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The Impact of Implementing Total Quality Management on Paints Products Quality.

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Abstract

The purpose of this study was to identify the impact of implementing Total Quality Management principles on the quality of paints products at Nile Paints Company. In order to achieve the objectives of the study, the researchers used descriptive method designing a questionnaire that included (20) items to collect the primary data from 30 participants representing the departments of marketing, Sales, production, quality control, supply chain and maintenance by using random sampling technique. The study found that implementation of total quality management principles (top management commitment, strategic planning, employee's empowerment, continuous improvement and quality culture) improves the quality of paints products in Nile Paints Company which takes the accountability and responsibility to effectively and continuously improve the product quality. This study may, therefore, be of value to practitioners wishing measure the impact of demographic factors on the implementation of total quality management at Nile Paints Company.

Keywords: Quality; Top management; Strategic Planning; Employees Empowerment; Continuous Improvement.

المستخلص

هدفت هذه الدراسة الي تحديد تأثير تطبيق مبادئ إدارة الجودة الشاملة على جودة منتجات الدهانات في شركة النيل للبوهيات. من أجل تحقيق أهداف الدراسة، استخدم الباحثون المنهج الوصفي لتصميم استبيان شمل (20) عنصرًا لجمع البيانات الأولية من 30 مشاركًا يمثلون أقسام التسويق والمبيعات والإنتاج ومراقبة الجودة وسلسلة التوريد والصيانة. استخدمت الدراسة أسلوب العينة العشوائية. وجدت الدراسة أن تطبيق مبادئ إدارة الجودة الشاملة (التزام الإدارة العليا والتخطيط الاستراتيجي وتمكين الموظف والتحسين المستمر وثقافة الجودة) يحسن من جودة منتجات الدهانات في شركة النيل للبوهيات والتي تلتزم بالتحسين الفعال والمستمر لجودة المنتج. هذه الدراسة يمكن أن تكون ذات قيمة للممارسين الذين يرغبون في قياس تأثير العوامل الديموغرافية على تنفيذ إدارة الجودة الشاملة في شركة دهانات النيل.

الجودة ; الإدارة العليا; التخطيط الإستراتيجي; تمكين العاملين; التحسين المستمر

Introduction

Total Quality management (TQM) is a philosophy that takes into consideration the participation of all workers in the productive process and in the decision taken, and the attention and focus on the internal and external consumers, which is the essence of the process. Total quality management is comprehensive approach to improve organizational performance. TQM is not about developing a system that follows flexible methods and constitutes procedures and decision; it is a commitment from the leaders of the organization to change the behavior of its members towards applying TQM concepts. The quality of goods and services is currently the main competitive element among business organizations in the local, regional and international markets. Today, business organizations are seeking to

improve and develop their products to strengthen their competitive position in the markets and achieve competitive advantages. Many producers at the local level consider quality to be of artistic dimensions and characteristics only. However, this belief is wrong because quality has many administrative dimensions that are complementary to technical dimensions. (Steenkamp, 1989). In this study, we will focus on the quality of the products.

To achieve the best customer needs and requirements, organizations develop quality systems that enable employees to identify, design, develop, produce, deliver and support products or services that the customer wants. Quality management does not happen by accident, but by managing each stage of the product's life. The quality system is the mechanical organization that manages the organization and its resources to achieve, support and improve quality economically. Quality systems are similar to financial control systems, information technology systems and personnel management systems.The development of rules and infrastructure that, if followed and maintained, will achieve the required results (Steenkamp, 1989).

The issue of product quality has come to the forefront in Europe and the United States. The strategic importance of product quality is acknowledged at the macro level as well as at the micro level in Western societies. At the macro level, product quality has been identified as a key variable in determining national competitiveness (i.e., competitiveness of a nation as a whole, as distinct from the competitiveness of individual firms (Steenkamp, 1989).

