

Influence of Supply Chain Product Quality on Performance of Kenya Beverage Industry: A Case of Almasi Beverages Limited, Eldoret

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Abstract

The purpose of this study is to analyze product quality as a factor influencing procurement performance in terms of efficiency and effectiveness in beverage industry a case of Almasi beverage limited, Eldoret. The study was guided by the specific objectives; to assess the effect of supply chain product quality on procurement performance, The theory relevant to the study include product quality theory that indicated how the variable link up with it. The study adopted a descriptive research design. This study targeted a population of 140 employees of Almasi beverage limited Eldoret. The study employed census since all respondents were manageable. The study used primary data collected through open and closed ended questionnaires. Data was edited, coded and tabulated in preparation for analysis with the aid of Statistical Package for Social Sciences (SPSS Version 22.0) program and presented through tables. Descriptively data was analyzed by use of descriptive statistics that included frequencies, percentages and means while inferential statistics regression was employed to test the relationship between dependent and independent variable. The study findings was of significance to the management of Almasi beverage limited and Government policy implementation since it provided recommendations on how they can effectively maintain and improve on sustainability of procurement performance function .

Keywords: Product Quality, Supply Chain and Performance

Introduction

Competitive advantage remains a key focus among organizations investing in production operations to enhance their performance relative to that of their competitors. A plethora of studies point to the desire to understand how to sustain competitive advantage among competing organizations (Porter & Kramer, 2006; Liao & Hu, 2007). It is argued that this desire to remain competitive among organizations informs strategic management decisions (Flint & Van Fleet, 2005; King, 2007). In such a scenario of sustaining competitive advantage, Jain, Dangayach, Agarwal and Banerjee (2010) contend that supply chain management takes on, a more central role that requires keen interest. This is on the understanding that processes under the supply chain possess the key to unlock organizations competitive ability.

The beverage industries remain central to many countries' desires in manufacturing, production, trade and employment. These industries are more significant in developing countries where they offer diverse opportunities for employment even to unskilled labor (Brenton & Hoppe, 2007). Moreover, it is further argued that the industry adjusts easily to variations in market conditions due to among other factors; low costs for investment; not very capital intensive, and ability to use labor that is low on skills (Nordas, 2004). The beverage industry like many other manufacturing industries is also turning more towards supply chain management with a view to retaining competitive advantage through increased procurement performance.

Mismanagement of core functions is often treated as a function of poor supply chain management of which, procurement practices becomes central. Indeed, there is an abundance of studies that posit that economic growth is a direct consequence of procurement practices (Pagell, Wasserman & Wu, 2010, McCue, Buffington & Howell, 2007). Procurement therefore represents a significant shift in the manner the supply chain should be managed.

Global Perspective

Interest on improvement of supply chains to meet competition requirements remains a global phenomenon. Queseda, Gazo and Sanchez (2012) for instance while examining critical factors that affect procurement performance in the context of the US pallet industry, identify information technology and product quality as one of the critical factors. These authors underscore the importance of information technology not only in the reduction of paper work and lead time within the supply chain, but also in ensuring a coordinated flow of information and quality materials that tends to impact positively on inventory management. Numerous

studies have addressed how product quality effectively improves the performance of its purchasing units in a dynamic environment as far as consumer expectations are concerned. These studies have discussed how product quality can enhance procurement performance across the procurement by minimizing operational costs, shortening process cycle, refining quality performance and enhancing customer satisfaction (Shin et al. 2000).

Regional Perspective

In Sub-Saharan Africa, several studies have illuminated information technology as key role being responsible for driving procurement performance in firms. on the basis of the regional economic outlook report (Navigating Headwinds, 2015) factors such as increased openness and new trade partnerships have been attributed to rapid expansion of sub-Saharan Africa's trade experience in the last two decades. It is believed that during the period, sub-Saharan African has forged new trade partnerships with the likes of Brazil, China and India. China is noted to have emerged as the most important single trade partner of Sub Saharan Africa (Navigating Headwinds, 2015).

