are important for long-term profitability. Sustainability therefore is a business strategy that drives long-term corporate growth and profitability by mandating the inclusion of environmental and social issues into the business model. It is intended to generate a maximum increase in company, consumer and employee value by embracing opportunities and managing risks derived from environmental and social developments.

In a study conducted in UK by Walker and Jones (2012), it was found that customers found products from companies which embraced sustainable development to be more appealing to them.

Wamalwa (2014) found that companies that embraced and implemented green supply chain strategies in their manufacturing processes gained and sustained greater competitive advantage in terms of goodwill, market share, returns on investment and even profitability. Vashta (2012), studied responsiveness of green supply chain management in the food and beverages manufacturing firms in Nairobi, Kenya. The study found out the gains reaped by organizations that applied green supply chain management came from development in systems of information; usage of materials that are recycled and the experience of firms, cost reductions because of proper utilization of available production resources.

Mwaura, Letting, Ithinji & Bula (2016) did a research on green distribution practices and competitiveness of food manufacturing firms in Kenya. The research findings indicated that, technology has greatly influenced distribution techniques with more firms using the internet as a distribution channel.

Nyakundi (2013) did a study on food processing firm's adoption of green manufacturing practices by in Mombasa County, Kenya. The results obtained indicated that green manufacturing practices adoption was at the implementation stage as most food processing firms had considered adoption. The study also established that the major perceived benefits of adopting green manufacturing were; reduction of waste water, reduction of frequency of environmental accidents and reduction in scrap rate.

Gatari and Were (2014), did a study on application challenges of green supply chain management in manufacturing sector in Kenya: Unga Limited Kenya, case study. The results showed that, there was inadequate change in the organization and its structures to support implementation of green supply chain management.

Statement of the Problem

In the food and beverage industry, the use of available resources in the environment must be done according to the sustainable attitude of social and economic perspectives. Food is one of the most widely used products in society, thus, in recent years sustainability studies in the field of food industry have been done by many researchers. A lot of research has been done on sustainability in the food and beverage industry but sustainability strategies and drivers have received less attention (Kim et al., 2016). Social aspects include following applicable laws and international treaties; using open and transparent participatory processes that actively engage relevant stakeholders, establish rights and obligations, and a long-term sustainability plan with periodic monitoring; and ensuring decent wages and working conditions, the safety of workers, and workers' rights to organize and collectively bargain (Mukanga, 2011). Many of the studies done in the sustainability area in supply chain management have focused on the planet and profit , but no known study has focused on the people , in this case the supplier aspect of sustainability ,therefore, this study aims at establishing whether supplier sustainability affects the performance of food and beverage manufacturing companies in Kenya. This study intends to fill this knowledge gap by establishing the influence of supplier sustainability on performance in the manufacturing sector of Kenya

Theoretical Framework

The systems theory was developed by (Bertalanmffy, 1969). The theory development was in the platform of the efficiency of the components on the organization. The theory recognized different functions of the organization which interact differently in order to achieve a specific objective in the organization. Systems theory describes the interrelatedness of all parts of an organization and how one change in one area can affect multiple other parts (Li & Geiser, 2009). According to Walker & Brammer (2009) organizations act as systems interacting with their environment. Any equilibrium is constantly changing as the organization adapts to its changing environment. The foundation of systems theory is that all the components of an organization are interrelated, and that changing one variable might impact many others (Maignan et al., 2012). Organizations are viewed as open systems, continually interacting with their environment. They are in a state of dynamic equilibrium as they adapt to environmental changes. According to Lozano and Valles (2013) system theory views organizational structure as the established pattern of relationships among the parts of the organization. Of particular importance are the patterns in relationships and duties. These include themes of 1) integration (the way activities are coordinated), 2) differentiation (the way tasks are divided), 3) the structure of the hierarchical relationships (authority systems), and 4) the formalized policies, procedures, and controls that guide the organization (administrative systems) (Maignan et al., 2012). Organizations are open systems and depend on their environment for support.

The relationship between an organization and its environment is characterized by a two-way flow of information and energy (Marron, 2013). Most organizations attempt to influence their environment. While Stafford and Harthman (2010) were among the first to explain the adoption of practices within the environmental context, several scholars have subsequently

investigated the positive impact of these institutional pressures on green procurement (Zhu et al., 2009). The theory argues that components interact on a different platform in a global setup with an influence of various open systems that are distinguished from the environment through inputs and outputs of the system.