Statement of the Problem

Many organizations implement total quality management approach as a modern management method to meet the challenges and difficulties they face due to the rapid changes that take place in the environment in which they operate, as well as the fierce competition for an estimated market share. To produce high quality products, organizations need to implement quality concepts and principles. However, some organizations fail to produce competitive products that meet the markets requirements, which may affect the organization position in its sector. Therefore, this study attempts to investigate the effects of implementing of principles of total quality management on products quality in Nile Paints Company.

Questions of the Study

Based on the present problem, the study seeks to answer the following questions:

1. What is the effect of implementing TQM on the quality of paints products in Nile Paints Company?
2. What are the principles of total quality management that most effect paints products quality?

Objectives of the Study

The objectives of the study are to:

1. Examine the impact of total quality management on paints products quality.

2. Determine principles of total quality management that most effect paints products quality.

The Study Hypotheses

In the light of the previous objectives, the hypothesis of the study can be phrased as follows:

1- H1 Implementation of TQM improves the quality of Paints products.

2- H2: There is a statistical significant relationship between top management and the quality of Paints products.

3- H3: There is a statistical significant relationship between strategic planning and the quality of Paints products.

4- H4: There is a statistical significant relationship between employees' empowerment and the quality of Paints products.

5- H5: There is a statistical significant relationship between continuous improvement and the quality of Paints products.

6- H6: There is a statistically significant relationship between quality culture and the quality of Paints products.

Significance of the Study

The importance of the study stems from the need to get a deeper understanding of the effect of implementing total quality management principles on organizations; in addition, to the knowledge of the researches this is the first study to be conducted in the paint products industry. On the other hand, understanding the effect of total quality management principles in the paints manufacturing sector, may give the managers the knowledge that may help them to choose the appropriate decisions to improve business performance, so this will open a way to find out the trends and priorities in changing business environment. This study does not only focus on technical perspective, but rather discusses the administrative dimensions of quality. Beside that, this study applied in an important sector in Sudan economy.

The limitations of the Study

Geographical limitation: This study was conducted in the Nile paints company-Khartoum state in 2018.

Subjective limitations: The study focused on the implementation of total quality management principles and product quality.

Literature Review and Previous Studies

Total Quality Management (TQM)

Total Quality Management is an approach to improve the competitiveness, effectiveness and flexibility of an organization for the benefit of all stakeholders. It is a way of planning, organizing and understanding each activity, and of removing all the wasted effort, energy, time, and money that is routinely spent in organizations (Sabur, 2015). TQM is an art of managing the whole to achieve excellence; TQM is also defined as both a philosophy and a set of benchmarks that represent the foundation of a continuously improving organization. It is an application of quantitative methods and human resources to improve all the processes within an organization and exceed customers' needs at present and in the future (Goetsch, *et al*., 1995).TQM schemes address the approach that a manufacturing organization needs to ensure product quality. They aim to involve every member of the organization in the achievement of management objectives to produce safe, wholesome goods, enhance customer satisfaction and confidence, and identify means of ongoing improvement. TQM is a comprehensive and structured approach to organizational management that seeks to improve quality products and services through ongoing refinements in response to continuous feedback (Wade, 2008). Recent trends in Total Quality Management have led to a proliferation of studies that focus on evaluating the impact of TOM on organizational performance (Flynn,et al.,1995; Terziovski & Samson, 1999; Boyne & Walker, 2002; Feng, et al., 2006; Ismail Salaheldin, 2009; Valmohammadi, 2011 ; Munizu, 2013). Other studies examined the effect of TQM in service quality (Finn, et al.,1996; Sureshchandar, Rajendran, & Anantharaman,2001; Sureshchandar, Rajendran, & Anantharaman,2002; Hasan, & Kerr, 2003 & Talib,et al., 2011). While there are a few number of published studies (Wang, 1998; Sebastianelli & Tamimi, 2002; & Munizu, 2013.) that describe the link between TQM and product Quality. Data from several studies suggest that TQM have a significant impact on firm performance. Fotopoulos and Psomas (2010) examined the quality practices of the top management, employee involvement in the quality management system, customer focus, process, data quality management, and quality tools and techniques implementation. According to the findings, these factors significantly affect the companies' performance with respect to their internal procedures, customers, market share and the natural and social environment. Talib, et al. (2011) points out that TQM practices are significantly associated in services and in the promotion of service quality. Munizu (2013) tested and analyzed the

