International Journal of **Supply Chain Management** (IJSCM)

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SUPPLY CHAIN QUALITY MANAGEMENT (SCQM) PRACTICES AND THE EFFECTS ON CUSTOMERS' SATISFACTION IN THE BREWERY COMPANIES IN CAMEROON

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SUPPLY CHAIN QUALITY MANAGEMENT (SCQM) PRACTICES AND THE EFFECTS ON CUSTOMERS' SATISFACTION IN THE BREWERY COMPANIES IN CAMEROON

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Abstract

Purpose: The heightening of competitive pressures has led companies to utilizing quality management practices through indirect competition. The brewery companies in Cameroon recently are noticing a wide variety of practices to this effect. This paper so sort to identify the supply chain quality management practices suitable for the brewery companies in Cameroon and also to examine their effects on customer satisfaction.

Methodology: The study made use of a case study survey research design. The quest for originality and the desire to address issues particular to the brewery companies in Cameroon gave room for the use of primary data collected using a survey questionnaire. From a diverse population 200 customers of the four principal brewery companies in the South West Region participated in the study. The Cronbach's Alpha was used to identify key constructs of supply chain quality management while the OLS technique was used to examine their effects on customer satisfaction.

Results: The study found that the supply chain quality management practice suitable for the brewery companies in Cameroon were top management commitment, strategic supplier partnerships, customer relationship management, information sharing and continuous improvement and innovation. Further, top management commitment, strategic supplier partnerships, customer relationship management, continuous improvement and strategic supplier partnership were found to significantly affect customer satisfaction at 5% level of significance while information sharing was insignificant. Generally, 39.9% of variations in customer satisfaction were as a result of changes in supply chain quality management.

Unique contribution to theory, policy and practice: The unique contribution to practice rest on clearly identifying the constructs of supply chain quality management suitable to the brewery companies in Cameroon. In relation to theory the study established a significant relationship between supply chain quality management and customer satisfaction and made policy recommendations for the implementation of top management commitment, customer relationship management, continuous improvement and strategic supplier partnership.

Key Words: Supply Chain Quality Management, Customer Satisfaction, Brewery companies, Cameroon.



1.0 INTRODUCTION

The aim of every business is long-term profitability. This is because it fuels growth and development and also generates greater earnings for shareholders (Remus, 2016). The advent of modern technology, the increase in competitive pressures and the increasing need for customer satisfaction has placed the concept of quality in the lips of every business person be it small or large, national or international. In a dynamic international market, efforts to improve quality are not enough. Supply at the right time, place and cost is also critical for competitive advantage (Maqbool & Rafiq, 2014). Businesses succeed in competition only when they can supply to consumers superior services over competitors to the extent that consumers will prefer service from them over the previous source of their supplies. This makes superior customer satisfaction the end point of any competitive strategy adopted by an organization. In the global business environment, competition is no longer direct but it is more indirect through the supply chains of competing firms (Michael, 2019; Purna, 2015). Today, leading companies are integrating Quality Management practices into the Supply Chain to achieve superior customer experience over competitors. This is the central point about Supply Chain Quality Management (SCQM).

SCQM has gained many definitions over time. Some of the most outstanding include Kuei and Madu (2001) who has broken down the concept into three simple equations thus:

SC = Production – Distribution Network

Q = Products should be in responsive to market demands and able to meet customer satisfaction speedily, accurately and at a profit.

M = The conditions that permits and enhance trust for supply chain quality.

While highlighting the internal actors of the SC, they eliminated the external actors thereby raising a lot of concerns how the goods manufactured will to get the final consumers as desired. Ferguson (2000) closed this gap by referring to Supply chain quality management as encompassing all quality management activities associated with the flow and transformation of goods from raw material stage through the end users (finished product) stage along with flow of all information related to quality. This embodies an unlimited list of all activities that are geared towards the flow of the finished product(s) to the end user of the product(s). This definition seems to completely involve all the actors of the supply chain of an organisation but at the same time leads to an unending list of items directed towards customer satisfaction. Malhotra & Robinson (2005) on their part, defined supply chain quality management as the formal coordination and integration of business processes involving all partner organisations in the supply channel to measure, analyse and continually improve products, services and processes in order to create value and achieve satisfaction of intermediate and final customers in the marketplace. Kushwaha & Barman (2010) referred to the concept as a set of approaches utilized to efficiently and responsively integrate all channel partners through applying quality management practices across the whole supply chain, in order to enhance trust between channel partners and deliver maximum value to customers. Although Kushwaha & Barman (2010), Ana, Paulo & Maria (2014) and Marcio et al, (2016) amongst others, have designed models that have helped unravel the meaning of supply chain quality management, a lot more is yet to be done particularly in relation to customer satisfaction and the context of application for managerial decision making. To move the studies forward, we explored the constructs of supply chain quality management in the brewery companies in Cameroon.