In supply chain there exists relations of different interactions between different players on the supply chain. Supply chain players need to interact simultaneously in order to achieve the general objectives of the firm. Supply chain should be able to identify the scope of different players in the supply chain in order to allow the seamless interaction of the supply chain activities in order to have harmonized results due to the contribution of different players in the supply chain. The supply activity performance brings components of a complex system together to form large systems of supply chain. Holistic perspective is a new paradigm in shaping the performance of the organization.

Conceptual Framework

The objective of the study is to establish the influence of supplier sustainability on organizational performance of the food and beverage manufacturing companies in Kenya. The conceptual framework for this study was based on the independent variable: supplier sustainability which influence the dependent variable organization performance and Figure 1 shows this relationship. The dependent variable organizational performance was established using financial wellbeing, quality of products, improved responsiveness and customer satisfaction.

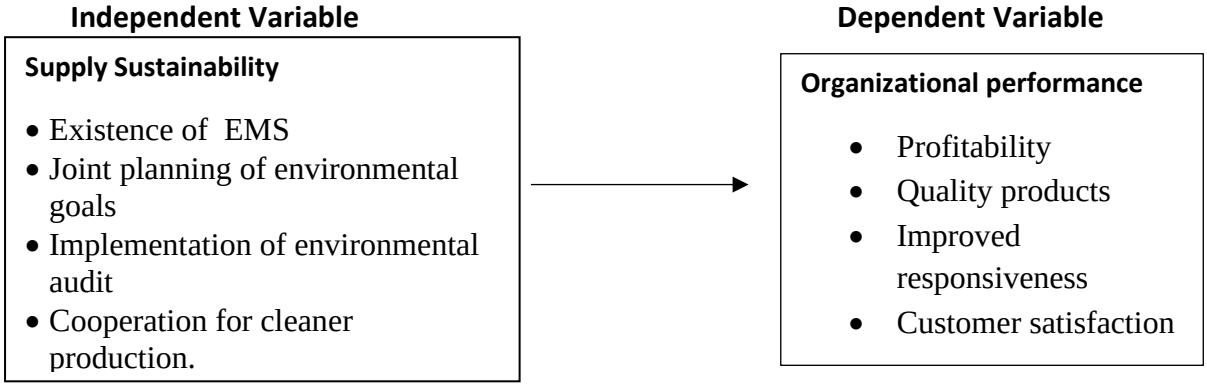

Figure 1. Conceptual Framework

Literature Review

Concept of Organizational Performance

Corina, Liviu and Roxana (2011) defined performance as a set of financial and non-financial indicators which offer information on the degree of achievement of objectives and results. Overall organizational performance can be divided into three parts: financial performance, product performance, and operational performance (Inayatullah, 2012). Organizational performance refers to how well an organization achieves its objectives. Common organizational objectives include shareholder wealth maximization, profit maximization, increased market share and customer satisfaction (Brigham & Houston, 2014).

According to Phanet et al (2011), cost performance is measured in terms of the unit cost of manufacturing while quality performance is measured using product capability and performance. On the other hand, flexibility performance is determined by organizational flexibility while delivery performance is measured in relation to degree of timely delivery.

Subsequently, the relationship paradigm is a composition of all the activities that are channeled towards the establishment, development and maintaining of successful relational exchange claims (Stevens, 2011). Value in organizations is not created in isolation but through the nurturing of key competencies which spurn to the supplier relationship management. There is a belief among organizations that strategic supplier management provides the vital benefits when creativity is natured among suppliers which in turn will translate to value benefits to an organization (Taraf dar & Qrunfleh, 2013). In the manufacturing sector, the measure of performance is in the form of different metrics such as schedule performance.
Operational performance measurement can also be on the employees through meetings and having appraisals (Moore, 2012). Abdifatah (2012) argued that performance is not uniform in all organization and keen considerations is needed on different factors such as effectiveness and efficiency of internal operations, flexible production processes, good supplier relationship management, customer relationship management and continuous improvement in the firms' operations. The dependent variable organizational performance was established using financial wellbeing, quality of products, improved responsiveness and customer satisfaction

