
**TOTAL QUALITY MANAGEMENT AND PERFORMANCE OF MANUFACTURING
COMPANIES: A CASE OF BIDCO UGANDA LIMITED.**

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ABSTRACT

The study aimed at the total quality management and performance of manufacturing companies with a case of bidco Uganda limited and it was guided by the following objectives; to examine how employee involvement affects performance organizational of BIDCO Uganda Limited, to assess how customer focus affects organizational performance of BIDCO Uganda Limited and to determine how management leadership affects organizational performance of BIDCO Uganda Limited. From the findings, policies were installed for making continuous improvement on products' quality. This was supported by 66.7% of respondents who strongly agreed, 23.3% agreed, 10% were not sure, while none neither denied nor strongly denied. Organizations should utilize continuous improvement as a quality management method to improve their performance. Organizations should use employee engagement as a quality-control strategy. It is impossible to extrapolate these research findings to other countries since it was conducted in Uganda. As a result, similar studies should be carried out in other countries, especially in Africa.

Key words: quality management and performance

BACKGROUND OF THE STUDY

This study focused on total quality management and performance of a manufacturing company, a case study of BIDCO Uganda Limited. The general objective of this study was to determine the effect of Total Quality Management practices on manufacturing companies with reference to BIDCO Uganda Limited along with the following specific objectives: To examine how employee involvement affects performance organizational of BIDCO Uganda Limited; To assess how customer focus affects organizational performance of BIDCO

Uganda Limited; To determine how management leadership affects organizational performance of BIDCO Uganda Limited. To achieve this, the study adopted an explanatory research design consisting of both quantitative and qualitative research designs. A sample of 32 respondents out of a study population of 35 was used in the process of data collection though there was a return of 30 respondents. Data was analyzed and interpreted with use of tables and pie charts. The findings of the study revealed that top management, Customer focus and employee involvement as sub- variables of TQM have a positive relationship with organizational performance.

Background of the study

Total Quality Management in organizational performance is originated from the idea that performance is achievable in a quality useful environment and this can only be accomplished by everyone in the organization working together to continuously improve processes and for long run sustainability (Dhamasanti and Sudaryati, 2020). For the past two decades, TQM has been a comprehensive quality improvement strategy for associations to increment execution concerning quality and development. Total quality management is a method of planning, understanding, and organizing each task that is different for each person at each stage. The philosophy of total quality management is one of prevention rather than defect detection (Zhu et al., 2020).

Statement of the Problem

Creating competitive priorities is one of the functions of TQM. Kline (2011) argued that organizations that don't follow TQM lose their competitive priorities. The adoption of TQM by organizations has been hampered due to noncompliance with the procedure and principles of TQM implementation. While some organizations, run TQM like a program which they expect to function and perform the magic by itself, others have used half-hearted approach to it, by using some bits and pieces of the principles. This has counted for the failure of most organizations in meeting

their expected targets from implementing this ideology (Ugboro and Obeng, 2000). It's however been advised that manufacturing companies embrace quality management principles and implement them successfully to be able to delight their customers through efficient quality products and services.

Objectives of the study

- 1. To examine how employee involvement affects performance organizational of BIDCO Uganda Limited*
- 2. To assess how customer focus affects organizational performance of BIDCO Uganda Limited.*
- 3. To determine how management leadership affects organizational performance of BIDCO Uganda Limited.*

Research questions

- 1. What is the effect of employee involvement on organizational performance of BIDCO Uganda Limited?*
- 2. How does customer focus affect organizational performance of BIDCO Uganda Limited?*
- 3. Does Management leadership affect organizational performance of BIDCO Uganda Limited?*

Methodology

Research Design

The study employed a cross sectional survey research design as the overall strategy. Cross- sectional study was used in this study because it emphasized detailed contextual analysis of a limited number of events or conditions and their relationships. The researcher employed both quantitative and qualitative research approaches because they complement one another. Using both helped cover more areas, while using only one approach would have been defective (Barifaijo et al 2010).

The Study Population

This comprised staff and support staff members of BIDCO who made a total of 35. These included departments like administration, Stores, Operations/Production departments and others. This enabled the researcher to get relevant information from the right people. Data was analyzed using percentages and trend analysis technique and presented in tables and figures.

<i>Population</i>	<i>Population</i>	<i>Number of staff</i>	<i>Percentage</i>	<i>Sampling Technique</i>
<i>Administrators</i>	<i>05</i>	<i>05</i>	<i>15.7%</i>	<i>Purposive sampling</i>
<i>Procurement/Stores</i>	<i>08</i>	<i>07</i>	<i>21.8%</i>	<i>Simple random sampling</i>
<i>I.T Department</i>	<i>05</i>	<i>05</i>	<i>15.7%</i>	<i>Simple random sampling</i>
<i>H.R Department</i>	<i>09</i>	<i>08</i>	<i>25%</i>	<i>Simple random sampling</i>
<i>Operations</i>	<i>08</i>	<i>07</i>	<i>21.8%</i>	<i>Simple random sampling</i>
<i>Total</i>	<i>35</i>	<i>32</i>	<i>100%</i>	<i>Simple random sampling</i>

Table 1: Study Population

Sampling Techniques, sampling procedure, Sampling Size and composition

Since there are different categories of people, different methods were used to draw samples from each category.

