

Assessing the Impact of Procurement Activities in Achieving Quality at Nestle Ghana Limited in the Manufacturing Sector in Ghana

Prince Baah Sawer

Procurement Directorate, Accra Technical University, Accra, Ghana

Email address:

princesawer19@gmail.com

To cite this article:

Prince Baah Sawer. Assessing the Impact of Procurement Activities in Achieving Quality at Nestle Ghana Limited in the Manufacturing Sector in Ghana. *American Journal of Theoretical and Applied Business*. Vol. 7, No. 4, 2021, pp. 112-117. doi: 10.11648/j.ajtab.20210704.16

Received: June 7, 2021; **Accepted:** June 25, 2021; **Published:** November 17, 2021

Abstract: The study sought to address the various impacts of procurement activities in achieving quality in manufacturing companies in Ghana and beyond. Purchaser's contribution in helping the organizations to implement these quality strategies is key to the sustainability, survival and performance improvement of these manufacturing companies in general. The research was aimed at identifying the challenges associated with implementation of quality standards at Nestle Ghana, to identify how procurement can help in ensuring quality of products at Nestle Ghana Limited, identify the role of quality management in procurement at Nestle Ghana Limited, to find out the quality management systems that has been put in place at Nestle Ghana Limited and to assess how quality control and quality assurance has helped improve the performance of Nestle Ghana Limited. This has proved beneficial enough to the extent that, data collected was analyzed and conclusions was drawn based on the responses gathered which showed that Nestlé's hindrance in implementing robust quality frameworks was due to lack of commitment and ignorance on the part of the organization in general. After the relevant data has been collected and analyzed evidences proved beyond reasonable doubt that inadequate funds, lack of organizational support, low knowledge on the quality practices, returns from customers, noncompliance to the standards, the expensive nature of implementing these quality strategies on the part of the company poses inherent reputational risk to the company.

Keywords: Procurement, Quality, Manufacturing, Assurance, Commitment, Standards

1. Introduction

Quality has become an increasingly important issue in every organization and for that matter quality and quality management in procurement has become a very critical in terms of coming out with a cogent resource management technique that will actually effective logistics management and to the greater extent the achievement of the various economic as well as competitive advantages [3].

Although the concept of procurement has evolved and progressively immersed as one of the core business areas over the years, the Council of Supply Chain Management Professionals has however been able to ascertain the fact that procurement as well as its related concerns is a key aspect of supply chain management that collates the planning, implementation as well as the controlling the efficient flow

and storage of the various raw materials, semi-finished and finished goods in addition to the various related information flows from one point to the other just for the purpose of meeting the needs of customers profitably.

Thus, the implementation of the five rights in procurement by producing the right quality of materials, delivered in the right quantity, to the right place, at the right time and at the right price. There is limited information on the actual relationship between quality management and supply chain management within a particular organizational context as well as their impact on the performance of such organization [1]. For this reason, Flynn and Flynn [9] realized in their study were able to ascertain the fact that companies that envisage both the quality as well as supply chain goals stands at an advantage of securing business hence gaining competitive advantage.

1.1. Problem Statement

Quality and quality management has been one of the key requirements of life today. The main issue today when it comes to quality of a product or a service is about customer satisfaction. Customers are always of the expectation that product and services to always meet their needs and expectations based on their own perceptions and expectations of the product. For this reason corporate bodies must always try to manage and control quality within all organizational processes by adopting all quality assurance strategies needed [10].

The ISO 9000 defined quality management as the series of coordinated activities that guides and control an organization in its quality management. In view of this, for companies to be able to achieve this, they must establish systems for quality management that can supplement their management of quality [10]. However, the application of these quality management is very wide and cumbersome that varies through all the inbound, operations and outbound logistics in terms of purchasing processes, manufacturing processes as well the delivering of the products or services to customers therefore resulting in the poor implementation of these quality systems [12].

1.2. Objectives of the Study

1. To identify the contributions of procurement in achieving quality of products at Nestle Ghana Limited.
2. To identify the role of quality management in procurement at Nestle Ghana Limited.
3. To see find out the quality management systems that has been put in place at Nestle Ghana Limited.
4. To assess how quality control and quality assurance has helped improve the performance of Nestle Ghana Limited.

1.3. Research Questions

1. What are the contributions of procurement in achieving quality of products at Nestle Ghana Limited?
2. What is the role of quality management in procurement at Nestle Ghana Limited?
3. What are the quality management systems that have been put in place at Nestle Ghana Limited?
4. How can quality control and quality assurance help improve the performance of Nestle Ghana Limited?