Concept of Supplier Sustainability

Sustainability integrates social, environmental, and economic systems. Social aspects include following applicable laws and international treaties; using open and transparent participatory processes that actively engage relevant stakeholders, establish rights and obligations, and a long-term sustainability plan with periodic monitoring; and ensuring decent wages and working conditions, the safety of workers, and workers' rights to organize and collectively bargain (Mukanga, 2011). A sustainable economic model proposes an equitable distribution and efficient allocation of resources. The idea is to promote the use of those resources in an efficient and responsible way that provides long-term benefits and establishes profitability (UNGC-Accenture, 2013).
Sustainable strategic orientation has been considered in economic, social and environmental levels in previous studies (Baumgartner & Rauter, 2017). In particular, sustainable development in food service industry is very important because of its impact on modern dietary life and the environment through complex supply chains. The issue of sustainability is relevant to all members of the organization, not a particular organization or part of its supply chain. Strategic sustainability orientation explains how sustainability issues are operated and administered at the organization. These orientations are discussed in economic, social and environmental areas (Baumgartner & Rauter, 2017).
Baumgartner and Rauter (2017) introduce sustainable environment orientation as a process that its inputs are raw materials which must be returnable to the environment. Besides, the outputs of this process are products and services that do not harm the environment or threaten the life cycle of plants and animals. This should be observed throughout the supply chain as a sustainable strategy. Organizations face competitive, regulatory, and community pressures thus it has become increasingly significant to balance environmental performance and economic performance. Environmental degradation, global poverty, lack of human rights, far-reaching health deficits and corporate governance resulted in sustainable supply chain management (SSCM) to emerge as key enabler that could push organizations to focus on alleviating environmental issues, providing economic and social benefits (Kovacs, 2014).
The selection of a supplier is considered an operational and strategic task for the development of effective and long-term partnerships (Sarkis and Dhavale, 2015), and hence, the importance of engaging the providers in environmental topics of the company. Due to these

considerations, the problem of green supplier's selection is more complex than the selection of a traditional supplier. However, with the identification of environmental, social, and economic criteria to be evaluated, it is sought to facilitate this task to the organizations (Sarkis and Dhavale, 2015). Sustainable development meets the needs of people today without compromising the ability of people in the future to meet their needs (CIPS, 2014).

The green supply chain (GSC) focuses on how the companies incorporate the suppliers, the processes and the distribution of not only the products and supply materials but also in environmental questions (Scur and Barbosa, 2017). An additional purpose is to determine how operations can be carried out to generate products greener and friendlier to the environment. Nowadays companies expect that their suppliers to go beyond compliance, such as quality or delivery on time. The companies are looking for suppliers to commit to an efficient green design in their product with and additional environmental awareness (Tseng and Chiu, 2013). Nevertheless, in order to make an effective evaluation and selection of green suppliers, complete and precise, environmental, social and economic features must be integrated into the fundamental evaluation processes. Here lies the importance of considering the green attributes as the main tool and most complete at the time of carrying out this process (Sarkis & Dhavale, 2015).

Kovacs (2014) opines that Supply chain sustainability is a holistic perspective of supply chain processes and technologies which go beyond the focus of delivery, inventory and traditional views of cost. This emerging philosophy is based on the principle that socially responsible products and practices are not only good for the environment, but are important for long-term profitability. Sustainability therefore is a business strategy that drives long-term corporate growth and profitability by mandating the inclusion of environmental and social issues into the business model. It is intended to generate a maximum increase in company, consumer and employee value by embracing opportunities and managing risks derived from environmental and social developments.

The ability of the suppliers to improve the design of their products is important in order to reduce the environmental impact throughout the supply chain, as well as maintain sustainability and go to reinforce a green image in organizations (Çifçi and Büyüközkan, 2011). It is important that, before the supplier starts his production process, they demonstrate a range of skills and green practices, such as training and education on such policies, and that such programmers are also evaluated (Winter and Lasch, 2016; Teixeira et al., 2016).

In a study conducted in UK by Walker and Jones (2012), it was found that customers found products from companies which embraced sustainable development to be more appealing to them. 82 percent of the customers preferred to buy products from these companies even if this option was more expensive. This means that by customers buying more it translated to increased sales for these companies which impacted on their bottom line directly.