1.1 Statement of the Problem

It is evident that all the players of the brewery companies in Cameroon engage in some form of supply chain quality management practices through distribution network configurations, information sharing across partners, distribution strategy and the trade-offs in logistical activities to build customer satisfaction and the performance of the companies (Biboum & Sigué, 2014). Guiness Cameroun S.A. for example focuses on innovation, product quality, employees' trust, quality assurance, standardized operation procedures, organization structures, capabilities, information and systems platform, demand forecasting, and GPS through regular inspections in production lines and quality control to certification in line with acceptable standards (Staff writer, 2016). 'Union Camerounaise de Brasseries' on her part applies the Deming's Plan-Do-Check-Act Quality management system wherein they look at quality as a state of mind and a new corporate culture that all activities of the company are concerned about. With this in mind, their quality management and food safety approach enable them to strengthen the fundamental principles that guide the company's strategy, ensure uncompromising quality of their products, create an entrepreneurial spirit and skill development of corporate staff, monitor their activities in accordance with the guidelines for improvement and constantly increasing the total and lasting customer satisfaction. Here, the issue of the external (downstream) supply chain is still a major concern as it is completely left out of their operations. Also, the context of application is problematic as its main goal is continuous improvement whereas the company focuses on constantly increasing the total and lasting customer satisfaction. 'Brasseries du Cameroun' focuses on a quality management system based on the new ISO 90001 certification (Emmanuel, 2019) while Source du Pays emphasizes the quality of her products, safety and hygiene for staff and customers. The expected outcome of these activities is customers' satisfaction.

Ironically, the extent to which these companies have appreciated their customers' satisfaction in relation to their supply chain quality management practices leaves much to desire. Going by these different practices geared towards customer satisfaction, what then are the standard supply chain quality management practices applicable to brewery companies in Cameroon and what is the effect on customers' satisfaction? In an attempt to provide answer to these questions, it is observed that very little research effort has been directed towards this relationship. This knowledge gap is evident following the variety of supply chain management practices and the near absence of studies on customer satisfaction in the brewery companies in Cameroon. This paper therefore desires to meet two specific objectives. The first is to identify the variables of supply chain quality management suitable for the brewery companies in Cameroon and the second is to assess the effects of the practices on customers' satisfaction

2.0 LITERATURE REVIEW

2.1 Empirical review

This paper reviews literature by focusing on both empirical findings and models that have made major strides in developing understanding of supply chain quality management practices and the effects on customer satisfaction. In this regards, Osayuwamen & Chengedzai (2016) investigated the relationship between customer satisfaction, supply chain management practices and three input factors; namely, product quality, flexibility and product variety in small to medium enterprises in South Africa. Also, Radwan el & Kassem (2016) examined the elements of supply chain management effect in companies represented by their relations with their suppliers, dealers and customers, on standards related to customer



service. Also, Kushwaha & Barman (2010) took the lead by establishing the relationship between supply chain management, total quality management, competitive advantage and performance and also examined the synergy between supply chain management and total quality management to develop constructs of supply chain quality management. Based on the shortcomings of the study of Kushwaha & Barman (2010), Ana, Paulo & Maria (2014) developed a conceptual model for supply chain quality management. In their study, they integrated supply chain management and total quality management as an intersection of the two and spelt out six main constructs (Management and Strategic Planning, Stakeholder/Employee Involvement and Commitment, Information, Integration and Mutually Beneficial Supplier relationships, Leadership, Continuous Improvement and Innovation) of supply chain quality management while also highlighting integration, process optimisation and sustainability as constructs transversal to the supply chain management and total quality management. The model, however helpful in underscoring the constructs of supply chain quality management, failed to include the opinions of the customer. Kotler, Armstrong & Opresnik, (2016) emphasized that 'the customer is the king' thereby making it imperative to be included in such a study particularly when it relates to market performance.