1.4. Purpose of the Study

Procurement and supply chain management has gained a lot of focus and attention in the recent years. However, the level of link that exists between the management of an organizations supply chain as well as its quality management has been quite limited and very tangential in nature [17]. For this reason, this paper will outline the influence or impact of the various aspects of supply chain management as well as quality management, the relationship between these two variables as well as their impact on overall corporate performance.

There are a quite a number of suggestions that has proposed the need for which research must be done in both the areas of quality management as well as supply chain management and the need for which these two needs a greater integration and as a result of the lack of several studies in these areas, this study is therefore going to fill the gap in this study area and for that matter enable the corporate bodies to be able to successfully implement Total Quality Management and effective procurement management practices [1].

2. Literature Review

2.1. Background

Almost every well to do organization have a procurement department that is mostly responsible for the procurement of all the requirements in terms of goods, services or works that is required by the organization. That function of every organization can therefore be classified as the major backbone of the organization other than the other related organizational functions. This implies that it is very prudent to support the quality management ideas and standards of the procurement function [12]. As determined earlier on, all the relevant standards that has been set by the International Organization of Standardization is one major means by which a robust and effective quality management system can be made. For this reason, the buildup of a robust quality standard into procurement will go a long way to strengthen the department in and hence maximize profit for the organization. To be able to explore more about the purchasing department, there is the need to expatiate on the various functions of the department [15].

2.2. Conceptual Review

2.2.1. The Concept of Procurement

The various requirements that have been outlined by Forker and Mendez [10] really have a very big area of application. For that matter, among the various major or top requirements that should be met by the procurement department in exhibiting quality includes the fact that [10].

The top level management systems will be able to bring about the implementation of a robust quality management systems that are geared towards the operational improvement of the overall corporate goals [7]. Thus, by way of defining the quality policy of the subcontractor, an establishment of an internal departmental subcommunication as well as the verification of procurement personnel must be the very first requirement of setting quality standards within the procurement organization.

The requirement therefore covers the rationale behind maintaining a steady quality policy with all the units or functions of the company. In order for this error to be recognized and the appropriate

Recording and tracking the efficiency of the implemented quality management systems is a sufficient tool to recognize the errors and possible parts for further improvement.

Therefore, before the official application of quality, an organization must be able to provide a quality manual, a copy of the quality policy and all needed documents, including e.g. work instructions [1].

2.2.2. Functions of the Procurement Department

Definitely, procuring materials is not the only one function the purchasing department has. According to [20] the most relevant five functions of the purchasing department are presented and explained in the following list.

Procuring material. This process starts with receiving requisition of materials from another department of an organization. Then, the assessment of the demand and selection of suppliers take place before the ordering of materials [22]. Obtaining materials is the main and fundamental function of the purchasing department where the quality management should be applied [12].

Supplier relationships, selection and price evaluation. Supplier selection and general evaluation of the quotations and further orders is a significant function of the purchasing department. This stage also includes further supplier relationship management [19].

2.2.3. The Concept of Quality Management Systems

As it was defined before, the quality management system is the tool within which an organization is applying quality management into the processes. However, quality management system affects the organizational structure, the organizational processes and procedures as well as the organizational resources [8].

All these organizational parts are required for the implementation of quality management into an organization: Thus, these parts might be modified in order to achieve efficient functioning of any quality management system. Moreover, quality management systems do not have a scope of application, thus they have an impact mostly in all areas of the organization [15]. Accordingly, any quality management system can be identified as the establishing process of quality management policy that discovers organizational structure, all processes, procedures and resources. Moreover, the process of establishing contains coordinated activities that provide direction for an organization to grow up efficiently and effectively [11].

2.3. Theoretical Review

2.3.1. Quality Planning

This part of quality management is based on the defining quality objectives and all components to achieve those objectives [10]. Quality planning has to be followed by further activities as quality control, etc. Thus, the implementation of quality management consists of all four activities – quality planning, quality control, quality improvement and quality assurance – along all processes in an organization. Quality planning could be divided in two ways – strategic and operational. Strategic is considered as the setting process of long-term goals that explains vision, mission and values of the business. This way of quality

planning is more theoretical and leads to analyzing all external and internal sides of the business [18].

