

## **ORIGINAL RESEARCH ARTICLE**

Moderating effect of organization culture on the relationship between supplier development and organizational performance in food and beverage manufacturing companies in Kenya

Bartoo Dorothy Chebichii<sup>1</sup>, Gregory Simiyu Namusonge<sup>2</sup>, Elizabeth Nambuswa Makokha<sup>3</sup>

Corresponding author: <u>bartoo.dorothy@yahoo.com</u>

#### **Abstract**

Supplier development may serve as a better tool that firms can leverage to improve and sustain their organizational performance. The purpose of this study was to determine the moderating effect of organization culture on the relationship between supplier development and organizational performance of food and beverage manufacturing companies in Kenya. The study employed a descriptive survey research design utilizing the resource dependency theory. The target population was procurement managers and procurement officers from 217 food and beverage manufacturing companies in Kenya registered under the Kenya Association of Manufacturers as of 2017. A sample of 248 respondents was drawn. Primary data were collected through the use of a questionnaire. The reliability coefficient was assessed using Cronbach's alpha. The content validity of the instrument was determined by the researcher using expert judgment. The analysis of the data was done using descriptive and regression analysis with the help of SPSS V26. The regression coefficients showed that the interaction between supplier development and organization culture on the performance of food manufacturing firms was significant ( $\beta$  = 0.058, t = 4.68, P < 0.05). The organizational culture moderates the relationship between supplier development and the performance of food and beverage manufacturing firms in Kenya. The study concluded that supplier development influences the performance of food and beverage manufacturing companies. Further, organization culture moderates the relationship between supplier development and the performance of food manufacturing firms. The management of food and beverage manufacturing companies in Kenya should enhance supplier development so as to enable the provision of better services and also to be competitive and achieve organizational goals for their survival.

**Key words**: Supplier development, organizational culture, organizational performance, food and beverage.

## 1.0 Introduction

URL: <a href="https://ojs.jkuat.ac.ke/index.php/JAGST">https://ojs.jkuat.ac.ke/index.php/JAGST</a>

<sup>&</sup>lt;sup>1</sup>Department of Procurement and Logistics, Jomo Kenyatta University of Agriculture and Technology, Nairobi

<sup>&</sup>lt;sup>2</sup>Department of Entrepreneurship Leadership and Management, Jomo Kenyatta University of Agriculture and Technology, Nairobi

<sup>&</sup>lt;sup>3</sup>Department of Entrepreneurship Leadership, and Management, Jomo Kenyatta University of Agriculture and Technology, Nairobi



Future-centric businesses are compelled to use their resources more strategically in order to gain a competitive advantage from the potential available in the market. According to emerging trends, supplier development may be a more contemporary source of competitive advantage that businesses can use to boost and maintain organizational performance. To build, increase, grow, and sustain the core competences and skills of the supplying firm(s) in order to primarily fulfill the buying firm's short- and/or long-term supply needs, supplier development has been characterized as any planned long-term business strategy (a cooperative effort) (Al-Doori, 2019). An important effort that businesses can make is to develop their suppliers for long-term partnership and relationship enhancement in addition to competitive advantage.

Many organizations in Europe and Asia are manufacturing powerhouses; therefore, they prioritize logistics as a critical area for growth in both shareholder value and customer value (Mohanty & Gahan, 2015). In this sense, improved supplier relationships increase the effectiveness of the supply chain and boost suppliers' competitiveness in the market. When highlighting the significance of supplier relationship management in India, Chopra and Sodhi (2014) use the example of Galopjee, an Indian milk processing company that has experienced growth through direct procurement from milk producers, no matter how small, thereby removing the middlemen. The guiding philosophy is to continuously enhance the process while ensuring client satisfaction at the point of delivery.

An increasingly potent path to establishing a cost advantage comes through improved logistical services rather than volume and economies of scale (Christopher, 2016). According to a regional study on the effects of supplier relationship management (SRM) on firm performance conducted in Egyptian companies in the FMCG, pharmaceutical, steel, and fertilizer business sectors, for the majority of companies, developing strong, mutually beneficial long-term relationships with strategic SRM is a critical step in improving performance throughout the supply chain, producing greater cost efficiency, and enabling the business to grow and develop (Roushdy *et al.*, 2015).

For Kenya Vision 2030, one of the main forces behind achieving a consistent yearly GDP growth of 10% is the manufacturing sector. Low value addition, limited diversification, high production costs, and an influx of counterfeit goods are the sector's main problems. According to KPMG (2013), the capacity to conveniently obtain raw materials that enable the development of the end product is what gives manufacturing enterprises their competitive advantage. This industry has increased throughout time in terms of both employment and its contribution to the nation's gross domestic product (Nyaoga & Magutu 2016).