National Perspective

The observed challenges that have continued to bedevil in beverage firms in Kenya in terms of mismanagement could possibly be addressed with proper procurement practices. In Kenya, product quality plays a very vital role in the production value chain. Facing up to the challenge of stiffer competition and having to supply the global markets, companies have quickly learned the importance of improving productivity and quality (Erasmus, 2006). In Kenya product quality have been widely adopted in both the private and public sector. A large number of organizations both large and small in the Supply chain sector suffer from lack of information in the field of product quality management and they need theoretical and practical training in this field. Even as organizations strive to meet customer's expectation, there still exist some flaws in the process involved in service delivery (Chopra & Meindl, 2006). Most supply chain firms are now narrowing down their quality approach too few operations rather than in cooperating wholly in all their entire supply chain processes in order to cut cost

Statement of the Problem

The procurement strategy has successfully been employed in diverse organizations for purposes of attaining a competitive advantage. It is posited that when well implemented, the procurement strategy has potential to bring transparency and accountability in the acquisition

of services, goods and works. On the basis of this background, it is clear that having satisfactorily worked in other industries, the noted factors possess the potential to unravel the challenges the beverage industry in Kenya is facing with a view to turning its fortunes and move it back into a profitable entity.

The present day business environment is getting more challenging and therefore companies have to increase their business operations to stay competitive. As a result managers need to embrace all those practices that will improve their performance one of the most important factors for improving business operations is implementation of effective and efficient procurement information technology. Adequate organized and executed supply chain information systems management will make possible companies to decrease their inventories, have better customer services and diminishing of costs as their inventory turns(Chong & Ooi (2008). Moenga (2011) study focused on procurement and supply chain practices and performance of small scale tea sector in Kenya and found that the challenges affecting the sector were procurement and supply chain visibility, increasing customer demands, risk management, globalization and cost containment. Gitau (2011) focused on procurement and supply chain malpractices in the Kenya public sector and found out that supply chain is affected by one or more of its components. Despite the numerous studies on supply chain management, the aspect of information technology influencing procurement performance in relation to beverage industry, specifically in Eldoret has been largely neglected therefore this study is intended to bridge the knowledge gap

Objectives of the Study

To assess the influence of product quality on procurement performance in Almasi beverage limited, Eldoret.

Hypotheses Ho₁: Product quality does not have a significant influence on procurement performance in Almasi beverage limited, Eldoret.

Justification of the Study

The findings from the study was particularly useful in providing additional knowledge to existing and future manufacturing firm on procurement performance in the manufacturing sector in Kenya to enable them remain competitive. This study was also beneficial to Almasi beverage limited and other companies since they would enhance the realization on procurement management measures that are majorly employed.

Scope of the Study

The study focused on product quality as a factor influencing procurement performance at Almasi beverage limited, Eldoret for a period of three months with the appropriate allocation of budget which made the investigation successful. Data collection relied mainly on the administering questionnaires.

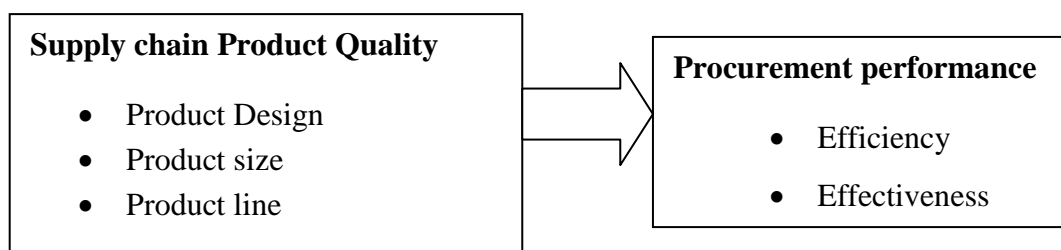
Quality Management Theory

Quality management theory by Heizer & Render (2005), states that the top management commitment and participation in quality management practices are the most important factors for the success of firm. Quality management is considered to have four main components: quality planning, quality control, quality assurance and quality improvement. Quality management is focused not only on product/service quality, but also the means to achieve it. Quality management theory focuses on continuous improvement therefore uses quality assurance and control of processes to achieve more consistent quality (Hansen, 2008).