Wamalwa (2014) found that companies that embraced and implemented green supply chain strategies in their manufacturing processes gained and sustained greater competitive advantage in terms of goodwill, market share, returns on investment and even profitability. Environmental sustainability reduces various risks for companies such as the risk of higher costs from fines and damage payments, and the risk of lower sales due to reputation loss and changes in consumer preferences. This in turns affects positively the competitiveness of the firm. Mwaura et al (2016) indicated that, technology has greatly influenced distribution techniques with more firms using the internet as a distribution channel.

Nyakundi (2013) indicated that green manufacturing practice adoption was at implementation stage as most food processing had considered adoption. The study also

established that the major perceived benefits of adopting green manufacturing were; reduction of waste water, reduction of frequency of environmental accidents and reduction in scrap rate. Gatari and Were (2014), did a study on application challenges of green supply chain management in manufacturing sector in Kenya: showed that, there was inadequate change in the organization and its structures to support implementation of green supply chain management.

Research Methodology

The researcher used descriptive survey research design. Descriptive survey design enabled the researcher to summarize and organize data in an effective way (Kireru, 2014). It provided tools for describing collections of statistical observations and reducing information to an understandable form. A descriptive research design was suitable where the study sought to describe and portray characteristics of an event, situation and a group of people, community or population which is the case adopted in this study.

The target population of this study was all the 217 food and beverage manufacturing companies drawn from all over the major towns and cities in Kenya. The target population was 534 respondents comprising of 217 procurement managers and 217 procurement officers from 217 food and beverage manufacturing companies.

The sampling frame for this study was all of the 217 foods and beverage manufacturing companies in Kenya as listed by the Kenya Association of Manufacturers. The researcher used purposive and simple random sampling technique to select the sample size. Procurement officers and managers were purposively selected from the foods and beverage manufacturing companies in Kenya. One procurement officer and one procurement manager per company was purposively selected to take part in this research. After purposively selecting the procurement officers and managers, simple random sampling was used as a major sampling technique because each respondent had an equal chance of inclusion in the sample. Simple random sampling was appropriate because the entire population is relatively large, diverse and sparsely distributed.

The researcher sampled all the 115 foods and beverage manufacturing companies in Kenya. Using Yamane's (1972) sample size formula at 95% confidence level, P = 0.5, the sample size was computed as hereunder:

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

Where; **n** = the sample size, **N** = the population size, e = the acceptance sampling error

$= 534/1+534(.05)^2$

= 230 respondents

From the target population of 534 respondents a sample of 115 managers and 115 procurement officers was selected from 115 food and beverage manufacturing companies.

A questionnaire was the most appropriate tool for collecting primary data from the respondents. The questionnaire was appropriate as it allows data to be collected in a quick and efficient manner. The researcher developed the questionnaire used in this study on the basis of previous studies. A five-point Likert scale was used for every question or statement that represent the degree of agreement to the given question. The researcher constructed closed-ended questionnaires, which were administered to 115 procurement officers and 115 managers from each of the selected companies under study.

Before embarking on the actual research, the researcher undertook a preliminary study to ascertain the validity and reliability of the research instruments. To test the validity and

reliability of the questionnaire used for this study, the researcher pilot-tested the questionnaire. Piloting of the instruments was done using 12 managers and 12 procurement officers from food and beverage manufacturing companies in Kenya who were not included in the final study. The pilot study was conducted to refine the questionnaire, identify loopholes in the questionnaire and anticipate any logistical problems during the actual survey. Validity is the extent to which a construct measures what it is supposed to measure (Saunders et al., 2007). During questionnaire development, various validity checks were conducted to ensure the instrument measures what it is supposed to measure. There are three important approaches to assessing measurement validity: content validity (also referred to as face validity), construct validity and criterion validity. The current study utilized content and construct validities.

To ensure content validity, discussions were held with experts during the questionnaire formulation stage to ensure that the measure includes an adequate and representative set of items that tap the content and ensure the questions conform to the study objectives. Content validity of the instrument was determined by the researcher using expert judgment. This was done by discussing the items in the instrument with the supervisors, lecturers from the department and colleagues. Construct validity assesses what the construct or scale is in fact measuring. Construct validity was maintained through anchoring of the constructs to the theory from which they are derived.

Reliability of an instrument is the measure of the degree to which a research instrument yields consistent results or data after repeated trials. Reliability was measured using Cronbach's alpha method. The Cronbach's alpha coefficient was an appropriate measure of variance attributable to subjects and variance attributable to the interaction between subjects and items. A reliability coefficient of 0.7 and above was assumed to reflect the internal reliability of the instruments (Fraenkel & Wallen, 2000).