Enterprises that produce food and beverages rely on suppliers for the raw materials they use in their manufacturing processes. It is crucial to note that financial measures, which are currently of great importance, are not the only ones that companies consider when determining success. Issues of sustainable supply, environmental concerns, and community social responsibility requirements have started gaining great importance, especially in building the brand of a firm.

URL: https://ojs.jkuat.ac.ke/index.php/JAGST



# 1.1 Influence of Supplier Development on Organizational Performance

Supplier development refers to any effort made by a purchasing organization, such as a manufacturer and its supplier, to improve the supplier's performance and/or capabilities and, in turn, satisfy the manufacturer's supply demands (Andrew 2016). Mbah et al. (2019) posit that organizational performance has been used to gauge supplier development. Its dimensions include profit, cost, return on investment, and sales. Operational, organizational, firm, and financial criteria have all been used to gauge the success of supplier development programs. Customer service delivery is the efficient, cost-effective, and timely completion of customers' orders (Olise & Ojiaku, 2018). Shorter lead times, consistent and on-time delivery, complete orders, a quicker response to customer requirements, and the capacity to meet special and unique customer requests are all part of meeting customers' expectations with regard to order fulfillment. Previous research on supplier development in terms of cost reduction, customer happiness, quick order fulfillment, and quick delivery shows that supplier development is an alternative paradigm to organization performance (Khuram, Ilkka, Elina, & Shpend, 2016).

Yegon, Kosgei, and Lagat (2015) also looked into how buyer performance was impacted by supplier development. An explanatory research approach was used in this study of sugar milling enterprises in Kenya's Western Region to help explain the cause-and-effect link between supplier development and buyer performance. Through the use of the purposive sampling technique, a sample of 88 senior purchasing and marketing executives was chosen. Correlation analysis and multiple regressions were used to examine the data collected from respondents. According to the study, both supplier financial and technical support improve the buyer's performance.

In a case study of East Africa Breweries Limited, Wachiuri (2015) looked into how supplier development affected the organizational performance of Kenya's manufacturing sectors. Although the study came to the conclusion that the supplier relationship had a favorable effect on the chosen business, it was generic in nature.

The impact of supplier development on supplier performance in Kisumu County food manufacturing companies has been examined by Lukhoba & Muturi (2015). The study concentrated on the specific goal of examining four supplier development strategies in the food manufacturing industries: early supplier involvement, financial support, supplier training, and supplier incentive. Both secondary and primary sources were used in the data collection. The study found that early supplier involvement, financial support, supplier training, and supplier incentives all improve supplier performance.

A supplier training program, supplier evaluation and assessment, supplier certification or qualification, financial support, supplier audits, and offering incentives and recognition, according to Job (2015), are all examples of supplier development approaches. According to Lukhoba and Muturi (2015), early supplier involvement, financial support, supplier training, and supplier incentives are the four techniques that make up supplier development. Yegon,

URL: https://ojs.jkuat.ac.ke/index.php/JAGST



Kosgei, and Lagat (2015) contend that there are only two techniques for supplier development: technical support and financial support.

Empowering suppliers in the areas of financial support, technical support, early supplier involvement, supplier audit, and supplier certification is anticipated to strategically influence operational performance, according to supply chain studies (especially in the areas of customer satisfaction, competitive advantage, cost efficiency, operational efficiency, and customer service delivery) (Marín-García et al., 2018; Easterby-Smith et al., 2019).

While many scholars have attempted to look at supplier development and its impact on organizational performance, published studies have produced contradictory findings: some (Babatunde et al., 2016; Adedokun et al., 2017; Erakpotobo, 2018) found a significant positive link, while others (Al-Doori, 2019; Essien et al., 2019) found an insignificant positive link. Other studies also reported a significant negative link. This study is prepared to investigate how organizational culture moderates the relationship between supplier development and organization performance in Kenyan food and beverage manufacturing enterprises, which is apparently driven by a dearth of empirical studies and a few empirical contradictions.

### 1.2 Organization Culture as a Moderator

According to Viegas-Pires (2016), the majority of an organization's leaders are individuals who share its core principles. According to Shahzad *et al.* (2017), an ideal organizational culture must include the following elements to support organizational performance: how the organization conducts its business, treats its employees, clients, and the general public; the degree of freedom allowed in decision-making, the development of new ideas, and personal expression; how power and information flow through its hierarchy; and how dedicated employees are to collective goals. Lack of an effective organizational culture in the corporate group contributes to poor performance and productivity. To increase performance and productivity, business managers must comprehend the significance of an effective organizational culture (Viegas-Pires, 2016).