The theory suggests that quality management is an important aspect for good performance of procurement and supply chain departments. Quality management affects the quality of goods procured and the delivery of quality services to the clients. Quality management results to high customer satisfaction and high firm's performance. The study will use quality management theory to identify how quality management affects procurement performance.

Conceptual Framework

Conceptual framework consists of independent variable and dependent variable. The independent variable is product quality. The dependent variable is procurement performance as shown in the figure below.



Supply chain Product Quality

Product quality has a significant effect on procurement performance. It is measured in terms of products design, product size and product line which have a significant role on procurement performance. The goal of a quality control team is to identify products or services that do not meet a company's specified standards of quality. The basic goal of quality control is to ensure that the products, services, or processes provided meet specific requirements and are dependable, satisfactory, and fiscally sound (Garvin, 2007). According to product based approach, the quality is the root of economics and the variation in product quality are the reflection for uniqueness in quality (Garvin, 2007). Product quality is one of the significant tools to maintain and enhance the competitive advantage in the market place which is usually designed by organizations to undergo the product development process to achieve the customer satisfaction, retention and upgrade the performance in terms of quality (Benson et al., 2011).

Procurement Performance

Procurement performance is the dependent variable whose evaluation or measurement is measured in terms of efficiency, effectiveness, quality of goods procured and timely delivery. Procurement performance is considered to be the result of procurement effectiveness and procurement efficiency. Procurement performance provides the basis for an organization to assess how well it is progressing towards its predetermined objectives, identifies areas of strengths and weaknesses and decides on future initiatives with the goal of how to initiate performance improvements. This means that purchasing performance is not an end in itself but a means to effective and efficient control and monitoring of the purchasing function (Van Weele, 2006). Performance means the completion of tasks within given level of accuracy, cost and time. According to Richard *et al.*, (2009) performance at procurement level includes achievement of end results (procurement goals).

The need for effective factors of procurement function in any manufacturing organization is to ensure that the organization achieves good quality output, improved customer care, increased profitability and enhance participation in corporate social responsibility (Johnson, 2008). This can be achieved by ensuring that raw materials are delivered on time to the factory while finished are distributed in an effective way. Proper management of suppliers therefore helps to meet customer demands promptly and hence subsequently leading to increased revenue to the organization. According to Lawson (2008) effective performance is achieved when the entire supply chain is effectively managed. The whole process should focus on cost

measurement, quality improvement, timeliness in deliveries, and measurement of supplier performance and assessment of extent of customer satisfaction

Gap of the study

Whereas several studies focus on procurement performance in a supply chain system, not many of them focus on beverage industry. A gap therefore remains to be filled regarding how factors of procurement performance can be harnessed for purposes of informing strategic changes to industrial operations in order to guarantee optimum performance of supply chain functions in beverage manufacturing companies. Moreover, besides guaranteeing optimal supply chain performance, there is need to add knowledge regarding specific drivers within the supply chain that explain variations in procurement performance.

Research Design

The study adopted a descriptive design since the study intended to gather quantitative data that described the nature and characteristics of the factor influencing procurement performance of Almasi beverage industry Eldoret. According to Severna (2003), descriptive survey research design is the type of design used to obtain information concerning the current status of the phenomena to describe "what exists" with respect to variables or conditions in a situation.