effect of TQM practices implementation that consists of leadership, strategic planning, customer focus, information and analysis, people management, and process management to product quality performance. The findings of his research indicate that leadership, strategic planning, customer focus, information and analysis, people management, and process management has significant effect on product quality performance. Leadership factor has dominant effect on product quality performance.

Principles of Total Quality Management

Principles of total quality management are the main pillars on which the practical application of this approach based on in any organization. Researchers mention it in different terms such as Elements, Fundamentals, dimensions, Practices and Factors. In the past two decades, a number of researchers have sought to determine Principles of Total Quality Management; reviews of the literature on TQM identified numerous principles that underlying the implementation of total quality management as shown in table 1. Recent investigation into TQM, Ngambi & Nkemkiafu (2015), Identified that Management commitment through leadership, Quality control, Inspection, Employee training, Customer focus, and benchmarking are the most important principles of TQM. Munizu (2013) assumes six main practices construct used in his study consists of leadership, strategic planning, customer focus, information and analysis, people management, process management, and supplier management. In his interesting analysis of TQM critical success factors in organizations, Adam (2010) identifies five principles namely; Leadership commitment, customers relationship, people management, suppliers management, process management and continuous improvement. Fotopoulos & Psomas (2009) examined the relationships between the total quality management (TQM) factors and organizational performance. The TQM factors revealed by this study were the quality practices of the top management, employee involvement in the quality management system, customer focus, process and data quality management and quality tools and techniques implementation. Based on the findings, these factors significantly affect the companies' performance with respect to their internal procedures, customers, market share and the natural and social environment. In the same vein, Ismail Salaheldin (2009). Identified twenty-four critical success factors of TQM implementation, to evaluate their impact on the primary measures as expressed by the operational performance and the secondary measures as expressed by the organizational performance, and to find out the effect of the operational performance on the organizational performance of small and medium-sized enterprises (SMEs) in the Qatari industrial sector. In a study, which set out to determine TQM dimensions, Fuentes, Montes and Fernández. (2006) their article Total Quality Management, Strategic Orientation and Organizational Performance: the Case of Spanish Companies determined a series of TQM dimensions where major consensus has been reached. These dimensions are Customer Focus, Continuous Improvement, Teamwork, Management Commitment and Leadership, Employees' Participation and Involvement, Training and Education and Management Process. Kannan & Tan (2005) proposed three TQM factors in particular, product design, strategic commitment to quality, and supplier capability.In another major study.

Table 1: Principles of Total Quality Management

#	Auther	principles
1	Ngambi & Nkemkiafu (2015)	1.Management commitment through leadership 2.Quality control 3.Inspection 4.Employees' training 5.Customers focus 6.Benchmarking
2	Munizu (2013)	1.Leadership 2. Strategic planning 3.Customer focus 4.Information and analysis 5.People management 6. Process management 7. Supplier management
3	Adam (2010)	1. Leadership commitment. 2. Customers relationship. 3. People management. 4. Suppliers management. 5. Process management. 6. Continuous improvement.
4	Fotopoulos & Psomas (2009)	1. Quality practices of top management 2. Employee involvement 3. Customer focus 4. Process and data quality management 5. Quality tools and techniques 6. Quality improvement 7. Market benefits 8. Customer satisfaction 9. Protection of natural and social environment
5	Ismail Salaheldin (2009)	1. Leadership 2. Organizational culture 3. Top management support 4. Continuous improvement 5. Benchmarking 6. Quality goals and policy 7. Team building and problem solving 8. Employee empowerment 9. Employee involvement 10. Employee training 11. Use of information technology 12. Supplier quality 13. Supplier relationships 14. Assessment of performance of suppliers 15. Product and service design 16. Enterprise performance metrics for TQM 17. Process control 18. Customer orientation 19. Management of customer relationships 20. Resources value addition process 21. Realistic TQM implementation schedule 22. Customer and market knowledge 23. Resources conservation and utilization 24. Inspection and checking work
6	Fuentes, Montes & Fernández (2006)	1. Customer focus 2. Continuous improvement 3. Teamwork 4.Management commitment and leadership