According to Bolboli and Reiche (2016), the corporate group's company managers' subpar cultural integration is the reason why more than 90% of business excellence projects fail. Nazir and Zamir (2015) investigated how Islamabad's organizational culture affected workers' productivity. The results show that organizational culture has an impact on employee performance. The study also showed that norms and values affect how well organizational goals are achieved and employee performance since they have an impact on what is expected of them in terms of conduct. In Jordanian private universities, Afaneh *et al.* (2014) sought to determine the impact of organizational culture on organizational commitment. The results demonstrate a statistically significant relationship between collective cultural dimensions and employee behavioral performance and organizational commitment.

Employees that have a high level of perceived organizational culture at their workplaces are more likely to have better job satisfaction, loyalty, and a desire to recommend the company as a great place to work). Corporate performance is significantly hampered by the group's



internal cultural differences. A study by Emeka and Philemon (2012) on the impact of organizational culture on employee performance in a sample of Nigerian manufacturing enterprises showed that there is a link between organizational culture, worker performance, and productivity.

# 1.3 Conceptual Framework

A conceptual framework explores the relationship between independent variables and dependent variables. The conceptual framework for this study was based on the independent variables: supplier development and organization performance, which influence the dependent variable, organization performance, and Figure 1 shows this relationship. The moderating variable was the organization's culture, which consisted of involvement, consistency, adaptability, and mission.

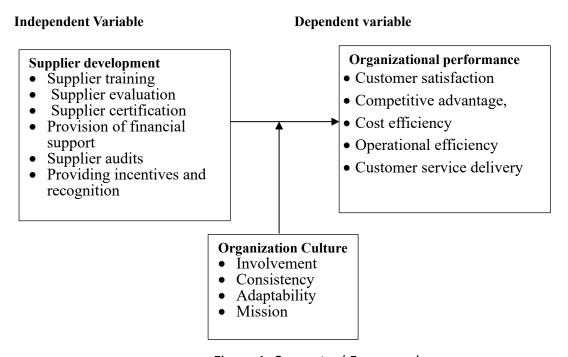


Figure 1. Conceptual Framework

#### 2.0 Materials and methodology

#### 2.1 Research design.

The study utilized a descriptive survey research design, which allowed for the effective summary and organization of data (Kireru, 2013). This design facilitated the description of statistical observations and the reduction of information into an understandable format.

#### 2.2 Target population and sample size of the study

The study targeted a population of 651 procurement managers and procurement officers from 217 food and beverage manufacturing companies registered with the Kenya Association of Manufacturers (KAM) in 2017. A sample size of 248 respondents was selected using a stratified simple random sampling procedure (Table 2). This method was appropriate due to the large,

URL: https://ojs.jkuat.ac.ke/index.php/JAGST



diverse, and sparsely distributed population. The sample size was determined using Yamane's (1967) formula, which considers a 95% confidence level and a probability of 0.5."

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

Where; n = the sample size, N = the population size, e = the acceptance sampling error =  $651/1+651(.05)^2$  651/2.675

= 248 respondents

Table 1: Target population

Region	Procurement	Procurement	Target
	managers	employees	population
Coast Region	12	24	36
Nyanza/Western Region	10	20	30
South Rift Region	15	30	45
North Rift Region	21	42	63
Eastern & surrounding regions	13	26	39
Central & surrounding regions	15	30	45
Industrial Area Region	131	262	393

Table 2: Sample Size

Region	Procurement	Procurement	Sample size
	managers	employees	
Coast Region	4	10	14
Nyanza/Western Region	3	8	11
South Rift Region	4	13	17
North Rift Region	6	18	24
Eastern & surrounding regions	4	11	15
Central & surrounding regions	4	13	17
Industrial Area Region	39	110	150

(Source; Researcher)

#### 2.3 Data collection

The study collected primary data from respondents using a questionnaire, which allowed for quick and efficient data collection. Closed-ended questions were used, and the questionnaire was administered to the respondents through a drop-and-pick method. Data collection took place between May and July 2018.

URL: <a href="https://ojs.jkuat.ac.ke/index.php/JAGST">https://ojs.jkuat.ac.ke/index.php/JAGST</a>



## 2.4 Pilot Study

A preliminary analysis was conducted to assess the validity and reliability of the research instrument before the main data collection phase of the study. The researcher pilot-tested a questionnaire on a sample of 24 respondents from 12 food and beverage manufacturing companies in Kenya who were not included in the final study. To evaluate the reliability of the questionnaire, Cronbach's alpha coefficients were used as a measure of internal consistency. The questionnaire included items on the performance, supplier development, and organizational culture of the companies. The reliability coefficients for each construct were calculated and found to be above the recommended threshold of 0.70, with performance having a coefficient of 0.714, supplier development having a coefficient of 0.745, and organization culture having a coefficient of 0.821. Although the sample size was small, the high reliability coefficients suggest that the questionnaire was a valid and reliable tool for measuring the targeted constructs.

