Quality Control Measures and Organizational Effectiveness of Cosmetic Manufacturing Companies in Aba, Nigeria

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Abstract
This study examined the quality control measures used by the cosmetic manufacturing organizations in Aba, Abia State. Sixty (60) respondents from the functional cosmetic organizations were studied as provided by the NAFDAC standards/regulations by the cosmetic organizations and the rate at which employees are involved in participating in the making quality control decisions. Questionnaire were distributed to the registered functional cosmetic organizations, the judgmental sampling procedure was used because of the nature of this study. The spearman ranked correlation coefficient statistical tool was used of the analysis of this study at a 0.05 level of significance. The research findings showed that quality control measures as provide by NAFDAC have improved organizational effectiveness. Similarly, most organizations that are registered by NAFDAC comply with quality control measures. Lastly, most employees participate in strategic quality control decisions in their various organizations. From the findings, we recommend that with a good diagnosis, BAFDAC quality control measures are useful for quality products in the marketplace. Hence rules, policies, regulations should be constantly reviewed to address quality control measures in this sector, regular visits should be encouraged by the NAFDAC officials and organizations must create research and development department in their organizations.

Keywords: Quality control measures, organizational effectiveness inspection, standard, quality assurance, profitability, productivity and standard equipment.

Introduction
Organizations are facing the kind of competition that was not envisaged a few years ago. Organizations have to compete with goods and services from all over the world and satisfy a more educated and sophisticated customers. What is satisfactory to customers today may not be regarded as such tomorrow as their expectations are continuously changing. Also, there has been consistent breakthrough in science and technology over the last couple of decades. Moreover, the fallout of a deregulated global competition has offered customers choices among various alternatives. Today, customers demand high quality and low price products. Since no one organization can boast of holding franchise to the development and delivery of quality products/services, hence many organizations have embraced quality control concept as a way of survival.

Cummings and Worley (2003) state that “Total Quality is achieved when organizational processes reliably products and services that meets or exceeds customer expectations and when
commitment to the continuous improvement of all processes become a part of the organizations culture”.

Most Nigerian firms have liquidated; the few survivors either in the verge of collapse of just managing to exist. These problems emanate from poor management of these firms. Thus, one begins to wonder why considering the significant increase in recent years on the attention given to the management performance.

The shock is tenser on realizing the most of our cosmetic products are not regarded as qualitative in the face of foreign cosmetic products. Does it really mean that the practice of quality control in these firms is inconsistent or irrational? Does it lack planning or does quality control measure not have any significant impact on managerial performance?

While a lot of strides have focused attention on managerial performance, very few have focused attention on the effect of quality control as strategy for improving managerial and organizational performance?

Therefore, there is an urgent need for an organization-wide approach and commitment to quality improvement, thus the development of the “total quality improvement, thus the development of the “total quality management concept”, every organization that is into manufacturing strives to achieve their primary objectives which includes: survival, efficiency, large market share, profitability and etc. must consider their resource base. Hence, it follows that management must plan, organize and control the use of available resources to accomplish the specified long-term objectives. Great emphasis must be placed on quality control as an essential factor for goals achievement. The concept of quality is concerned with how well and how long a product or service meet s the customer requirements. The role of technological change has intensified customer’s taste in this competitive market place. Therefore, organizations must structure its policies and procedures to adapt to quality control standards.

A trip into most of our Nigeria markets shows that a good number of products sold are of inferior quality compared to foreign counterparts. The buyers have been deceived by different name given to the products, for example, some call it Aba-made, Taiwan-made, Igbo-made etc. The proliferation of these products can be checked through the introduction of a sound quality control in our production establishment. Therefore, the establishment of a sound quality control system in any organization would be ineffective without proper management and application of the necessary quality standards as established by the National Agency for Food and Drugs Administration Control (NAFDAC).