After all data has been collected, the researcher conducted data cleaning, which involved identification of incomplete or inaccurate responses and corrected them to improve the quality of the responses. The data was coded and entered in the computer for analysis using the Statistical Package for Social Sciences (SPSS V23). The research yielded quantitative data. Quantitative techniques such as descriptive statistics and inferential statistics were used to understand relationships between different variables.

The main descriptive statistical analysis that was used include mean, percentages, standard deviation and frequencies to cater for the Likert scale that has been used in the study. Inferential statistics was used to analyze the relationship between variables using linear regression analysis. Linear regression is a parametric statistic used since the data adheres to the following assumptions (Field, 2009); data must be on interval level, a linear relationship exists, the distribution is normal, outliers were identified and omitted. Data was presented by use of tables and graphs.

The Linear regression model assumed the following form:

$Y=\beta_o+\beta_1 X_1+ \varepsilon$……..Equation 3.1

Y is Organizational performance.

β_o,β_1 -coefficients of organizational performance.

X_1 – Supplier sustainability

ε –Error Term

Results

Performance in Food and Beverage Manufacturing Companies

The dependent variable was the performance in food and beverage manufacturing companies in Kenya. The study sought to find out from respondents their view on performance in food and beverage manufacturing companies. The respondents were asked to indicate their agreement on various aspects of performance in food and beverage manufacturing companies using a 5- point likert scale. A total of 10 items were used to explore the respondent's views on performance in food and beverage manufacturing companies and findings are presented in Table 1.

Majority of the respondents 185(88.9%) agreed that both their company and its suppliers have the same goals, with 1.9% undecided and 9.2% disagreed (M=4.15; SD=0.99). Most of the respondents 200(96.2%) agreed that it was easy to solve a business problem between suppliers and the company because of the collaboration they have, with 1% disagreeing and 2.9% undecided (M=4.33; SD=0.58). Majority of the respondents 194(93.3%) agreed that both the company and its suppliers are financially sound due to their close relationship, with 5.8% undecided and 1% disagreed (M=4.32; SD=0.67).

Table 1: Performance in food and beverage manufacturing companies in Kenya

Statement	SD		D		UD		A		SA		Mean	Std.
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		Dev
Both my company and its suppliers have the same goals.	9	4.3	10	4.8	4	1.9	102	49.0	83	39.9	4.15	0.99
It is easy to solve a business problem between our suppliers and my company because of the collaboration we have.			2	1.0	6	2.9	122	58.7	78	37.5	4.33	0.58
Both my company and its suppliers are financially sound due to their close relationship.	2	1.0			12	5.8	109	52.4	85	40.9	4.32	0.67
My company and its suppliers look forward to doing business into the distant future.			14	6.7	17	8.2	84	40.4	93	44.7	4.23	0.87
Our business has improved because of the trust we share with our suppliers.	3	1.4			22	10.6	102	49.0	81	38.9	4.24	0.75
We are able to provide better products to our customers because we work closely with our suppliers.					18	8.7	94	45.2	96	46.2	4.38	0.64
My company has been able to deliver services to its customers at a reduced cost due to supply chain integration	2	1.0	3	1.4	10	4.8	74	35.6	119	57.2	4.47	0.74
We serve our customers fast because we work closely with our suppliers.	2	1.0			15	7.2	97	46.6	94	45.2	4.35	0.70
The integration of technology, people, business and processes has enhanced the company's competitive edge in the current digital age			35	16.8	26	12.5	79	38.0	68	32.7	3.87	1.05

We have been able to deal with abrupt changes in our business environment because we share information with our suppliers.	17	8.2	94	45.2	97	46.6	4.38	0.63
Mean							**4.27**	**0.40**

Most of the respondents 177(85.1%) agreed that the company and its suppliers look forward to doing business into the distant future, with 6.7% disagreeing and 8.2% undecided (M=4.23; SD=0.87). Majority of the respondents 183(87.9%) agreed that their business had improved because of the trust they share with our suppliers, with 10.6% undecided and 1.4% disagreeing (M=4.24; SD=0.75). Most of the respondents 190(91.4%) agreed that they are able to provide better products to their customers because they work closely with the suppliers and 8.7% undecided (M=4.38; SD=0.64).