2.2 Theoretical Literature

2.2.1 Attribution Theory

This paper examines customer satisfaction from the point of view of the attribution theory of Weiner et al. (1971). This model argued that when the delivery of a product does not match customers' prior expectations or other standards, they engage in an attribution process in order to make sense of what has occurred (Bitner, 1990). More specifically, the model established that consumers tend to look for causes for product successes or failures and usually attribute these successes or failures using a three-dimensional schema: Locus of causality (internal or external) meant that the purchase outcome is the cause of dissatisfaction and can be attributed either to the consumer (internal factors) or to the marketer or something in the environment or situation (external factors). Stability (stable/permanent or unstable/temporary) described both stable and unstable causes of customer satisfaction. Stable causes were thought not to vary over time, while unstable causes were thought to varv over time. Controllability (volitional/controllable fluctuate and or non volitional/uncontrollable) held that both consumers and firms can either have volitional control over an outcome or be under certain controllable constraints that induces customer satisfaction.

This paper makes use of the attribution theory of consumer satisfaction by examining the constructs of supply chain quality management as the principal drivers of customer satisfaction. The theory view causes of consumer satisfaction/dissatisfaction from the internal and external points of view. In this paper, the external attributes relate to the external supply chain quality management practices while the internal drivers relate to internal supply chain quality management practices as the set of practices geared towards customer satisfaction.

3.0 METHODOLOGY

3.1 Data collection

The study adopted a survey of case study approach following its ability to explain mechanisms and outcomes of contemporary phenomenon using standard statistical techniques. In this regard, it captured primary data from the adult customers of the companies within the active population between 21 and 60 years of age. The choice of primary data was centered on the quest for originality and the fact that customer satisfaction is behavioural by



nature. This group of persons was considered ideal for this study because they constituted a majority of the consumers of the companies' products. The lack of information regarding the size of the active population within this region left no choice than to make estimates from the national classification. The CIA World Factbook (2019) showed estimates at about 35% of the population of the entire country. This runs up to 8,974,338 people for the ten regions of the country. In this respect estimates for the South West Region rested at 897,434 persons (CIA World Factbook, 2019). The stratified random sampling technique was used to break down the entire region (population) into twenty five sample points following the administrative headquarters of the different subdivisions making up the South West Region of Cameroon. From each sample point, a convenience sampling technique was used to select two customers of each of the four companies included in the study. This gave a sample of 200 respondents. The study captured data using a five point likert scale questionnaire designed to include the constructs of supply chain quality management found in the literature and presented on table 1 below. For each of these constructs a set of five questions were assigned with the last designed to check for internal consistency in the responses. The five point scale was adopted following its capacity to reduce heterogeneity in the responses and to give room for conclusions to be made based on standard scientific analysis. To administer the questionnaires, the researcher traveled to each of these administrative headquarters and incorporated persons within the required group to participate in the study. However, this was also influenced by the convenience to the researcher and to the respondent to participate in the exercise. The data was callected from the questionnaires using excel spread sheet to give room for statistical analyses.

3.2 Variables of data collection

The constructs of supply chain quality management examined in the study based on a review of literature and presented on table 1 thus:

S/N	Variable	Abbreviations	Sources		
1	Top Management Commitment	TMC			
2	Supplier Quality Management	SQM			
3	Customer Focus	CF			
4	Process and Systems Design	PSD	Kushwaha & Barman		
5	Process Management	PM			
6	Employee Training and Human Relations	ET&HR	(2010) theoretical framework of SCQM		
7	Quality Data and Reporting	QDR	Ana Daula & Maria		
8	Supplier Strategic Partnerships	SSP	Ana, Paulo & Maria		
9	Customer Relationship Management	CRM	(2014) Conceptual model for SCQM		
10	Information Sharing	IS	IOI SCQM		
11	Postponement	PPT	Marcio et al, (2016)		
12	Benchmarking	BENMKG	Marcio et al, (2016) Performance		
13	Stakeholder Involvement and Commitment	SIC	Measurements Of SCQM		
14	Sustainability	SUSTBLTY			
15	Continuous Improvement and Innovation	CII			

Table 1: Constructs of supply	y chain quality management
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3.3 Model of analysis

Two analytical models were utilized to examine the two objectives of this study thus:

Objective 1: To identify the constructs of supply chain quality management suitable for the brewery companies in Cameroon

For the arithmetic mean: $\overline{x} = \frac{\text{Sum of items}}{\text{No. of items}} = \frac{\sum x_i f_i}{\sum f_i}$ (1)

Where x_i are the scores and f_i are the respective frequencies. The mean was used to pull the responses of a given variable to a single score to facilitate the analyses using the Cronbach's Alpha and the regression model that follows.