2.3.2. Quality Control

This part covers mostly fulfilling requirements and regulating future performance of a product or service. Quality control might be applied to different parts of the operational processes. It is used in the beginning steps of manufacturing, the intermediate stage of the developing of a product or even the final measuring of the performance of a produced product [13]. Wherever the quality control is applied the main issue is to prevent changes and to increase the level of predictability. As known, operations under control and a high level of predictability is the key of success of any business [3]. With quality control an organization can avoid chances, define possible failure and predict changes. Thus, for the implementation of quality control into real cases, it is valuable to apply it within the main plan–do–check–act/adjust method (PDCA) [6].

2.3.3. Quality Improvement

One of the last steps of quality management is quality improvement. As the applied control to any process of an organization keeps stable for a time it requires the maintenance and continuous development to stay effective all the time. For maintaining and increasing the efficiency, the quality improvement phase could be implemented in any process of the organization [22]. Quality improvement is described as a stage of quality management based on developing new targets and raising the standards by maintaining stable efficiency and fulfilling all quality requirements [16].

Undoubtedly, quality improvement is related to the standards and performance measurement tools. Quality improvement can be presented as qualitative or as quantitative methods to set continuous improvement of any stage of the company [17].

2.3.4. Quality Assurance

Quality assurance is focused on providing the confidence of the future fulfillment of all requirements. There are always some restrictions and requirements to maintain quality and these have to be completed in order to gain the result [14]. A customer or a manager are not able to handle or observe all actions by themselves, thus they have to trust to a company that the requirements are met. Eventually, the creating of quality assurance is understood as recording, organizing reviews and documenting the processes and results. However, these activities can be mentioned also as quality control tools as well as quality assurance parts [21].

2.4. Empirical Review

Some studies define the integration between quality management and supply chain management as the concept of Supply Chain Quality Management – SCQM [15]. From the point of view of quality management, design supply chain could be recognized as providing quality products and services across every organization in the supply chain, to

client's expectations.[4] stated that SCQM is the formal coordination and integration of business processes involving all partner organization in the supply channel to measure, analyze and continually improve products, services, and processes in order to create value and achieve satisfaction of intermediate and final customers in the marketplace [5].

2.5. Summary

There are quite big influences on the purchasing department from the implementation of the quality management systems. Almost all operations and processes need to be modified [7]. However, all the changes have to be done to apply quality management in an efficient way. Thus, with the right application the company might achieve sufficient results both internally and externally [9]. The side effects are also predictable and might be eliminated with a good preparation of the implementation in the beginning. Therefore, all modifications within the department are aimed to the key goal – customers' satisfaction. This main aim does not depend on the size of the company or on the operating industry [17].

3. Research Methodology

References to this study have been carried out in various and from different sources. To begin with, this study took the form of a case study to identify how procurement can help in ensuring quality of products at Nestle Ghana Limited.

The source of data that was used includes primary and secondary sources. In the primary data collection, the questionnaires were used in collecting data from selected respondents. Well-designed relevant questions in a well-structured way were prepared for the respondents to answer. The secondary sources include publications, internet, articles, books, documents, and magazines on procurements contribution to quality standards.

A sampling of employees in the procurement, stores and other supporting departments were given questionnaires to purposely answer on the topic. The population size for the study was estimated to be 40 whilst a sample size of 20 was drawn out of it for the study. The data collection method and techniques comprises of questionnaires and observations. The data collected was then grouped into statistical tables and analyzed accordingly.

4. Data Analysis

Table 1. How procurement has ensured quality at Nestle.

Category	Frequency	Percentage %
Good Specification	6	30
Early Supplier Involvement	7	35
Supplier Development	5	25
Others	2	10
Total	20	100

Source: Compiled from Case Study Data, 2020

In response to the Table 1, 6 respondents representing 30% have admitted the fact that good specification is key in achieving quality, 7 respondents representing 35% agreed on early supplier involvement, 5 respondents representing 25% agreed on supplier development whilst 2 respondents representing 10% also agreed on other factors. The distribution therefore implies that the procurement indeed contributes massively to quality of products that are offered for sales in the market.

Table 2. Benefits the organization is enjoying as a result of being quality assured.

Category	Frequency	Percentage %
Profit maximization	5	25
Goodwill	6	30
Competitive Advantage	6	30
Customer Loyalty	3	15
Total	20	100

Source: Compiled from Case Study Data, 2020

In Table 2, the researcher sought to access the benefits in implementing quality standards. 5 respondents representing 25% attributed this to profit maximization on the part of the company, 6 respondents representing 30% said its goodwill enhancement, 6 respondents representing 30% agreed on gaining competitive advantage whilst 3 respondents representing 15% agreed on winning customer loyalty. The distribution represented here implies that certain, Nestle Ghana has benefited massively in areas such as the maximization of their profit, the gaining of competitive advantage as well as protecting the company's goodwill in terms of their quality implementation.