			5.Employees' participation and involvement 6. Training and Education 7. Management process
7	Kannan (2005)	& Tan	1. Just in time 2. Supply chain management 3. Quality management

Based on previous literature review and recent trends in TQM researches, the study identified five principles of total quality management as explained below:

1. **Top Management Commitment**

The commitment of top management to quality is one of the few principles agreed upon by researchers and specialists in total quality management, Riemann, director of the Baldridge Quality Award argued, "The TQM entry stems entirely from the interest and commitment of leaders in any organization. They are made in the boardroom, the leader is responsible for quality and not for anyone else, and no one else can be held responsible" (Deming, et al. 1997).

2. **Strategic Planning**

Strategic planning considered being one of the most important principles of total quality management approach. It includes a long-term view of the quality of the organization, as it requires time and appropriate budget and careful planning. The first steps begin with the formation of a higher committee and a quality team with representatives from all business units it is about developing quality policies that must focus on increasing customer satisfaction and translate on the ground so that they do not remain mere slogans (Badis, 2016).

3. **Employees Empowerment**

Previous studies emphasized the importance of empowerment for its role in improving the relationship between manager and employees, as this relationship is the cornerstone for the success and development oforganizations (Badis, 2016). Empowerment can be achieved through the following methods (Al Ebeideen, 2004):

1. Structural methods (structural empowerment): Fewer administrative levels facilitate the flow of information in two directions, preferably in the application of the following principles:

a) Build organizational units based on the initial working group so that they have a distinct leader.
b) The leader and members of each unit plan organize and evaluate their work within a specific framework.
c) Forming the unit in such a way to solve the problems in achieving the objectives.

2. Empower able administrative style of presidents: It is characterized by the ability to delegate some of its powers to subordinates in the planning, implementation and performance evaluation, and the ability to change the pattern of bureaucratic control to another based on trust and mutual respect.
3. Participate in solving issues: Each unit (team) diagnose problems and develop appropriate solutions to them within the available resources and the limits of obstacles and restrictions imposed on them.

4. **Continuous improvement**

Continuous improvement is one of the focusing area in the recent quality research and practice. Organizations shall continuously improve quality of their products and services; reduce the operational cost in order to enhance the customer satisfaction. In the paints industry, the pressure to continuously improve the organizations performance increasing day and night because the market competition is getting harder every day. Many Methods of continuous improvement investigated in business organizations. Juran trilogy which consists

of three basic components of quality planning, quality control and improvement; Problem solving methodology include identifying opportunities for improvement, analyzing current processes, conceptualizing future processes, implementing change, checking change and continuously improve, and Kaizen Method which argues that continuous improvement is achieved through small changes in all areas of the business. There are also an ongoing activities for continuous improvement, including benchmarking (comparative measurement of the best), customer information system, training and motivation of employees and a climate of creativity.

5. Quality culture

The desire to obtain high quality is no longer an isolated and simple desire. Achieving high quality is not enough, but requires three conditions: to occur from the first time, to occur continuously, to take place with the participation of all. This requires a strong institutional structure and laying the foundations for a supportive culture (Badis, 2016). Abdullah (2016) pointed to many basic values that can be relied upon to build a well-established culture of quality in any institution. Relationship management (organization, suppliers, clients), Empowerment, which is a sense of responsibility and the ability to innovate by employees are the foundation for long-term success. Communication as a critical point in total quality management by contributing to greater clarity of the employees, which will contribute to the development of the sense of group unity and teamwork and interdependence among individuals and a sense of belonging and document the link of employees of the institution. No doubt, that trust

is essential to success in this area, breaking barriers and activating communication at the same administrative level and with other administrative levels will help to create a comprehensive view of the institution conducive to individual development and to the success of the institution.