Cronbach's Alpha:
$$\alpha = \frac{N.\hat{C}}{\tilde{V} + (N-1).\hat{C}}$$
 (2)

- N = the number of items.
- \hat{C} = average covariance between item-pairs.
- \tilde{V} = average variance

The Cronbach's Alpha was also used to assess the reliability of the variables of supply chain quality management included in the study.

Objective 2: To assess the effect of supply chain quality management on customer satisfaction in the brewery companies in Cameroon

Considering that the five point likert scale questionnaire produces ordinal scales data, the ordinary least square regression model was employed to assess the contributions of supply chain quality management on customer satisfaction in the Cameroon brewery companies. This was as a result of the fact that it is the best unbiased estimator of the mean. The regression model is then presented thus:

 $CS = f(SCQM_i + e)$ $CS = a_0 + a_i SCQM_i + e$ (3) Where apriori: $a_i > 0$, at 5% level of significance and 95% confidence interval

4.0 FINDINGS

4.1 The variables of supply chain quality management applicable to the brewery companies in Cameroon

A review of the literature in the previous chapter revealed a lot of variables that have been used in capturing supply chain quality management. Fifteen of these variables (presented in table 1) were examined using the Cronbach's Alpha as presented in table 2 below:

 Table 2: Reliability Statistics of the constructs of SCQM

Cronbach's Alpha	Cronbach's Standardized	Alpha Items	Based	on No of Items	
0.567	0.616			200	



With reference to the table 2, the Cronbach's Alpha of the raw score was 0.567 and for the standardized items it was 0.616. Mohsen & Reg (2011) revealed that this value is poor and unacceptable. This implies that there are some of the constructs that are non-responsive. For this reason, the different variables of the study were examined closely regarding the effect of their deletion on the overall reliability and also in line with the consistency of the responses. This analysis gave the values on table 3.

Variables		Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item- Total Correlation	Cronbach's Alpha if Item
					Deleted
_	TMC	83.9939	10.096	0.300	0.541
chain	SQM	83.9913	10.029	0.289	0.641
ch	CF	84.2463	10.798	-0.013	0.584
nt	P&SD	84.1394	11.170	-0.118	0.594
supply management	PM	84.5355	9.983	0.185	0.655
supply nageme	ET&HR	84.4562	10.121	0.148	0.662
su ane	QD&R	84.5703	10.013	0.220	0.649
m	SSP	84.3053	10.080	0.195	0.553
of	CRM	83.9106	9.886	0.311	0.537
ty	IS	83.8863	10.269	0.247	0.548
ucts quality	PPT	83.7926	10.657	0.060	0.671
dr	BENMKG	83.9375	10.629	0.094	0.596
Constructs qua	SIC	84.0155	10.220	0.301	0.574
Col	SUSTBLTY	84.0509	10.333	0.352	0.584
-	CII	83.9906	10.567	0.197	0.556

Table 3: Test for individual item reliability

The Item-Total Statistics presented in table 2 above showed the Cronbach's Alpha if each test item was deleted from the questionnaire. All the variables gave values higher than the overall Cronbach's Alpha of the study except top management commitment, supplier strategic partnership, customer relationship management, information sharing and continuous improvement and innovation. This showed that deleting all the other variables would result in higher Cronbach's Alpha and hence making the items more reliable and acceptable for implementation with the view to customer satisfaction. In addition, the researchers also re-examined the test items for consistency in the responses. This led to rejecting some of the responses relating to some of the questions. After doing these, the Cronbach's Alpha increased to 0.829 for the raw scores and 0.872 based on the standardized Items. The work of, Mohsen & Reg (2011) gave evidence to retain top management commitment, customer relationship management, continuous improvement and innovation, information sharing and strategic supplier partnership as the significant variables of supply chain quality management to be implemented in the brewery companies in Cameroon. This is because their Cronbach's Alpha were all well above 0.7 which is the acceptable level for analysis.