# 2.5 Data analysis

The researcher carried out data cleaning and coded the data into the Statistical Package for Social Sciences (SPSS) V26 computer to prepare it for analysis. Descriptive and inferential statistics were utilized to analyze the data, including mean, percentages, standard deviation, and frequencies as the four basic descriptive statistical analyses. The researcher used the product-moment correlation to determine whether a relationship exists between the variables. Additionally, multiple regression analysis was employed to examine the relationship between the independent and dependent variables since the data met specific assumptions, including being on an interval scale, having a linear relationship, normal distribution, and the exclusion of outliers (Field, 2009).

The regression model is as follows:

 $Y = \beta_0 + \beta_1 X_1 + \epsilon$  .....Equation 1 (Direct effect)

 $Y = \beta_0 + \beta_2 X_2$ .....Equation 2 (Moderated effect)

 $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_1 X_1^* X_1 + \epsilon$  ......Equation 3 (Hierarchical Multiple regression)

Y is Organizational performance.

 $\beta_0$ ,  $\beta_1$ ,  $\beta_2$ ,  $\beta_3$   $\beta_4$  - Regression coefficients to be estimated

X<sub>1</sub> –Supplier development

X<sub>2</sub>- Organization Culture

ε –Error Term

## 3.0 Results

#### 3.1 Supplier development in food and beverage manufacturing companies

In order to investigate the impact of supplier development on the performance of food and beverage manufacturing companies, a 5-point Likert scale was used to ask the respondents to rate their level of agreement with various supplier development factors. The opinions of the respondents were assessed using a total of ten items, the details of which are presented in Table 3.

URL: https://ojs.jkuat.ac.ke/index.php/JAGST



Table 3: Supplier development in food and beverage manufacturing companies

Statement		SD		D		NAD		Α	_	SA	Mean	Std.
	Fre	%	Fre	%	Freq	%	Freq	%	Freq	%		Dev
	q		q									
I do understand the supplier			6	2.9	5	2.4	58	27.9	139	66.8	4.59	0.68
development concept												
Supplier development is			2	1.0	12	5.8	109	52.4	85	40.9	4.32	0.67
necessary in supply chain												
management												
The management of our			14	6.7	17	8.2	84	40.4	93	44.7	4.23	0.87
company is keen on improving												
specific supplier attributes  My company trains key			12	5.8	8	3.8	111	53.4	77	37.0	4.22	0.77
My company trains key suppliers on best supply			12	5.8	٥	3.8	111	55.4	//	37.0	4.22	0.77
management practices												
My company helps suppliers to	9	4.3	9	4.3	48	23.1	92	44.2	50	24.0	3.79	1.00
improve their production	,	4.5	,	4.5	40	23.1	32	7-7-2	30	24.0	3.73	1.00
process												
The company extents financial	8	3.8	31	14.9	49	23.6	82	39.4	38	18.3	3.53	1.07
support to suppliers in case the												
supplier has a financial												
challenge in its production												
operations.												
The company communicates	18	8.7	11	5.3	40	19.2	72	34.6	67	32.2	3.76	1.21
to the suppliers about												
performance and customer												
feedback	24	10.1	20	0.6	20	40.0	7.6	26.5		25.5	2.50	4.25
The company assists suppliers	21	10.1	20	9.6	38	18.3	76	36.5	53	25.5	3.58	1.25
in acquiring certification by agencies.												
The company recognizes	9	4.3	10	4.8	4	1.9	98	47.1	87	41.8	4.17	1.00
outstanding suppliers	,	4.5	10	4.0	-	1.5	50	47.1	07	41.0	7.17	1.00
The company does occasional			2	1.0	6	2.9	119	57.2	81	38.9	4.34	0.58
supplier audits to ensure			_		•			07.2		00.0		0.00
suppliers maintain expected												
standards												
Mean											4.05	0.53

The supplier development survey's overall mean response score was 4.05, with a standard deviation of 0.53 points. This value falls within an acceptable range and indicates that respondents agreed that supplier development has an impact on the performance of food and beverage manufacturing companies in Kenya. Furthermore, the small overall standard deviation suggests that respondents held similar views on the influence of supplier development on company performance.

## 3.2 Organization culture

The organizational culture of Kenyan food and beverage manufacturing companies served as the moderator variable, whose results are shown in Table 4.