Table 1: Correlation Matrix

		Organizational Performance
Cost control	Pearson Correlation	.527**
	Sig. (2-tailed)	.000
	N	110
Quality	Pearson Correlation	.719**
	Sig. (2-tailed)	.000
	N	110
Risk mitigation	Pearson Correlation	.711**
	Sig. (2-tailed)	.000
	N	110
Employee competence	Pearson Correlation	.713**
	Sig. (2-tailed)	.000
	N	110

As shown on Table 1 above, the p-value for supply chain product Quality was found to be 0.000 which is less than the significant level of 0.05, ($p < 0.05$). The result indicated that Pearson Correlation coefficient (r-value) of 0.719, which represented a strong, positive relationship between supply chain product quality and procurement performance.

Table 1: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	29.741	2.638		11.273	.000
Cost control	.506	.127	.697	3.985	.000
Quality	.350	.147	.282	2.387	.019
Risk mitigation	.360	.156	.353	2.308	.023
Employee competence	1.024	.179	.733	5.720	.000

Hypothesis

Ho₁: Quality does not have a significant effect on Procurement performance in Almasi Beverage Limited in Eldoret. From Table 1 above, Quality ($\beta = 0.350$) was found to be positively related Procurement performance. From t-test analysis, the t -value was found to be 2.387 and the ρ -value 0.019. Statistically, this null hypothesis was rejected because $\rho < 0.05$. Thus, the study accepted the alternative hypothesis and it concluded that quality affect Procurement performance in Almasi Beverage Limited in Eldoret.

Effect of product quality on procurement performance

The study sought to establish the Effect of product quality on procurement performance in Almasi Beverage Limited in Eldoret. The findings are presented in a five point Likerts scale where SA=strongly agree, A=agree, N=neutral, D=disagree, SD=strongly disagree and T=total.

From table below the response of the respondents on various issues

Table 2: Supply chain product quality

Statements	SA	A	N	D	SD	T
The organisation offers product of high quality to enhance effectiveness	% 30.0	41.8	22.7	5.5	0	100
The size of the product is reasonable for encouraging effectiveness	% 9.1	16.4	30.0	27.3	17.3	100
Changes in customer product uptake and lie are greatly influence by customer needs	% 18.2	29.1	19.1	28.2	5.5	100
The product design influences the efficiency of the organisation	% 13.6	28.2	23.6	34.5	0	100
Suppliers meet the requirement to specification	% 36.4	40.0	22.7	0.9	0	100
Suppliers are audited at a regular intervals	36.4	20.0	32.7	0.9	0	100

Findings

Does the influence of product quality affect procurement performance at Almasi Beverages Limited in Eldoret? The study findings appropriate adoption of procurement performance in beverage industry is hindered by absence of proper quality management practices. From the study it was established that beverage companies lacked knowledge on how to manage product quality and this led to poor performance. The key product quality challenges that hinder implementation of procurement performance at Almasi Beverages Limited in Eldoret included; product of high quality to enhance effectiveness, size of the product is reasonable for encouraging effectiveness, Changes in customer product uptake, The product design , Suppliers meet the requirement to specification and auditing of suppliers at regular intervals. From the findings it was noted that of majority 40.0%, 36.4% and minority of the respondents rated the influence of product quality on procurement performance agree, strongly agree respectively. A total of 76.40% respondents noted that procurement performance is influenced with the factors affecting product quality.

Recommendations

Based on the study findings, it was found out that effective implementation product quality as a factor influencing procurement performance in beverage firm is greatly hampered operations. To improve on product quality the management of beverage industry should focus

on concentrating on production of high quality items to enhance effectiveness, manufacturing of the right size of the product reasonably for encouraging effectiveness, Ensure constant Changes in customer product uptake, introduce varying product design ,supplier management put in place to ensure and increase on market share of our products which improves national growth.

Areas for further Research

This study was confined to the beverage-manufacturing firms and focused on supply chain product quality as a driver affecting procurement performance. This limited the study from exploring other factors that still could affect procurement performance. The study, therefore, proposes further studies to be carried out to help in establishing other factors that affect implementation of procurement performance. These factors could include corporate social responsibility, political interference and the level of procurement regulations enforcement. Secondly studies should also be carried out in public sector organizations since they are also key players in government ministries supply chain management activities.