Product Quality

It was not until the late 1940s, product quality determined by its characteristics that identified by the organization production and marketing staff .The modern concept of quality is a set of attributes, characteristics and criteria that must be available in the product based on the desires and preferences of the consumer (Al-Hussain, 2004).

Product Types

Depending on the overall concept of the product, Bashir & Mahmood (2002) suggests that product can be dividing into the following types:

1- Material goods**,** which includes:

- **Consumer goods of all three types (**Soft commodities, Shopping and Private goods).
- **Industrial goods**: These commodities are divided into (Raw materials, Equipment, machinery and Operating materials).

Factors Influencing the Product Quality

The production of goods and the provision of services in any institution determines its performance even the continuation of survival, so organizations shall determine the most important factors affecting the product, so as to exert its effort in order to ensure the improvement of quality of its products, and thus achieve continuity and growth, (Barwari, et al., 2004). These factors include the fowlings:

• Production techniques: High-end technologies can produce good products, less time, less cost, less effort and better specifications.

• Manpower: The human element works at different levels. The more skillful, efficient employees, the more higher the quality of the product and the more accurate the work.

• Raw materials involved in production: the material inputs for production. The more these have better specifications; the product is more quality and more compatible with the required specifications.
• Administrative and technical organization: The form of organization followed and the quality of the internal arrangement in place in the institution occupy a large role in the process of sequence of decisions and orders and the transfer of information and the conduct of operations.
• External factors include competition, prices, income levels, government actions and legislation. All these factors have a prominent role in the exit of the product with certain benefits that agree with them.

Conceptual Framework and Study Variables

In order to examine the impact of total quality management on the products quality. The current study, based on a thorough review of literature developed a conceptual framework that exhibitions the relation between the independent variables (TQM principles) and the dependent variable (products quality) as shown in figure (1).4

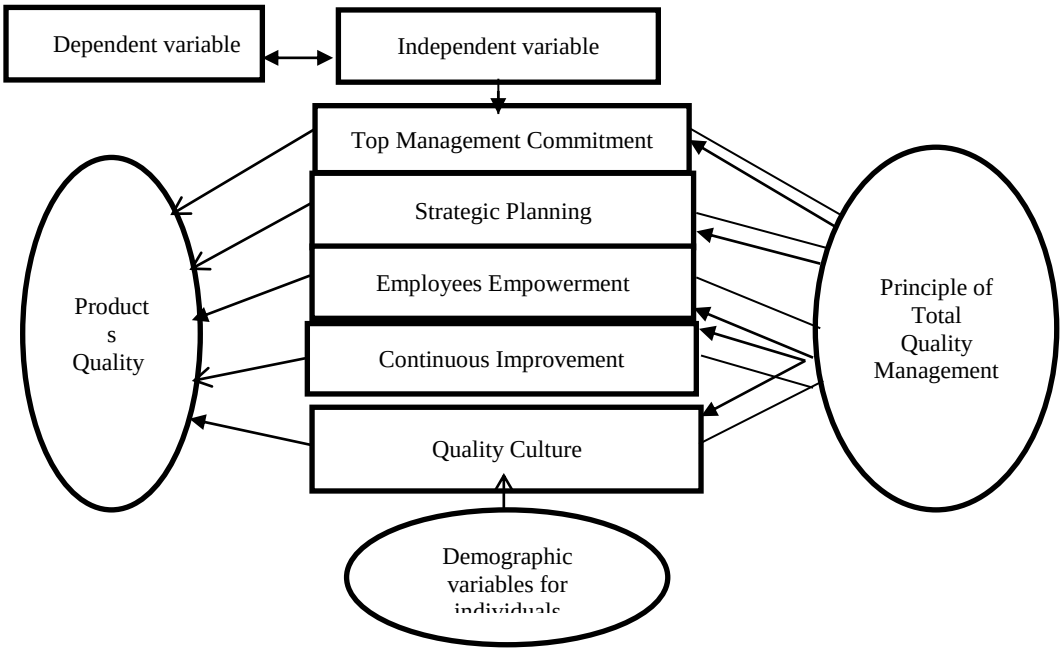

Figure 1: Variables and Study Model.