URL: https://ojs.jkuat.ac.ke/index.php/JAGST



Table 4: Organization Culture

Iable 4: Or	ganıza	tion C	uiture				
Statement	SD	D	NAD	Α	SA	Mean	Std. Dev
	%	%	%	%	%		
Decision are taken based on enough		1.0	2.9	58.7	37.5	4.33	0.58
information							
There is information sharing to the	1.0		5.8	52.4	40.9	4.32	0.67
employees							
We have team cohesiveness		6.7	8.2	40.4	44.7	4.23	0.87
Development of employees' ability is an	1.4		10.6	49.0	38.9	4.24	0.75
important source for our firm							
competitiveness		_					0.55
There is a common awareness to find		.5	3.4	58.2	38.0	4.34	0.57
solution to every organizational problem	1.0	3.4	7.7	49.5	38.5	4.21	0.80
There is harmony between organizational levels	1.0	3.4	7.7	49.5	38.3	4.21	0.80
There is a good response to competitors		7.2	12.5	41.8	38.5	4.12	0.89
and environmental changes		7.2	12.5	41.0	30.3	4.12	0.05
Consumers evaluation are applied for basic		11.1	11.5	37.0	40.4	4.07	0.98
changes				07.10			0.50
Action and work performance are carried	2.9	1.0	4.8	56.3	35.1	4.20	0.81
out after coordination with concerned units							
The company has a clear mission as	2.4	1.4	6.3	50.5	39.4	4.23	0.83
directions for work performance							
The company has clear future strategies		2.9	2.4	27.9	66.8	4.59	0.68
Organizational goals are agreed to by all	1.0		5.8	52.4	40.9	4.32	0.67
stakeholders in the organization							
Mean						4.27	.446

The study investigated the opinions of respondents on the corporate culture in Kenyan food and beverage manufacturing enterprises using a total of 12 items. The overall mean response score was 4.27, with a standard deviation of 0.446. This score falls within the interval range, indicating that respondents agreed that organizational culture has an impact on the performance of food and beverage manufacturing companies in Kenya.

# 3.3 Performance in food and beverage manufacturing companies

The respondent's opinions on performance in companies that manufacture food and beverages were elicited using a total of ten items. The results are shown in Table 5.



Table 5: Performance in food and beverage manufacturing companies in Kenya

Statement		SD		D		UD		Α		SA	Mean	Std.
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%		Dev
Both my company and its	9	4.3	10	4.8	4	1.9	102	49.0	83	39.9	4.15	0.99
suppliers have the same goals.												
It is easy to solve a business			2	1.0	6	2.9	122	58.7	78	37.5	4.33	0.58
problem between our suppliers												
and my company because of the												
collaboration we have.												
Both my company and its	2	1.0			12	5.8	109	52.4	85	40.9	4.32	0.67
suppliers are financially sound												
due to their close relationship.												
My company and its suppliers			14	6.7	17	8.2	84	40.4	93	44.7	4.23	0.87
look forward to doing business into the distant future.												
Our business has improved	3	1.4			22	10.6	102	49.0	81	38.9	4.24	0.75
because of the trust we share	3	1.4			22	10.6	102	49.0	01	30.9	4.24	0.75
with our suppliers.												
We are able to provide better					18	8.7	94	45.2	96	46.2	4.38	0.64
products to our customers					10	0.7	J.	.5.2	30	10.2	1.50	0.0.
because we work closely with												
our suppliers.												
My company has been able to	2	1.0	3	1.4	10	4.8	74	35.6	119	57.2	4.47	0.74
deliver services to its												
customers at a reduced cost												
due to supply chain integration												
We serve our customers fast	2	1.0			15	7.2	97	46.6	94	45.2	4.35	0.70
because we work closely with												
our suppliers.												
The integration of technology,			35	16.8	26	12.5	79	38.0	68	32.7	3.87	1.05
people, business and processes												
has enhanced the company's												
competitive edge in the current												
digital age					17	0.2	0.4	45.2	07	16.6	4 20	0.62
We have been able to deal with abrupt changes in our					17	8.2	94	45.2	97	46.6	4.38	0.63
business environment because												
we share information with our												
suppliers.												
Mean											4.27	0.40

The study found that the respondents generally agreed on the effectiveness of Kenyan food and beverage manufacturing firms, with an aggregate mean response score of 4.27 and a standard deviation of 0.40. The score falls within the acceptable range, indicating a high level of agreement among the respondents. Furthermore, the low aggregate standard deviation suggests that there was a general consensus among the respondents on the effectiveness of the companies.

# 3.4 Multiple Hierarchical Regression Analyses

To investigate the relationship between supplier development and the performance of food

URL: https://ojs.jkuat.ac.ke/index.php/JAGST



and beverage manufacturing companies, a moderated multiple regression analysis was conducted using a sample of X participants. The aim was to quantify the interaction impact and examine the moderating effect of organizational culture. Standardized variables were used to create the interaction variables, and the analysis was performed in three steps. In step 1, multiple regressions were conducted on the independent variable, supplier development. In step 2, the moderator variable, organizational culture, was introduced. Finally, in step 3, the linkages between supplier development and organizational culture were examined.