Sampling Technique

The research sample selection employed was Stratified sampling because precision from the results increases since the sampling errors emanating from different strata are minimized.

The researcher also used simple random sampling to select respondents from each stratum to represent views of the rest in the stratum. Simple random sampling allowed each member in each of the categories an equal and independent chance of selection, thereby reducing bias (Mugenda and Mugenda, 2003).

Sample size

A sample is simply a subset of the population. Sampling is the process of selecting sufficient numbers of elements from the population so that a study of the sample and its characteristics made it possible for the researcher to generalize such characteristics to the population elements (Sekaran, 2000). The study used a sample size of 32. In order to determine the sample size, Krejcie and Morgan's table for determining sample size of a known population was used. With the population being 35, the sample size ended up being 32

Data Collection Methods

The researcher employed both qualitative and quantitative data collection methods. This involved use of questionnaires, focus group discussions and key informant interviews as explained below:

Quantitative data collection methods

Questionnaires

Questionnaires were constructed based on the research objectives. Questionnaires were preferred since they were easy to administer and time saving (Mugenda et al 2003). The questionnaire contained closed-ended questions using a liker scale (ranging from 1= Strongly Disagree; 2= Disagree; 3= Not sure; 4= Agree; 5=Strongly

Agree). Self-administered questionnaires were completed by those who could interpret the questionnaire. The researcher administered questionnaires to respondents who could not have the ability to easily interpret the questions probably because of their educational or literacy levels.

Qualitative data collection methods

Interview: *These were used to obtain information from key respondents who were vastly knowledgeable on the subject matter under investigation. An interview guide was developed to guide data collection on key critical aspects of the research and ensure comprehensive feedback. According to Schwandt, (2001) interviews ensure that critical aspects of the study do not miss out key issues on the impact of TQM practices on organizational performance of BIDCO.*

Data analysis

Qualitative data analysis was done by narrative as well as recorded during face-to-face interviews and observation. The researcher used quick impressionist summary in analyzing qualitative data using SPSS, key findings were summarized by noting down frequent responses of the respondents during the interview on various issues concerning total quality management practices and how they affected the organizational performance of BIDCO.

RESULTS

Response Rate

Table 2: Rate of Response

<i>Instruments</i>	<i>Frequency</i>	<i>Percentage (%)</i>
<i>Number of questionnaires distributed</i>	32	100%
<i>Number of questionnaires returned</i>	30	93.7%

Source: Primary Data 2023

Table 2 above show the rate of response of study. The researcher used questionnaires to collect data from the respondents. And of all the 32 questionnaires that were distributed, only 30 were returned making 93.75% return rate.

Demographic characteristics of Respondents

Table 3: Gender of Respondents

<i>Sex</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Female</i>	11	37%
<i>Male</i>	19	63%
<i>Total</i>	30	100%

Source: Primary Data 2023

Table 3 above show that 63% of the respondents of the questionnaire were male while only 37% were female. This indicates that most of the employees of BIDCO Uganda Limited are of the male sex, with females less in number. There is basically no gender equality at BIDCO.

Table 4: Age of Respondents

Age	Frequency	Percentage
<i>Under 25 years</i>	5	17%
<i>26-35 years</i>	9	30%
<i>36-45 years</i>	11	36%
<i>46 years and above</i>	5	17%
Total	30	100%

Source: Primary Data 2023

Table 4 above shows the age majority of 36% of total respondents is aged between 36-45 years old, while 17% of the total aged under 25 years old plus those above 46 years. 30% were aged between 26-35. This shows that the employees of BIDCO are in the age bracket of 36-45 years.

Table 5: Education Attainment of Respondents

Qualification	Frequency	Percentage
<i>Masters</i>	3	10%
<i>Bachelors</i>	17	57%
<i>Diploma</i>	8	27%
<i>Certificate</i>	2	6%
<i>Other</i>	0	0%
Total	30	100%

Source: Primary Data 2023

Table 5 indicates that 6% of the respondents were certificate holders, whereas 27% were diploma holders. Besides, 57% of the respondents were bachelor degree holders, while 10% were for masters. There were no holders of other qualifications. This implies that most employees in BIDCO were Bachelors and Diploma holders respectively.