Materials and methods

Research Methodology

In this research, descriptive method was used, using a questionnaire to examine the effect of implementing principle of total quality management in paints ind

Data Collection and Instrument

The researcher used a questionnaire to collect preliminary data from the study sample. The questionnaire consisted of two main parts. The first part describe the general information of the sample, The second part consists of the basic variables divided into the main study axes.
The questionnaire used five point Likert scale measurement ranging between (5=Strongly Agree, 4 = Agree, 3=Neither, 2= Disagree and 1=Strongly Disagree) as shown in table (2).

Each of the axes of the questionnaire has a number of statements and each of the respondents to answer them and to present the questionnaire after correcting by number of arbitrators to ascertain the accuracy of the statements and their validity to achieve the research objectives.

Table 2: Response Degrees on Five Point Likert Scale

Response	Weight	Median
Strongly Agree	5	4.20- 5.00
Agree	4	3.40 – 4.19
Neither	3	2.60 – 3.39
Disagree	2	1.80 – 2.59
Strongly Disagree	1	1.00 – 1.79

Reliability and Validity of the Questionnaire:

Reliability means that the questionnaire gives a similar result or the same results if it is re-applied more than once in the same conditions. To verify this, 15 samples were distributed to the sample by means of internal consistency (Alpha Cronbach). The coefficient of Alpha Cronbach was equal to(0.84) Indicates the stability of the scale and validity of the study and the coefficient of validity is (0.92) This indicates that there is a high validity of the scale in favor of the questionnaire, Which confirms the accuracy of the questionnaire and acceptance of the results of this study .

The Statistical Methods used in the Study:

The researcher relies on a number of statistical methods (Frequency tables, Percentages, Graphs, Median, Chi square, and Alpha Cronbach coefficient)

Findings and Results

Study Results

Description of the Sample characteristics

Table 3: Demographic Characteristics of the Individuals of the Study, n=30

Characteristics	Frequency	Percentage
Gander		
Male	20	66.7%
Female	10	33.3%
Total	30	100%
Age		
25 years and less	7	23.3%
26-35 years	12	40%
36-45 years	9	30%
46-60 years	2	6.7%
Total	30	100%
Qualification		
PhD	1	3.4%
MSc	13	43.3%
BSc	16	53.3%
Total	30	100%
Years of experience		
5 years and less	12	40%
6-15 years	12	40%
16-25 years	5	16.7%
26 years and more	1	3.3%

Total	30	100%
Position		
manager	5	16.7%
supervisor	6	20%
Employee	19	63.3%
Total	30	100%

Inferences of Demographic Profile

Table (3) illustrates the frequency and percentage of different categories of the demographic variables and profile of the respondents. Regarding **Gander** the percentage of males participants (66.7%) is greater than the females participants which featuring (33.3%) only. The participants aged (26-35 years) are the majority (40.0%), while those aged (46-60years) are the minority (6.7%). The lowest
participants are holders of Doctoral degree (3.4%) and most of them have a Bachelor's degree (53.3%). Years of experience were scaled from 5 years and less (40.0 %) then (6-15 years 40.0 %) then (16-25 years16.7%) and finally (26 years and more 3.3%). Employees are the most in this study (63.3%), while managers are the least (16.7%).

Data Analysis and Hypotheses Testing

In order to analyze the data obtained through the questionnaire, these data were entered into the computer and then a number of statistical treatments were applied to it, as indicated in table (4)

Table (4): The Overall Median and Chi-square Value for the Study Variables.