Table 3. Areas where quality management has enhanced.

Category	Frequency	Percentage
Efficiency of warehouse	5	25
Efficiency of procurement	10	50
Efficiency of marketing	5	25
Total	20	100

Source: Compiled from Case Study Data, 2020

In Table 3, the researcher sought to analyze how the areas where quality management has improved. In response to the question, 5 respondents representing 25% said it has enhanced the warehouse, 10 respondents representing 50% said the procurement department whilst 5 respondents representing 25% said the marketing department. All these organizational parts are required for the implementation of quality management into an organization: Thus, these parts might be modified in order to achieve efficient functioning of any quality management system. Moreover, quality management systems do not have a scope of application, thus they have an impact mostly in all areas of the organization [15].

Table 4. *Quality principles the organization implements.*

Category	Frequency	Percentage
Quality control	4	20
Quality Assurance	10	50
Total Quality Management	4	20
None	2	10
Total	20	100

Source: Compiled from Case Study Data, 2020

In response to the question in Table 4, 4 respondents representing 20% answered in favor of the quality control principle, 10 respondents representing 50% answered quality assurance principle, whilst 4 respondents representing 20% answered total quality management. Quality control might be applied to different parts of the operational processes. It is used in the beginning steps of manufacturing, the intermediate stage of the developing of a product or even the final measuring of the performance of a produced product [13]. Quality assurance is focused on providing the confidence of the future fulfillment of all requirements. There are always some restrictions and requirements to maintain quality and these have to be completed in order to gain the result [14].

Table 5. *Quality control process applied at Nestle.*

Category	Frequency	Percentage%
Right first time	9	45
Right second time	5	25
Scrapping and reworks	4	20
Others	2	10
Total	20	100

Source: Compiled from Case Study Data, 2020

In response to the quality control process applied at Nestle Ghana, 9 respondents representing 45% said Nestle practices right first time, 5 respondents representing 25% said right second time, 4 respondents representing 20% said scrapping and reworking whilst 2 respondents representing 10% answered for other processes. From the point of view of quality management, design supply chain could be recognized as providing quality products and services across every organization in the supply chain, to client's expectations.[4] stated that Supply Chain Quality Management is the formal coordination and integration of business processes involving all partner organization in the supply channel to measure, analyze and continually improve products, services, and processes in order to create value and achieve satisfaction of intermediate and final customers in the marketplace [5].

5. Research Findings

Effective quality management is key to manufacturing organization overall success, thus, meeting consumer's requirement. The following findings became evident as the research work was carried out from a thorough analysis of the administered questionnaire. Returns management at Nestle Ghana is mostly done through reworking or remanufacturing.

This alone cannot be taken into consideration but rather other relevant management methods like right first time and right second time philosophies were also considered.

Most quality management was said to be carried out by the procurement and logistics departments. Quality management cannot be done effectively only by logistics expert; hence the productions also play key role in ensuring effective quality management.

The main challenges hindering the implementation of quality systems at Nestle were attributed to the lack of commitment to quality, ignorance on the part of the organization and poor planning of the requirements of the organization.

5.1. Conclusions

In conclusion the researcher believes that the Management of quality at Nestle Ghana has so far not been properly implemented considering all the challenges that hinder its implementation, but there are still more that needs to be achieved. The recommendations provided below when taken in good faith are likely to improve the quality management system at Nestle Ghana Limited, and hence build up image of the procurement department as well as the organization and help achieve sustainable goals.

5.2. Recommendations

- 1) There are various key quality systems implemented at Nestle Ghana Limited. Practicing quality control and quality assurance are the most relevant, therefore the continuous implementation and focus on zero defects will help reduce rework and have a positive impact on the organizations bottom line.
- 2) Management must be committed and ready to invest into effective quality management principles to enable the organization deal with zero defects to help recover capital investments in assets.
- 3) For Nestle Ghana to continue to maintain their customer base to keep enlarging their pie, we recommend that they manage stakeholder conflicts resulting from their customers regarding purchases made with defects very well so that their customers will also feel a sense of loyalty to them and hence increase their shareholder value and impact positively on their bottom line.