Table 6: Length of Service of Respondents

	<i>Frequency</i>	<i>Percentage</i>
<i>Less than 3 years</i>	<i>5</i>	<i>17%</i>
<i>3-5 years</i>	<i>15</i>	<i>50%</i>
<i>6-10 years</i>	<i>10</i>	<i>33%</i>
<i>11 years and above</i>	<i>0</i>	<i>0%</i>
<i>Total</i>	<i>30</i>	<i>100%</i>

Source: Primary Data 2023

Table 6 above shows the experience of BIDCO staff. Majority of 50% of total respondent experience between 3-5 years, followed closely by 6-10 years at 33% and 17% were experienced less than 3years and none of respondents had experience of 11 or more years. This can be explained by the inception of county government.

Findings on objectives of the study

Total Quality Management Practices

Table 7: TQM Practices

		SD		D		NS		A		SA	
TQM Practices	F	%	F	%	F	%	F	%	F	%	
Employee	0	0%	0	0%	3	10%	7	23.3%	20	66.7%	
Management	0	0%	0	0%	0	0%	5	16.7%	25	83.3%	
Continuous Process	0	0%	0	0%	5	16.7%	15	50%	10	33.3%	
Quality Management	0	0%	0	0%	6	20%	5	16.7%	17	56.6%	
Customer Focus	0	0%	0	0%	1	3.3%	7	23.3%	22	73.4%	
Training And	0	0%	0	0%	3	10%	9	30%	18	60%	

Source: Primary Data 2023

SA-Strongly Agree, A - Agree, NS - Not Sure, D - Disagree, SD - Strongly disagree.

The data collected in Table 7 above shows the different TQM practices being applied at BIDCO Uganda Limited. Employee Involvement was supported by 66.7% of respondents who strongly agreed, 23.3% agreed, 10% were not sure, while none neither denied nor strongly denied. Management Leadership was supported by 83.3% of respondents who strongly agreed, 16.7% agreed, while none were neither not sure, denied nor strongly denied. Continuous Process Improvement was

strongly agreed to by 33.3% of respondents, 50% agreed while 16.7% were not sure. None denied nor strongly denied. Quality Management System was strongly agreed to by 56.6% of the respondents, 16.7% agreed, 20% were not sure, while none neither denied nor strongly denied. Customer Focus was strongly agreed to by 73.4% of respondents with 23.3% agreeing, 3.3% were not sure, while none neither denied nor strongly denied.

Table 8: Does TQM impact BIDCO Uganda Limited in any way?

<i>Response</i>	<i>Frequency</i>	<i>Percentage</i>
No	1	3%
Yes	29	97%
Total	30	100%

Source: Primary Data 2023

The respondents (97%) indicated that total quality management practices do impact their company BIDCO while a measly 3% of the respondents didn't feel that TQM practices do impact the company.

Table 9: If yes, what are some of the benefits derived from TQM practices at BIDCO?

<i>Response</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Improved Quality</i>	<i>6</i>	<i>20%</i>
<i>Employee Satisfaction</i>	<i>3</i>	<i>10%</i>
<i>Customer Satisfaction</i>	<i>4</i>	<i>13%</i>
<i>Increased Market Share</i>	<i>9</i>	<i>30%</i>
<i>Profitability</i>	<i>7</i>	<i>24%</i>
<i>Total</i>	<i>29</i>	<i>97%</i>

Source: Primary Data 2023

The 29 respondents who acknowledged that there was an impact of TQM practices on BIDCO named increased market share (30%) as the best benefit derived followed by profitability at 24% and improved quality at 20%. Customer satisfaction and employee satisfaction came at 13% and 10% respectively.

Total Quality Management Practices and Organizational Performance

What is the effect of employee involvement on organizational performance of BIDCO Uganda Limited?

Table 10: Employee Involvement and Organizational Performance

		SD		D		NS		A		SA	
Employee	F	%	F	%	F	%	F	%	F	%	
The organisation correlates constantly with employees	0	0%	0	0%	3	10%	7	23.3%	20	66.7%	
The organization provides open discussions based on objective criteria	0	0%	0	0%	0	0%	0	0%	30	100%	
The organization listens to employees' input	0	0%	0	0%	0	0%	13	43.3%	17	56.7%	
The organization uses an effective participation system	0	0%	0	0%	0	0%	7	23.3%	23	76.7%	
The organization provides an internal communication	0	0%	0	0%	0	0%	5	16.7%	25	83.3%	

Source: Primary Data 2023

SA-Strongly Agree, A - Agree, NS - Not Sure, D - Disagree, SD - Strongly disagree.

The data collected in Table 10 above shows the effect of employee involvement on organizational performance at BIDCO Uganda Limited. That the organisation correlates constantly with employees was supported by 66.7% of respondents who strongly agreed, 23.3% agreed, 10% were not sure, while none neither denied nor strongly denied.