4.2 The effects of supply chain quality management on customers' satisfaction in the brewery companies in Cameroon.

The second objective of this paper was to verify the effect of supply chain quality management on customer satisfaction in the brewery companies in Cameroon. To meet this objective, the variables identified from objective one above were subjected to further investigation using the ordinary least square regression model shown above. However the



need for generalization and the context of implantation of the findings made the test for multicollinearity using the correlation structure imperative.

4.2.1 The correlation Matrix

Considering that the study adoped a time series model in analysing the data, it was important to begin by conducting a sensitivity analysis. The most particular here is the test for multicollinearity among the variables included in the study. This was to ensure that the variables do not correlate among themselves since its incidence falsifies the overall results. This gave the correlation matrix in table 4:

Correlations structure of the		TMC	CRM	CI	IS	SSP
indepe	ndent variables					
	Pearson Correlation	1	0.154	0.184	0.293	-0.067
TMC	Sig. (2-tailed)		0.030	0.009	0.000	0.349
	N	200	200	200	200	200
	Pearson Correlation	0.154	1	0.345	0.229	0.492
CRM	Sig. (2-tailed)	0.030		0.000	0.001	0.000
	N	200	200	200	200	200
	Pearson Correlation	0.184	0.345	1	0.247	0.228
CI	Sig. (2-tailed)	0.009	0.000		0.000	0.001
	N	200	200	200	200	200
	Pearson Correlation	0.293	0.229	0.247	1	0.181
IS	Sig. (2-tailed)	0.000	0.001	0.000		0.010
	N	200	200	200	200	200
	Pearson Correlation	-0.067	0.492	0.228	0.181	1
SSP	Sig. (2-tailed)	0.349	0.000	0.001	0.010	
	N	200	200	200	200	200

Table 4: The correlation Matrix

The correlation matrix in table 4 examined the relationship between independent variables included in the study. The correlation coefficient between top management commitment and customer relationship management was +0.154 indicating a weak positive relationship between them. An increase in efforts towards top management commitment will, all other things being equal, lead to an increase in customer relationship management and vice versa. The same kind of relationship was noticed between top management commitment and information sharing. Contrary to this was the weak negative relationship existing between top management commitment and supplier strategic partnership indicated by a correlation coefficient of -0.067. The weak relationship between strategic supplier partnership and customer satisfaction was indication that strategic supplier partnership may not significantly influence customer satisfaction. However, the weak negative correlation coefficient suggested that an increase in top management commitment will lead to a less than proportionate fall in strategic supplier partnership.

Furthermore, the relationship between customer relationship management and continuous improvement, information sharing and strategic supplier partnership were also examined. The correlation coefficient of +0.345 was indicating a weak positive relationship between customer relationship management and continuous improvement. Increasing customer relationship management will lead to a less than proportionate increase in continuous improvement. Same was the relationship between customer relationship management and information sharing as well as between customer relationship management and strategic



supplier partnership. Similar relationships were noticed between continuous improvement and information sharing and between continuous improvement and strategic supplier partnership. From the table, the strongest relationship between the explanatory variables was noticed between customer relationship management and SSP with a correlation coefficient of 0.492. This represents a moderate relationship between customer relationship management and strategic supplier partnership although it was still below 0.7 to suggest evidence of multicollinearity in the results. The absence of a strong relationship between any two of the explanatory variables was an indication of the near absence of multicollinearity affecting the overall results. It was then wise to examine the overall model for significance prior to assessing the effect of supply chain quality management on customer satisfaction using the regression model designed for the study.