# 3.4.1 Model summary on interactions

Summary results from a hierarchical regression model examining the relationship between organizational culture, supplier development, and the performance of food and beverage manufacturing firms revealed that the independent variable was statistically significant, explaining 43.8% (R2 = 0.438) of the variance in the firms' performance. The results of the regression study also showed a substantial positive association between supplier development and the performance of food manufacturing firms (Model 1). The independent variable accounted for 43.8% of the variation in the performance of food manufacturing firms. Additionally, the moderator organizational culture explained only 62.8% (R2 = 0.628) of the variance, and the significant increase in R2 of 0.190 (19%) was evident in Model 2 (Table 6).

Table 6: Model Summary on Interactions

Model	R	R Square	Adjusted	Std. Error	Change Statistics				
			R Square	of the	R Square	F Change	df1	df2	Sig. F
				Estimate	Change				Change
1	.662ª	.438	.435	.30043	.438	160.529	1	206	.000
2	.792 <sup>b</sup>	.628	.624	.24506	.190	104.619	1	205	.000
3	.815°	.664	.659	.23344	.036	21.915	1	204	.000

a. Predictors: (Constant), Development

b. Predictors: (Constant), Development, Culture

c. Predictors: (Constant), Development, Culture, SDOC

Model 3's analysis of the interaction between supplier development and organizational culture (SDOC), which produced an R2 change of 0.036 (3.6%), was found to be significant as shown in Model 3. This interaction explained 66.4% (R2 = 0.664) of the variance in the performance of food and beverage manufacturing companies, as reported in Table 7. The outcomes suggested by models 1, 2, and 3 demonstrated good model fit, as evidenced by an overall test of significance with a p-value of 0.000 (below the 0.05 threshold of significance). Moreover, the independent variable, moderator, and one interaction were statistically highly significant predictors of the performance of food and beverage manufacturing companies in Kenya (Table 7). Therefore, using the interaction between the independent variable and organizational culture, models 1-3 were appropriate and well-suited to predict the performance of food manufacturing companies in Kenya.



	Table 7: Interactions ANOVA <sup>a</sup>											
Mod	el	Sum of	Df	Mean Square	F	Sig.						
		Squares										
1	Regression	14.489	1	14.489	160.529	.000b						
	Residual	18.593	206	.090								
	Total	33.083	207									
2	Regression	20.772	2	10.386	172.947	.000c						
	Residual	12.311	205	.060								
	Total	33.083	207									
3	Regression	21.966	3	7.322	134.367	.000 <sup>d</sup>						
	Residual	11.117	204	.054								
	Total	22.002	207									

a. Dependent Variable: Performance

b. Predictors: (Constant), Development

c. Predictors: (Constant), Development, Culture

d. Predictors: (Constant), Development, Culture, SDOC

The validity of the model was assessed using an F-statistic. The results indicated that there was a significant correlation between supplier development and manufacturing firm performance (F = 160.53, p-value 0.001). Organizational culture was also found to be a major predictor of manufacturing business performance, as evidenced by the statistical significance of the model when it was included in the analysis (Model 2) (F = 127.95, p-value 0.001).

When the product terms were added to the analysis (Model 3), the F-statistics changed (F = 134.367, p-value 0.001), demonstrating that organizational culture, the independent variable, and the moderated variables were all important predictors of the performance of food and beverage manufacturing companies.

As shown in Table 8, the regression coefficient for supplier development and performance of food and beverage manufacturing companies was statistically significant ( $\beta$  = 0.496, t = 12.67, P = 0.000), satisfying the requirements for adding a moderator. Using Model 2, the influence of organizational culture on the performance of food and beverage manufacturing companies could be reliably assessed. The results of the hierarchical regression analysis showed that organizational culture was a statistically significant predictor of performance for food and beverage manufacturing companies ( $\beta$  = 4.818, t = 7.25, P = 0.000), indicating that it moderated how well these companies performed.