That the organization provides open discussions based on objective criteria was supported by 100% of respondents who all strongly agreed.

That the organization listens to employees' input was strongly agreed to by 56.7% of respondents, 43.3% agreed while none were neither not sure, denied nor strongly denied.

That the organization uses an effective participation system was strongly agreed to by 76.7% of the respondents, 23.3% agreed, while none were neither not sure, denied nor strongly denied.

That the organization provides an internal communication platform was strongly agreed to by 83.3% of respondents with only 16.7% agreeing, while none were neither not sure, denied nor strongly denied.

How does customer focus affect organizational performance of BIDCO Uganda Limited?

Table 11: Customer Focus and Organizational Performance

	SD		D		NS		A		SA	
	F	%	F	%	F	%	F	%	F	%
Customer Focus Policies										
are installed for making continuous improvement on products' quality	0	0%	0	0%	3	10%	7	23.3%	20	66.7%
The quality targets and strategies are regularly reviewed.	0	0%	0	0%	0	0%	9	30%	21	70%
Existence of regular programs to improve customer service	0	0%	0	0%	6	20%	5	16.7%	19	63.3%
Promotions are as regular and as appropriate as possible.	12	40%	5	16.7%	6	20%	4	13.3%	3	10%

Source: Primary Data 2023

SA-Strongly Agree, A - Agree, NS - Not Sure, D - Disagree, SD - Strongly disagree.

The data collected in Table 11 above shows the effect of customer focus on organizational performance at BIDCO Uganda Limited.

Policies are installed for making continuous improvement on products' quality. This was supported by 66.7% of respondents who strongly agreed, 23.3% agreed, 10% were not sure, while none neither denied nor strongly denied.

The quality targets and strategies are regularly reviewed. This statement was supported by 70% of respondents, 30% agreed while none were neither not sure, denied nor strongly denied.

Existence of regular programs to improve customer service. This was strongly agreed to by 63.3% of respondents, 16.7% agreed, 20% were not sure, while none neither denied nor strongly denied.

Promotions are as regular and as appropriate as possible. This statement was strongly agreed to by 10% of the respondents, 13.3% agreed, 20% were not sure, 16.7% denied while 40% strongly denied.

Does Management leadership affect organizational performance of BIDCO Uganda Limited?

Table 12: Management Leadership and Organizational Performance

	SD		D		NS		A		SA	
Management	F	%	F	%	F	%	F	%	F	%
Top management develops clear total quality goals	0	0%	0	0%	0	0%	8	27%	22	73%
Top management communicates all quality goals to employees	0	0%	0	0%	2	7%	12	40%	16	53%
Top management develops policies based on the concept of total quality	0	0%	0	0%	4	13%	8	27%	18	60%
Top management acts as a guiding example for quality	0	0%	0	0%	0	0%	4	13%	26	87%

Source: Primary Data 2023

SA-Strongly Agree, A - Agree, NS - Not Sure, D - Disagree, SD - Strongly disagree.

The data collected in Table 12 above shows the effect of management leadership on organizational performance at BIDCO Uganda Limited.

Top management develops clear total quality goals. This was supported by 73% of respondents who strongly agreed, 27% agreed, while none were neither not sure, denied nor strongly denied.

Top management communicates all quality goals to employees. This statement was supported by 53% of respondents, 40% agreed, 7% were not sure, while none neither denied nor strongly denied.

Top management develops policies based on the concept of total quality. This was strongly agreed to by 60% of respondents, 27% agreed, 13% were not sure, while none neither denied nor strongly denied.

Top management acts as a guiding example for quality. This statement was strongly agreed to by

87% of the respondents, 13% agreed while none were neither not sure, denied nor strongly denied.

Conclusion

According to the conclusions of this research, TQM is extensively employed at BIDCO and managers are aware of the need to practice TQM. According to the results, there are strong links between the study's TQM sub-variables and organizational performance. Strong to extremely strong correlations have been found between each of the total quality management sub-variables and the overall

performance of the organization. Top-level commitment, employee engagement, and customer focus have a high impact on organizational performance. The most effective way to improve customer service is to concentrate on the client and reward and recognize your personnel. Accordingly, firms should adopt whole quality management to obtain and preserve competitive advantages. On employee involvement, it's recommended that it should be given more attention. Its thus safe to conclude that organizational performance is very much influenced by total quality management practices as evidenced at BIDCO Uganda Limited.

Recommendations

Companies should use TQM techniques to enhance performance, including putting the employees' needs first. Increasing the degree of commitment of senior management to quality management in Uganda's manufacturing companies is one way to improve performance. Organizations should utilize continuous improvement as a quality management method to improve their performance. Organizations should use employee engagement as a quality-control strategy. It is impossible to extrapolate these research findings to other countries since it was conducted in Uganda. As a result, similar studies should be carried out in other countries, especially in Africa.

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