The following research questions are presented with regards to the objectives of the study:

I. To what extent does inspection impact on profitability of cosmetic manufacturing companies in Aba?

II. To what extent does inspection affects productivity of cosmetic manufacturing companies in Aba?

III. To what extent does inspection affects the standard equipment of cosmetic manufacturing companies in Aba?

Literature Review
Theoretical Background
Evans and Lindsay (2006), pointed out that while its roots are in America management theories and practices, TQM attempts to reconfigure these into a whole approach to management that is
more than the simple sum of its parts. These parts may have existed before the Strategic Quality Management era and the popularity of TQM. However, they were not usefully configured into an integrated approach that it focused on the themes of the emerging paradigm. This holistic approach makes TQM fundamentally different from past traditions of management. TQM may yet be regarded as a passing fad. However, the underlying themes of management being addressed by those who are striving to define and move to a new paradigm are not fads. These themes include the importance of understanding customer needs, formulating strategies to provide value to customers, and continuously improving organizational systems to provide that value.

The Concept of Quality
The word “quality” is derived from the Latin word, “qualitas” meaning of what. Ancient writers seem to have used the word in the sense of “nature”. While managers have shown interest in the concept of quality, many have been frustrated by its elusiveness. There are many diverse and often conflicting definitions in professional books, journals, and new media. Despite common these such as continuous improvement, customer focus, and excellence, different people emphasize different things. According to Bounds, Yorks, Adams, and Ranney (2005) for example in a 2000 public television special “Quality or Else”, executives, managers, workers, academics and other defined quality variously as follows:

i) A pragmatic system of continual improvement, a way to successfully organize man and machine.

ii) The unyielding and continuing effort by everyone in an organization to understand, meet and exceed the needs of its customer &

iii) The best product that you can produce with the materials that you have to work with.

The Evolution of Quality Approaches
The modern approaches to quality have emerged gradually, developing through a steady evolution rather than heralded by dramatic breakthroughs. In tracing back into history, the evolution of quality activities can be divided into four distinct quality eras. Garvin (2005) mentions that the four eras are as follows:

The Quality Gurus
A Quality Guru is someone whose concepts and approaches to Quality (within manufacturing, the service industries, and probably life in general) had made a major impact on the way consumers and industrialists alike both think and act. It has been generally accepted that Gurus are charismatic individuals whose vision, leadership, and drive easily transfer to those in their surroundings they have different focal points, or areas of concentration and expertise. The main contributors in developing the concepts of quality management come from the following persons: Edward Deming, Armannd V Feigenhaum, Joseph M. Juran, Philip 13. Crosby and Kauro Ishikawa.

Quality planning: This is the activity of developing the products and processes required to meet customer’s needs.

Quality Control: This process consists of the following steps. Evaluate actual quality performance, compare actual performance to quality goals and act on the difference.
Quality Improvement: This process is the means of raising quality performance to unprecedented levels breakthroughs.

Common Quality Management Principles
Globadian and Speller (2009) highlighted the common quality management discussed by these quality gums. These principles are similar to those outlined by Flood (2010) and by ISO 9001:2000 (2007) Ghobadian and speller also made a comparison among the three month renowned America quality gurus’ approaches based on three factors as indicated in quality principles, viz; process, people and performance.

Human Facts in QMS Implementations
Claus Moller (1996) identified five types of quality within any organizations: Personal quality, Team quality, Product quality, Service quality, company quality, and demonstrated that high personal quality and team quality are prerequisites of products quality, service quality and total company quality. According to him, each quality has two dimensions: “hard” which is technical and “soft” which is emotional. The latter he referred to as the human side of quality that relates to emotional aspects, such as psychological climate, management styles, attitudes towards people, ethnics and team spirit. These are closely linked to corporate culture that tackles the question of motivation, internal communication, creativity, enthusiasm, job satisfaction flexibility, cooperation etc.

Leadership Styles
Deming (2007) believed that “profound knowledge” is a prerequisite for effective leadership which visionaries and creates new aspects to life within an organization. The leadership role should include coaching, facilitation, counseling, risk taking, visiting, involvement and most of all, transformation. The development of Deming’s theory on profound knowledge in an organization will lead to leadership and empowerment.