4.2.2 Test of significance of the model

Testing for the significance of the overall model is important to assure policy decision makers of the suitability of the research instrument and the variables so as to give confidence to the findings of the study. This was done with the help of analysis of variance presented on table 5 below:

Table 5: ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	29.933	5	5.987	27.454	$.000^{b}$
1	Residual	42.305	194	.218		
	Total	72.238	199			
a. Dependent Variable		CS				

b. Predictors: (Constant), SSP, TMC, CI, IS, CRM

The table shows the mean square (regression and residual) as a quotient of the sum of squares and the respective degrees of freedom. The F ratio (the quotient of the mean square regression and the mean square residual) indicates the reliability of the independent variables in predicting the dependent variable. This value was 27.454. The critical value at 5% level of significance lies between 2.29 (for $d_1=5$ and $d_2=120$) and 2.21 (for $d_1=5$ and $d_2=\infty$). The calculated value of 27.454 was far greater than the critical value at 5% level. This lead to the conclusion that the independent variables capturing supply chain quality management reliably predicted the dependent variable (customer satisfaction) at 5% level of significance. This finding was confirmed by the p value 0.000 (corresponding to 0%) since it was less than the 0.05 level at which the test was conducted making the findings suitable for generalizations. At this juncture the results of the ordinary regression model were employed to assess the effects of these variables on customer satisfaction. The results are presented in table 6 below:

4.2.3 The regression results

The analysis of our primary data to get insights on the effect of supply chain quality management on customers' satisfaction in the brewery companies in Cameroon made use of the following ordinary least squares regression model:

CS = f(TMC + CRM + CII + IS + SSP + e)

 $CS = a_0 + a_1 TMC + a_2 CRM + a_3 CI + a_4 IS + a_5 SSP + e$ ------(4)

Where apriori: $a_i > 0$, at 5% level of significance and 95% confidence interval



Here, the dependent variable was Customer Satisfaction (CS) measured using the customers' attribution of satisfaction. The explanatory variables on their part include Top Management Commitment (TMC), Customer Relationship Management (CRM), Continuous Improvement and Innovation (CII), Information Sharing (IS) and Strategic Supplier Partnerships (SSP). Table 6a distinctly brings out the results relating to the independent variables.

Model		Unstandardized	l Coefficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
	(Constant)	-0.454	0.418		-1.087	0.278
	TMC	0.206	0.071	0.171	2.886	0.004
1	CRM	0.310	0.098	0.212	3.177	0.002
1	CI	0.358	0.061	0.354	5.894	0.000
	IS	0.120	0.075	0.095	1.599	0.111
	SSP	0.166	0.068	.158	2.446	0.015
a. Dependent Variable		CS				

Table 6a: Coefficients of the variables and the statistical significance

The results on table 6a show that there were some other variables that had an effect on customers' satisfaction but which were not included in the model. This was captured by the constant term in the results presented. The corresponding t value (-1.087) was less than the standard value at 5%. This indicated that all other variables not included in the model but which had an effect on customer satisfaction, put together, had a negative, although insignificant, effect on customer satisfaction. In fact, a 1% increase/decrease in these factors will lead to a 0.454% decrease/increase in customer satisfaction, all other things being equal. The study examined the independent variables beginning with top management commitment. Its standardized coefficient of +0.171 signified a positive relationship between top management commitment and customer satisfaction. The corresponding t value of 2.886 was significant at 5% level of significance for the study. This implies that a 1% increase/decrease in top management commitment, all other things being equal, will lead to a 20.6% increase/decrease in customer satisfaction. Therefore, top management commitment is an important factor to be taken into consideration when making managerial decisions in line with supply chain quality management to induce customer satisfaction. Also, customer relationship management was not underestimated considering that it also had a positive coefficient of 0.310 and a standard error of 0.098. In fact, the findings revealed that a 1% increase/decrease in customer relationship management, all things being equal, will lead to a 31.0% increase/decrease in customer satisfaction.

The t value of 3.177 was found to be greater than the critical value at 5% level. This indicated that customer relationship management has a significant effect on customer satisfaction at 5% level of significance. Similar results were noticed with continuous improvement and strategic supplier partnership. It is important to note here that information sharing had a positive coefficient meaning there was a positive relationship between information sharing and customer satisfaction. Unfortunately, the t value of information sharing was less than the critical value at 5% level. This revealed that although information sharing influenced customer satisfaction positively, the effect was insignificant at 5% level. In fact, a 1% increase/decrease in information sharing will lead to a 12.0% increase/decrease in customer satisfaction. Considering these results, the mixed feelings regarding the effect of supply chain quality management on customer satisfaction was minimised. However, the adjusted R squared was used to ascertain the overall results. This can be seen on table 6b below:



Model	R	R Square	Adjusted R Square	Std. Error of the Estimate			
1	0.644 ^a	0.414	0.399	0.46698			
a. Predictors: (Constant), SSP, TMC, CI, IS, CRM							

The adjusted R squared (the coefficient of multiple determination), having improved on the R and R squared was 0.399. This indicated that a 39.9% deviation in customer satisfaction was accounted for by variations in the variables of supply chain quality management included in the study. This means a 1% increase/decrease in the variables of supply chain quality management included in the study will generate a 39.9% increase/decrease in customer satisfaction in the brewery companies in Cameroon.