T  -   0 -	C = = ££: = : = . = ± = !	n
іаріе 8:	Coefficients'	-

	Table 6. Coefficients										
Mo	odel	Unstandardize	d Coefficients	Standardized	t	Sig.					
				Coefficients							
		В	Std. Error	Beta							
1	(Constant)	2.259	.160		14.103	.000					
	Development	.496	.039	.662	12.670	.000					
2	(Constant)	1.207	.166		7.255	.000					
	Development	.206	.043	.275	4.818	.000					
	Culture	.523	.051	.583	10.228	.000					
3	(Constant)	.831	.178		4.682	.000					
	Development	.266	.043	.355	6.235	.000					
	Culture	.544	.049	.607	11.131	.000					
	SDOC	.058	.012	.214	4.681	.000					

a. Dependent Variable: Performance

The regression coefficients of supplier development and organizational culture's impact on the performance of food and beverage manufacturing companies were (= 0.058, t = 4.68, P < 0.05). Hypothesis H01 stated that organizational culture has little influence on supplier development and the performance of food and beverage manufacturing companies. However, the findings of the study rejected Hypothesis H01, indicating that organizational culture does influence the performance of food and beverage manufacturing companies concerning supplier development. Therefore, it can be concluded that the relationship between supplier development and the performance of food manufacturing companies is moderated by organizational culture.

Both the independent variable and the moderator were significant in the entire model. When organizational culture was included in the research, there was a strong positive link between organizational culture and supplier development in food and beverage manufacturing companies. Furthermore, the output model of the investigation revealed a substantial association between supplier development and the performance of food and beverage manufacturing companies when the interactions were added to the analysis. These results demonstrate that the organizational culture of food manufacturing companies has a strong moderating effect on supplier development and firm performance.

The research indicated that supplier development significantly impacts the performance of organizations. These findings align with previous studies conducted by Wachiuri et al. (2015), which demonstrated that financial support and training for suppliers have a big impact on organizational success. Additionally, Yegon, Kosgei and Lagat (2015) found that supplier technical support and financial support have a favorable impact on buyer performance. This also supports Job's (2015) findings that supplier development positively and significantly impacts the organizational performance of the manufacturing sector, as demonstrated through supplier certification, supplier audit, financial support, technical support, training, and education.

#### 4.0 Conclusions

Food and beverage businesses inform their suppliers about their performance and customer



feedback, which helps the suppliers become certified by organizations. The businesses also recognize their best suppliers. By exchanging information with their suppliers, these businesses are able to identify exceptional suppliers and adapt to sudden changes in the business environment. Organizational culture and supplier development both have an impact on how well food and beverage manufacturing companies perform. A study found that supplier development affects the performance of food and beverage manufacturing companies. Additionally, the study found that there is a moderating effect of organizational culture on the relationship between supplier development and the performance of food manufacturing companies

#### 5.0 Recommendations

The management of Kenyan food and beverage manufacturing companies should enhance their supplier development programs to enable the delivery of improved services, compete in the market, and fulfill their objectives for organizational survival. The management of food and beverage manufacturing companies shares tacit knowledge that enhances suppliers' competencies and boosts their performance. Additionally, this study has determined that management should enhance organizational culture, as it moderates the relationship between supplier development and organizational performance.

# 6.0 Acknowledgement6.1 FundingNone

#### 6.2 Conflict of interest

None.

#### 6.3 General acknowledgment

None

#### 6.4 Ethical consideration and clearance

None

#### 7.0 References

Adedokun, F. B., Onikola, Y. S. and Oke, J. A. (2017). Influence of supplier development on organization performance: An empirical investigation of manufacturing sector in Oyo State, Nigeria. *International Journal of Economics and Business Management*, 3(2), 29-37.

Afaneh, J. A., Khaireddin, M. A., Sanjuq, G. M., & Qaddoumi, J. B. (2014). Impact of cultural dimensions according to Hofstede model on organizational commitment of the middle management at Jordanian private universities. *European Journal of Business and Social Sciences*, *3*(9), 129-146.

Al-Doori, J. A. (2019). The Impact of supply chain collaboration on performance in automotive industry: Empirical evidence. *Journal of Industrial Engineering and Management*, 12(2), 241-253. http://dx.doi.org/10.3926/jiem.2835