Effectiveness of an Organization
According to Heath (2009) Organization effectiveness has at least two fundamental different meaning. It is worthwhile to sort out these meanings with the expectations that our thinking and understanding of the subject-matter can be clarified. Organizational effectiveness has different meaning, depending on whether the organizational is viewed from the outside or inside. The insider perspective of an organization is a typical managerial view point. The fundamental question asked about organizational effectiveness is whether the resources invested are utilized efficiently. Return on investment is typical way to measure this type of organizational effectiveness.

Problems Affecting Quality Control Measures in the Cosmetic Sector
Productivity is concerned with efficiency and effectiveness. Efficiency implies to compare the resources expected (inputs) with the result obtained (output). Effectiveness evaluates the degree to which a chosen course of action leads to the attainment of the results it was designed to achieve. According to Mac’Odo (2002) problems hindering the achievement of the set target including the following:

Plant Break Down: Break down will be frequent where unskilled and cheap labours are
employed. Poor training of maintenance technicians will make them unproductive and obvious of modern production technique. Using machines or fairly used ones, the buying of which have become vogue of recent times does not give room for higher performance but frequent breakdown.

Inadequate Infrastructure: The infrastructure may just be there, but where they perform below expectation or work critically like NEP’A, NITEL, water Based, productivity will be hindered.

**Lack of Spare Parts**: The use of the machine leads to wear and tear of some components of this equipment’s put them in proper working condition means replacement of the affected parts. Nigeria manufacturing firms rely heavily on imported machinery and will always resort to importation of spare parts. Lack of it will result to shut down of production and productivity suffers.

**Lack of sustainable source of Raw Materials**: Productivity control system in the manufacturing sector of the economy depends on imported raw materials. A shortage of which will added to idle, this may be a result of bad planning, government policies, poor inventory control leading to late reorder, etc.

**Plant Layout**: When plants are arranged without considering for movement of men and goods, productivity suffers. Also, where they are arranged, and goods and workers have to cover distance to get to the next production stage, productivity suffers.

**The Environment**: The fact that Nigerian environment is very dynamic in nature, business establishment has in the last few years been passing through turbulent changes that have make business operation very difficult and effective to adapt.

**Benefits of Effective Quality Control Planning**

A well designed quality control system achieves five benefits according to Wisdom (2003).

i) It promotes sales through the maintenance of finished goods inventories adequate to meet the demand for its standard products and through accurate determination of delivery dates and costs of product information which is necessary for the proper pricing of customer orders.

ii) It promotes steady production at high output levels by maintaining rapid processing, by minimizing the need for overtime and “rush” orders, and by reducing interruptions and idleness of men and machines caused by non-availability of materials, parts and tools.

iii) It achieves low investment in inventory by keeping work in process a at a minimum, by maintaining rapid stock turn over, and by avoiding aver-accumulation of raw materials and finished goods.

It is in the light of these theories, the following hypothesis are presented:

**H01**: There is no significant relationship between inspection and profitability of cosmetic manufacturing companies in Aba?

**H02**: There is no significant relationship between inspection and productivity of cosmetic manufacturing companies in Aba?

**H03**: There is no significant relationship between inspection and standard equipment of cosmetic manufacturing companies in Aba?
Methodology
There are two types of research design. These are the experimental design, and the quasi-experimental design. Under the experimental design, the elements are under the control of the research. While under the quasi-experimental design, the various elements of the design are not under the control of the researcher.

This study is a descriptive research and requires the quasi-experimental design. This was chosen after a critical look at the nature of the problems. However, the cross sectional survey would be adopted, since it takes a snapshot at the situations and analyze it. Hence, the researcher was designed in such a way that meaningful results would be achieved. This study will use primary data from a cross sectional survey, which will be composed of information for the same variables of the study. The gathering of relevant information for the study is both vital and necessary if the objective of the study is to be achieved. The source of primary data will be through questionnaire survey, and-personal interview, which generate qualitative and quantitative information. Furthermore, the questionnaire was composed of structured questions and multiple choice questions that has a 5 point likert ratings scale of: to a great extent 5 points, to a considerate extent, 4 points, to a moderate extent, 3 points, to a slight extent, 2 points and very small extent 1 point. The reliability of the product contains 100 parts or components, the reliability of the product will only by 60 percent. The reliability of the product = (0.99) = 100 = 0.60.