Majority of the respondents 193(92.8%) agreed that the company has been able to deliver services to its customers at a reduced cost due to supply chain integration, with 4.8% undecided and 2.4% disagreed (M=4.47; SD=0.74). Most of the respondents 191(91.8%) agreed that they serve their customers fast because they work closely with suppliers with1% disagreeing and 7.2% undecided (M=4.35; SD=0.70). Majority of the respondents 147(70.7%) agreed that integration of technology, people, business and processes have enhanced the company's competitive edge in the current digital age, with 12.5% undecided and 16.8% disagreed (M=3.87; SD=1.05). Most of the respondents 191(91.8%) agreed that they have been able to deal with abrupt changes in their business environment because they share information with their suppliers and 8.2% undecided (M=4.38; SD=0.63).

A total of 10 items were used to explore the respondent's views on the performance in food and beverage manufacturing companies in Kenya. The overall mean response score among the respondents on performance in food and beverage manufacturing companies in Kenya was 4.27 and standard deviation of 0.40. This value lies in the interval which implies that respondents appeared to agree with performance in food and beverage manufacturing companies in Kenya.

Supplier Sustainability in Food and Beverage Manufacturing Companies

A quantitative analysis of questionnaire responses was conducted to identify their views on supplier sustainability in food and beverage manufacturing companies in Kenya. A total of 9 statements were used to determine supplier sustainability using a 5-point likert scale and responses presented in Table 2. Majority of the respondents 184(88.4%) agreed that a company environmental management system exists in their company, with 6.7% undecided and 4.8% disagreed (M=4.20; SD=0.89). Most of the respondents 165(79.3%) agreed that they share environmental knowledge with their suppliers, with 14.4% disagreed and 6.3% undecided (M=3.89; SD=1.09). Majority of the respondents 179(86.1%) agreed that achieving environmental goals through joint planning with major suppliers has improved the performance of their company, with 5.3% undecided and 8.6% disagreed (M=4.10; SD=1.07). Majority of the respondents 168(80.8%) agreed that the company cooperates with major suppliers to reduce environmental impact of our products, with 9.1% undecided and 10.1% disagreed (M=4.01; SD=1.06). Most of the respondents 153(73.5%) agreed that the company

cooperates with suppliers for cleaner production, and green packaging with 15.8% disagree and 10.6% undecided (M=3.75; SD=1.19).

Table 2: Supplier Sustainability in Food and Beverage Manufacturing Companies

Statement	SD	D	UD	A	SA	Mean	Std. Dev
	%	%	%	%	%		
An environmental management system exists in their company	3.4	1.4	6.7	49.0	39.4	4.20	0.89
We share environmental knowledge with their suppliers.	5.3	9.1	6.3	50.0	29.3	3.89	1.09
Achieving environmental goals through joint planning with major suppliers has improved the performance of their company.	7.2	1.4	5.3	46.2	39.9	4.10	1.07
My company cooperates with suppliers to reduce environmental impact of our products	5.3	4.8	9.1	44.7	36.1	4.01	1.06
The company cooperates with suppliers for cleaner production, and green packaging.	9.1	6.7	10.6	47.1	26.4	3.75	1.19
My company implements environmental audit for major customer's internal management	2.9	3.4	13.5	26.0	54.3	4.25	1.01
My company collaborates with major suppliers to set up environmental goals	4.3	5.3	2.4	44.2	43.8	4.18	1.02
My company requires major suppliers to implement environmental management system or obtain third-party certification of environmental management system (e.g., ISO 14001)		.5	3.4	58.2	38.0	4.34	0.57
My company collaborates with customer to implement environmental management system	1.0	3.4	7.7	49.5	38.5	4.21	0.80
Mean						**4.10**	**0.54**

Majority of the respondents 167(80.3%) agreed that the company implements environmental audit for major customer's internal management, with 13.5% undecided and 6.3% disagreeing (M=4.25; SD=1.01). Most of the respondents 183(88%) agreed that the company collaborates with major suppliers to set up environmental goals with 9.6% disagreeing and 2.4% undecided (M=4.18; SD=1.02). Majority of the respondents 200(96.2%) agreed that the company requires major suppliers to implement environmental management system or obtain third-party certification of environmental management system (e.g., ISO 14001), with 3.4% undecided and 0.5% disagreeing (M=4.34; SD=0.57. Most of the respondents 183(88%) agreed that their company collaborates with customers to implement environmental management system, with 4.4% disagree and 7.7% undecided (M=4.21; SD=0.80).