URL: https://ojs.jkuat.ac.ke/index.php/JAGST



- Andrew, A. (2016). Strategic sourcing process model. *Journal of Business & Industrial and Labor Relations Review, 17*, 99-120.
- Babatunde, B. O., Gbadeyan, R. A. and Bamiduro, A. (2016). Supply chain management practices and market performance: Evidence from selected major marketers of petroleum products in Nigeria. *The Pacific Journal of Science and Technology*, 17(1), 129-139.
- Bolboli, S. A., & Reiche, M. (2016). Development of an instrument for assessing corporate culture in the context of EFQM excellence model. *Organ. Cult. Int. J*, *16*, 37-50.
- Chopra, S., &Sodhi, M. S. (2014). Reducing the risk of supply chain disruptions. *MIT Sloan Management Review*, 55(3), 73.
- Christopher, M. (2016). Logistics & supply chain management. Pearson Uk.
- Easterby-Smith, M., Lyles, M. A. and Peteraf, M. A. (2019). Dynamic capabilities: Current debates and future directions. *British Journal of Management*, 20(1), 1-8.
- Emeka, N., & Philemon, A. (2012). The impact of organizational culture on employee performance a study of selected Manufacturing Industry in Enugu. *Asian J. Bus. Manag. Stud. 3 (2): 13- 19.*
- Field, A. P. (2009). Discovering statistics using SPSS. London: Sage publications.
- Erakpotobo, V. O. (2018). Supply chain integration and organisational performance in the upstream oil and gas firms in Nigeria. *Accounting & Taxation Review*, 2(1), 233-244.
- Essien, E. E., Lodorfos, G. and Kostopoulos, I. (2019). Antecedents of supplier selection decisions in the public sector in Nigeria. *Journal of Public Procurement*, 19(1), 15-45. http://dx.doi.org/10.1108/JOPP-03-2019-023
- Job, M. K. (2015). Supplier Development and Operational Performance of Manufacturing Firms in Nairobi City County. MBA Thesis of School of Business University of Nairobi.
- Khuram, S., Ilkka, S., Elina, S., & Shpend, I. (2016). Benchmarking Supplier Development: An Empirical Case Study of Validating A Framework to Improve Buyer-Supplier Relationship. *Management and Production Engineering Review.* 7(1) 56–70. http://dx.doi.org/10.1515/mper-2016-0007
- Kireru, J. N. (2014). Challenges affecting implementation of talent management in state corporations-Case of Kenya Broadcasting Corporation.
- KPMG (2013) The KPMG survey of corporate responsibility reporting 2013. *KPMG Special Services* B.V, Netherlands
- Lukhoba, E. J, &Muturi, W. (2015). Effect of Supplier Development on Supplier Performance: A Survey of Food Manufacturing Companies in Kisumu County. *International Journal of Economics, Commerce and Management*. 3(11), 1146 1160.
- Marín-García, J.A., Alfalla-Luque, R., &Machuca, J.A.D. (2018). A Triple-A supply chain measurement model: validation and analysis. *International Journal of Physical Distribution and Logistics Management*, 48(10), 976-994. https://doi.org/10.1108/IJPDLM-06-2018-0233
- Mbah, S., Obiezekwem, J. and Okuoyibo, A. (2019). Inventory management and operational performance of manufacturing firms in south-east Nigeria. *International Business Research*, 12(7), 76-82. http://dx.doi.org/10.5539/ibr.v12n7p76
- Mohanty, M., & Gahan, P. (2015). Supplier Relationship Management & Strategic



- Outsourcing. LAP LAMBERT Academic Publishing.
- Nyaoga, R., & Magutu, P. (2016). Constraints management and value chain performance for sustainable development. *Management Science Letters*, 6(6), 427-442. http://dx.doi.org/10.5267/j.msl.2016.4.002
- Olise, M. C. and Ojiaku, O. C. (2018). Effects of product quality on customer satisfaction: A review of manufacturing company's performance in anambra state. *International Journal of Business & Law Research*, 6(1), 39-47.
- Nazir, N., & Zamir, S. (2015). Impact of Organizational Culture on employee's performance. *Industrial Engineering Letters*, *5*(9), 31-37.
- Roushdy, M., Mohamed, M., Hesham, S., Elzarka, S., & Hafez, L. (2015). Investigating the Impact of Suppliers Relationship Management on Firms' Performance: A Multiple Case Study Approach on Manufacturing Companies in Egypt. In *Proceedings of the 2015International Conference on Operations Excellence and Service Engineering Orlando, Florida, USA, September* (pp. 10-11).
- Shahzad, F., Xiu, G. Y., & Shahbaz, M. (2017). Organizational Culture and Innovation Performance in Pakistan's Software Industry. *Technology in Society, 51*, 66-73. https://doi.org/10.1016/j.techsoc.2017.08.002
- Viegas-Pires, M. (2013). Multiple levels of culture and post M&A integration: A suggested theoretical framework. *Thunderbird International Business Review*, 55(4), 357-370. https://doi.org/10.1002/tie.21550
- Wachiuri, E. W., Waiganjo, E. & Oballah, D. (2015). Role of supplier development on organizational performance of manufacturing industry in Kenya: A case study of East African Breweries Limited. *International Journal of Education and Research*, 3(3), 683-694.
- Yamane, T. (1967). *Statistics, An Introductory Analysis*. 2nd Ed., New York: Harper and Row.
- Yegon, J. Kosgei, D. K and Lagat, C. (2015). Effect of supplier development on buyer performance: A survey of sugar milling firms in Western Region of Kenya. *European Journal of Logistics, Purchasing and Supply Chain Management*. 3(3), .35-54,