4.3 Discussion of results

This finding lead one to rejecting the null hypothesis while retaining the alternative hypothesis that supply chain quality management has a statistically significant effect on customer satisfaction in the brewery companies in Cameroon at 5% level of significance. These findings are in agreement with the theoretical background and the previous studies conducted on this topic. Further, they are in line with the locus of causality dimension of the attribution theory of customer satisfaction. It confirms the practices of supply chain quality management examined in the study as the principal causes of customer satisfaction or dissatisfaction. Increasing these variables leads to a more satisfied customer and vice versa. These variables, by their definition, can be described as both permanent and temporal outcomes of the attribution theory of customer satisfaction. While top management commitment, customer relationship management, information sharing and strategic supplier partnerships are permanent practices over time, continuous improvement is a regularly changing parameter. Such continuous improvement assures the companies' ability to continuously meet the customers' prior expectations or other standards that induces their purchase decisions. The findings also confirmes supply chain quality management as significant controllable practices that can induce customer satisfaction from both the firms and the consumers' point of view. The above finding also affirms the contribution of Kushwaha & Barman (2010) who established that supply chain quality management has a significant effect on customer satisfaction based on empirical reviews of related articles. This work adds to their work by collecting and analyzing actual data based on Cameroon breweries and yet establishing the same results.

5.0 SUMMARY, CONCLUSIONS, RECOMMENDATIONS

5.1 Summary of findings

The above result confirmed that the supply chain quality management practices suitable for the brewery companies in Cameroon were top management commitment, customer relationship management, continuous improvement, information sharing and strategic supplier partnerships. Based on the analyses, these practices reliably built to supply chain quality management and accounted for 39.9% variations in customer satisfaction at 5% level of significance. Based on these results, the study established that supply chain quality management has a significant effect on customer satisfaction in the Cameroon brewery companies. The study therefore rejects the null hypothesis while accepting the alternative hypothesis making supply chain quality management practices an imperative for customer satisfaction in the brewery companies in Cameroon.



5.2 Conclusion

This study followed from the fact that the central focus of every supply chain management practice is to achieve a better customer experience. A better customer experience means customer satisfaction. By assessing the reliability of the constructs suitable for the brewery companies in Cameroon and focusing on their effects on the customer satisfaction this study examined the attribution theory of customer satisfaction through top management commitment, continuous improvement, strategic supplier partnership, customer relationship management and information sharing. The analyses revealed that top management commitment, customer relationship management, continuous improvement, strategic supplier partnership, and strategic supplier partnership had significant effects on customer satisfaction at 5% level while although having a positive effect, information sharing was insignificant at that level.

5.3 Recommendations

Based on the above results, this study recommends that the companies should set up policies towards top management commitment, customer relationship management, continuous improvement and strategic supplier partnership. In detail, policies in line with top management commitment, should include communicating the company's philosophy to customers, actively developing integrated quality plan to meet business objectives and encouraging customers' involvement in quality management and improvement activities along the companies' supply chains. In relation to customer relationship management, the companies should set up policies that allow frequent interaction with customers to set reliable and responsive standards, frequently follow-up customers for quality/service feedback and frequently determine future customer expectations and integrate them into their operations. In direction to continuous improvement, the companies are advised to put in place an accurate and efficient database that provides information on internal operations including performance evaluation, inspection, process control and improvement. Efforts in line with strategic supplier partnership should include establishing long term relationship with few high quality suppliers.

6.0 ACKNOWLEDGEMENTS

In addition to our list of references, the success of this study could not have been possible without the effort of Mrs. Zelefac Catherine Fogap Epose Tiendem and Rev. Fr. Felix Nkafu who gave moral, material and financial support needed for the collection and analysis of the data to facilitate the study. The moral support of Mbinkar Bernard (PhD) and Ehu Christopher (PhD) and Ajong Acquilas (PhD) cannot also be under estimated.

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