



**INFLUENCE OF SUPPLY CHAIN PRODUCT QUALITY ON PERFORMANCE OF KENYA BEVERAGE INDUSTRY: A
CASE OF ALMASI BEVERAGES LIMITED, ELDORET**

Chepleting, F., & Musau, E.

**INFLUENCE OF SUPPLY CHAIN PRODUCT QUALITY ON PERFORMANCE OF KENYA BEVERAGE INDUSTRY: A
CASE OF ALMASI BEVERAGES LIMITED, ELDORET**

Chepleting, F., & Musau, E.

Tutorial Fellow, Department of Management Science, School of Business & Economics, Kisii University, Kenya
Ph.D, Lecturer, Department of Management Science, School of Business & Economics, Kisii University, Kenya

Submitted: January 30, 2019 | Accepted: June 22, 2019

ABSTRACT

The purpose of this study was 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 objective; to assess the effect of supply chain product quality on procurement performance. The theory relevant to the study was product quality theory that indicated how the variable linked 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 could effectively maintain and improve on sustainability of procurement performance function.

Key Words: Product Quality, Supply Chain and Performance

CITATION: Chepleting, F., & Musau, E. (2019). Influence of supply chain product quality on performance of Kenya beverage industry: A case of Almasi Beverages Limited, Eldoret. *The Strategic Journal of Business & Change Management*, 6 (2), 2526 – 2532.

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.

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).

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).

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 was 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 had been largely neglected therefore this study was 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 H₀: Product quality does not have a significant influence on procurement performance in Almasi beverage limited, Eldoret.

LITERATURE REVIEW

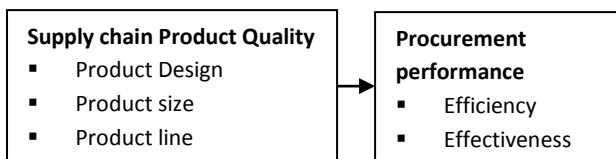
Quality Management Theory

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

used quality management theory to identify how quality management affects procurement performance.

Conceptual Framework



Independent Variable

Dependent Variable

Figure 1: Conceptual Framework

Source: Author (2019)

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.

METHODOLOGY

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.

FINDINGS AND DISCUSSIONS

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 was 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 2: 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

H₀: Quality does not have a significant effect on Procurement performance in Almasi Beverage Limited in Eldoret. From Table 2 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 p -value 0.019. Statistically, this null hypothesis was rejected because $p < 0.05$. 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 were presented in a five point Likerts scale where SA=strongly agree, A=agree, N=neutral, D=disagree, SD=strongly disagree and T=total.

Table 3: 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

CONCLUSION

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 hindered 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 met 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 was 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 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, proposed 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.

REFERENCES

- Chong, A.Y.L. and Ooi, K.B. (2008). 'Adoption of inter organizational system standards in supply chains: an empirical analysis of Rosetta Net standards', *Industrial Management and Data Systems*, 108 (4), 529–547
- Chopra S. and Meindl P(2001). *Supply Chain Management: Strategy, Planning and Operation*. Prentice- Hall, Upper Sadle River, New Jersey
- Flint, G.D., &Van Fleet, D.D. (2005). *A comparison and contrast of strategic management and classical economic concepts: Definitions, comparisons, and pursuit of advantages*, Retrieved from: http://www.uvsc.edu/schools/business/facultyScholar/jbi/jbi_v3.html (9th April, 2006)
- Gitau, E.S.K. (2011). Responses to Supply Chain Management Malpractices in the Kenyan Public Sector. *Published project University of Nairobi*
- Hansen T. (2008). *Consumer values, the theory of planned behaviour and online grocery shopping*: <https://doi.org/10.1111/j.1470-6431.2007.00655.x>
- Heizer, J. & Render, B. (2005). *Principles of operations management*. New Jersey: Pearson Prentice-Hall.
- Jain J., Dangayach, G.S., Agarwal, G. & Banerjee, S. (2010). Supply Chain Management: Literature Review and Some Issues, *Journal of Studies on Manufacturing*, 18(1): 60-77
- King, A.W. (2007). Disentangling inter firm and intra firm causal ambiguity: A conceptual model of causal ambiguity and sustainable competitive advantage. *Academy of Management Review*, 32(1), 156-178.
- Liah, S.H., &Hu, T.C. (2007). *Knowledge transfer and competitive advantage on environmental uncertainty: An empirical study of Taiwan*. Taiwan: Taiwan semiconductor industry.
- McCue C.P., Buffington K.W., & Howell A. D. (2007). *Public procurement: international cases and commentary*, 247,2007
- Moenga K.O. (2011).Supply Chain Management Practices and Challenges to the Small Scale Tea Sector in Kenya. *Published project University of Nairobi*
- Nordas, H.K. (2004). The global textile and clothing industry post the agreement on textiles and clothing, WTO Discussion Papers 5,World Trade Organization (WTO), Economic Research and Statistics Division.
- Porter, M.E., &Kramer, M.R. (2006). Strategy and society: The link between competitive advantage and corporate social responsibility. *Harvard Business Review*, December 2006, 79-92.
- Quesada, H., Gazo, R., & Sanchez, S. (2012). Critical Factors Affecting Supply Chain Management: A Case Study in the US Pallet Industry. Retrieved from www.intechopen.com
- REO (2015). Navigating Headwinds. Regional Economic Outlook: Sub-Saharan Africa.
- Shin, H., Collier, D. & Wilson, D. (2000). "Supply management orientation and supplier/buyer performance", *Journal of Operations Management*, Vol. 8, pp. 317-33
- Brenton, P and Hoppe, M (2007), "Clothing and Export Diversification: Still a Route to Growth for Low Income Countries?", mimeo, World Bank.
- Pagell, M., & Wu, Z. (2009).Building a more complete theory of sustainable supply chain management using case studies of 10 exemplars. *Journal of Supply Chain Management*, 45(2), 37-56.