References

- [1] Agus, A., Supply Chain Management, production quality and business performance, 2001 International Conference on Sociality and Economics Development IPEDR, vol. 10, IACSIT Press, Singapore, 2011.
- [2] Arumugam, V., Chang, H. W., Ooi, K.-B. and Teh, P.-L., Self-assessment of TQM practices: a case analysis, The TQM Journal, vol. 21, no. 1, pp. 46-58. 2009.
- [3] Blackiston, G. H., A barometer of trends in quality management, National Productivity Review, vol. 16, no. 1, pp. 15-23, 1996.

- [4] Boronat, P. and Canard, F., *Management par la qualite: A totaleetchangementorganisationnel, Les Nouvelles Forms Organisationnelles*, Paris, Economica, 1995.
- [5] Bozarth, C. C., Warsing, D. P., Flynn, B. B. and Flynn, E. J., The impact of supply chain complexity on manufacturing plant performance, *Journal of Operations Management*, vol. 27, no., pp. 78-93, 2009.
- [6] Cao, M. and Zhang, Q., Supply Chain collaboration: Impact on collaborative advantage and firm performance, *Journal of Operations Management*, vol. 29, no. 3, pp. 163-180, 2011.
- [7] Claver-Cortés, E., Pereira-Moliner, J., Tari, J. J. and Molina-Azorin, J. F., TQM, managerial factors and performance in the Spanish hotel industry, *Industrial Management and Data Systems*, vol. 108, no. 2, pp. 228-244, 2008.
- [8] Ellram, L. M. and Cooper, M. C., Supply Chain Management, Partnerships, and the Shipper – Third Party Relationship, *The International Journal of Logistics Management*, Vol. 1, no. 2, pp. 1-10, 1990.
- [9] Flynn, B. and Flynn, E., Synergies between supply chain management and quality management: emerging implications, *International Journal of Production Research*, vol. 43, no. 16, pp. 3421-3436, 2005.
- [10] Forker, L. B., Mendez, D. and Hershauer, J. C., Total quality management in the supply chain: what is its impact on performance?, *International Journal of Production Research*, vol. 36, no. 6, pp. 1681-1701, 1997.
- [11] Fynes, B., Voss, C. and Búrca, S., The impact of supply chain relationship quality on quality performance, *International Journal of Production Economics*, Vol. 96, no. 18, pp. 339-354, 2005.
- [12] Hoang, D. T, Igel, B. and Laosirihongthong, T., The impact of total quality management on innovation: findings from a developing country, *International Journal Quality and Reliability Management*, vol. 23, no. 9, pp. 1092-1117, 2006.
- [13] Houlihan, J. B., *International Supply Chains: A New Approach*, *Management Decision*, vol. 26, no. 3, pp. 13-19, 1988.
- [14] Kannan, V. R., Tan, K. C., Just in Time, Total quality management, and supply chain management: understanding their linkages and impact on business performance, *Omega*, vol. 33, no. 2, pp. 153-162, 2005.
- [15] Kuei, C. and Lu, M., Integrating quality management principles into sustainability management, *Total quality management*, vol. 24, no. 1, pp. 62-78, 2013.
- [16] Lin, L. and Gibson, P., Implementing Supply Chain Quality Management in Subcontracting System for Construction, *Quality Journal of System and Management Sciences*, vol. 1, no. 1, pp. 46-58, 2011.
- [17] Mohanty, R. P. and Behera, A. K., TQM in the service sector, *Work Study*, vol. 45, no. 3, pp. 13-17, 1996.
- [18] Murthy, D. B. N., *Consumer and Quality*, 2nd Edition, New Age International Pvt Ltd Publishers, 2007.
- [19] Oakland, J. S., *Total Quality Management*, 2nd Edition, Oxford: Butterworth-Heinemann, 1993. Prajogo, D. I. and Sohal, S. A., The relationship between TQM practices, quality performance, and innovation performance: an empirical examination, *International Journal of Quality & Reliability Management*, vol. 20, no. 8, pp. 901-918, 2003.
- [20] Teh, P.-L., Yong, C.-C., Arumugam, V. and Ooi, K.-B., Does total quality management reduce employees' role conflict?, *Industrial Management and Data Systems*, vol. 109, no. 8, pp. 1118-1136, 2009.
- [21] Terziovski, M. and Hermel, P., The Role of Quality Management Practice in the Performance of Integrated Supply Chains: A Multiple Cross-Case Analysis, *Quality Management Journal*, vol. 18, no. 2, pp. 10-25, 2011.
- [22] Terziovski, M., Quality management practices and their relationship with customer satisfaction and productivity improvement, *Management Research News*, vol. 29, no. 7, pp. 414-24, 2006.