Presentation and Analysis of Data
Effects of Quality Control Measures on Organizational Effectiveness of Cosmetic Manufacturing Companies in Aba, Abia State, Nigeria are discussed and presented in tables below:

Table 1: Responses on how long the Plants/Equipments are used for Operations

<table>
<thead>
<tr>
<th>Rank</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 hours</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>12 hours</td>
<td>15</td>
<td>33</td>
</tr>
<tr>
<td>24 hours</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Continuously</td>
<td>30</td>
<td>67</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey data, 2017.

The analysis of this table above indicates that (15) 33% of the respondents states that they run the plants/equipment for 12 hours while 30 (67%) of the respondents stated that they run the plants/equipments on a continuous basis.

Thus, efforts were made in the next question to determine whether they run shift operations.
Table 2: Responses on Cosmetic Products Manufactured by Different Organizations in Nigeria

<table>
<thead>
<tr>
<th>Rank</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soap</td>
<td>45</td>
<td>100</td>
</tr>
<tr>
<td>Cream</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>Hair</td>
<td>18</td>
<td>40</td>
</tr>
<tr>
<td>Provide</td>
<td>18</td>
<td>40</td>
</tr>
<tr>
<td>Detergent</td>
<td>10</td>
<td>22</td>
</tr>
<tr>
<td>Nail polish</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Perfumes</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>109</td>
<td>242</td>
</tr>
</tbody>
</table>

Source: Survey data, 2017.

The table above shows the responses of products manufactured by the various registered organizations in Abia State. The firms produce one product or the other.

Table 3: Responses on the influence of quality control measures on high quality products in the market place

<table>
<thead>
<tr>
<th>Rank</th>
<th>Response</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>42</td>
<td>93</td>
</tr>
<tr>
<td>No</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>45</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Survey data, 2017.

From the table 42 (96%) of the respondents are of the view that quality control measures have an influence on their project standardization in the market place. While only 3 (7%) of the respondents believes that the quality control measures have no services influence on their product standardization the market place. Hence, this implies that the best choice of meeting the demands of the customers is to product quality and standard products.

Discussion of the Findings

The findings are discussed in two phases: Research question findings and hypotheses findings. The research questions analysis in chapter four has the following findings: That the cosmetic manufacturing organizations in Nigeria do not have different control measures, rather their activities and operations are regulated by stipulated quality control measures by the National Agency for Food and Drug Administration and Control (NAFDAC). It was also discovered that quality control measures as provided by NAFDAC has tremendously helped organizations to be effective in its global attainment, such as in market share, product quality and profitability. The current practices of quality control measures have ensured high quality products ion the Nigerian market place.

Conclusion and Recommendation

In line with the decision and findings above, the following conclusions are made: Quality control measures if adopted and followed religiously will enhance the performance or organizations within the cosmetic manufacturing industry. That most quality control measures by the National Agency for Food and Drug Administration and Control (NAFDAC) has given rise to a more
reliable and qualitative cosmetic products. Hence, organizational policies and procedures within this industry relating to quality control should be adequately planned and implemented. An increase in employee involvement in quality control decisions will encourage more participation in quality management. Based on the conclusions reached, we offer the following recommendations: Constant appraisal of the quality control measures established must be done by NAFDAC to ensure effectiveness in usage and meeting with international standards. NAFDAC officials must engage in unofficial visit to the various cosmetic organizations to ensure that they don’t engage in sharp practices after the initial inspection. Organisations should endeavour to comply with the rules and regulations by NAFDAC to foster good quality products in the market.

References
Cummings, C. I. & Worley, C.G. (2003). Organizational development and change. West publishing company, municipals, USA.