Influence of Supplier Sustainability on Organization Performance

A linear regression model was used to explore the relationship between supplier sustainability and organization performance. From the model, (R^2 = .490) shows that supplier sustainability

accounts for 49% variation in organization performance in food and beverage manufacturing companies in Kenya as shown in Table 3.

Table 3: Model Summary on Supplier sustainability and organization performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.700[a]	.490	.487	.28630

a. Predictors: (Constant), supplier sustainability

The regression model with supplier sustainability as a predictor was significant (F=197.62, p =0.000) as shown in (Table 4). This shows that there is a significant influence of supplier sustainability on organization performance.

Table 4: Analysis of Variance on Supplier sustainability and organization performance

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	16.198	1	16.198	197.616	.000[b]
	Residual	16.885	206	.082		
	Total	33.083	207			

a. Dependent Variable: Performance

b. Predictors: (Constant), supplier sustainability

Table 5 shows the estimates of β-value and gives contribution of the predictor to the model. From the findings the t-test associated with β-values was significant and supplier sustainability as the predictor was making a significant contribution to the model. The β-value for supplier sustainability had a positive coefficient, depicting positive relationship with organizational performance as summarized in the model as:

$Y = 2.461+0.440x + \varepsilon$ …… Equation 1

Where: Y = Organization performance, X = Supplier sustainability, ε = error term

Table 5: Supplier sustainability and organization performance Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.140	.153		13.990	.000
	Integration	.520	.037	.700	14.058	.000

a. Dependent Variable: Performance

The study findings depicted that there was a positive significant influence of supplier sustainability on organization performance (β_1=0.520 and p<0.05). Supplier sustainability had a significant influence on organization performance. Therefore, an increase in supplier sustainability led to a rise in performance of food and beverage manufacturing companies. The null hypothesis (H_{O1}) was rejected.

This agrees with Kovacs (2014) that Supply chain sustainability is a holistic perspective of supply chain processes and technologies which go beyond the focus of delivery, inventory and traditional views of cost. It also concurs with Wamalwa (2014) that companies that embraced and implemented green supply chain strategies in their manufacturing processes gained and

sustained greater competitive advantage in terms of goodwill, market share, returns on investment and even profitability.

This agrees with Margolis (2011) that supplier development undertakings also lead to superior partnerships between buyers and their suppliers as well as ways to efficiently and effectively utilize capital by incorporating "lean" practices. Eliminating the waste of resources across the entire supply chain helps in making it "lean" and "green". Working in close partnership with suppliers, to ensure that the labor force get at least the required minimum legal wage and are properly remunerated for overtime hours is a basic obligation. Purchasing and supplies management ought to also be receptive to the likelihood of taking up supplier know-how and aligning it to the buyer's business objectives and needs (Chan, 2012). It agrees with Nyakundi (2013) that the major perceived benefits of adopting green manufacturing were; reduction of waste water, reduction of frequency of environmental accidents and reduction in scrap rate. Structural bonds and Cooperation in business-to-business are viewed as vital mechanisms of supplier-customer-relationships seen as a network (Anderson et al., 2014). Value in organizations is not created in isolation but through the nurturing of key competencies with spurn to the supplier relationship management. There is a belief among organizations that strategic supplier management provides the vital benefits when creativity is natured among suppliers which in turn will translate to value benefits to an organization (Tarafdar & Qrunfleh, 2013).

Conclusions

An environmental management system exists in the company and they cooperate with major suppliers to reduce environmental impact of the products. The company cooperates with suppliers for cleaner production and green packaging and implements environmental audit. The embracing and implementation of green supply chain strategies in their manufacturing processes gained and sustained greater competitive advantage in terms of goodwill, market share, returns on investment and even profitability. With an increase in supplier sustainability there was an improved performance of food and beverage manufacturing companies. The study concluded that supplier sustainability influences the performance of food and beverage manufacturing companies.

Recommendations

The study recommends that Food and Beverage Manufacturing Industry in Kenya and also organizations that are non-manufacturing should ensure they enhance supplier sustainability in its entire supply chain since this study has concluded that supplier sustainability influences the performance of food and beverage manufacturing companies

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