No	Study Variables	Chi-Square	df.	Sig.	Median	Scale
1	Top Management Commitment	13.28	1.57	.000	4.25	Strongly Agree
2	Strategic Planning	15.46	2.0	.000	4.00	Agree
3	Employees Empowerment	14.71	2.75	.000	4.00	Agree
4	Continuous Improvement	13.44	1.75	.000	4.12	Agree
5	Quality Culture	14.78	2.25	.000	4.00	Agree

From the Table (4) above we can see that the median was (4.25) with Sig. of (0.000) for top management commitment, that means top management commitment positively affect total quality management implementation. In addition, the above table shows that the median was (4.00, 4.00,4.12 and 4.00) for (Strategic Planning, Employees Empowerment, Continuous Improvement and Quality Culture) respectively, chi-square value ranging between (13.44-15.46) The overall scale for the all variables is agree. The most obvious finding to emerge from these results is that Strategic Planning, Employees Empowerment, Continuous Improvement and Quality Culture positively affect total quality management.

Testing Hypotheses

Chi square test was used to test the hypothesis of the study. Further, the study Hypotheses were tested to accept the alternative hypotheses if the value of the level of significance is less than or equal to 0.05 ($a \leq 0.05$), these hypotheses are:

H1: There is a statistical significant relationship between top management and the quality of Paints products.

H2: There is a statistical significant relationship between Strategic Planning and the quality of paints products.

H3: There is a statistical significant relationship between Employees Empowerment and the quality of paints products.

H4: There is a statistical significant relationship between Continuous Improvement and the quality of paints products.

H5: There is a statistical significant relationship between Quality Culture and the quality of paints products.

Table 5: The Study Hypothesis Results.

H0 no	Study Variables	Chi-Square	df.	Sig.	Decision on Hypothesis
H1	Top Management Commitment and the quality of Paints products.	13.28	1.57	.000	Accepted
H2	Strategic Planning and the quality of Paints products.	15.46	2.0	.000	Accepted
H3	Employees Empowerment and the quality of Paints products.	14.71	2.75	.000	Accepted
H4	Continuous Improvement and the quality of Paints products.	13.44	1.75	.000	Accepted
H4	Quality Culture and the quality of Paints products.	14.78	2.25	.000	Accepted

It can be seen from Table (5) that the results of chi-square test indicate that the value of the significance level is (Sig. =.000) for all the study variables which is less than the value of the confidence level ($a \leq 0.05$). Thus, a positive significant relationship was found between total quality management principles (top management commitment, strategic planning, employee's empowerment, continuous improvement and quality culture) and the quality of paints products in Nile Paints Company.

Conclusion and Implications Recommendations

Conclusion

This study was designed to examine the impact of total quality management on the quality of Paints products. The study found that implementation of total quality management principles (top management commitment, strategic planning, employee's empowerment, continuous improvement and quality culture) improves the quality of paints products in Nile Paints Company and which takes the accountability and responsibility to effectively and continuously improve the product quality. The results of this study indicate that the implementation of TQM principles has a positive effect on the quality management system, increasing annual revenue and continuously improve the paints products. Another important finding was that TQM has positive effect on employees' training, production process, customer satisfaction and retention by increasing customer confidence and reducing compliance.

Implications and Recommendations

Although the top management commitment to implement TQM is significant, leaders of Nile Paints Company should give greater attention to the requirements and expectations of the employees, because they represent an important component of TQM implementation, as well as the importance of specialized departments to ensure and follow up the quality. The findings reported here suggest that Nile Paints Company needs more to empower its employees and should be concerned with the employees satisfaction and the provision of better working conditions, and environment through the implementation of a fair system of recruitment. The administration should also find and design training programs for employees who are appropriate to the nature of their work, as well as organizing special programs that enable them to implement quality systems continuously and at the highest levels.

Nile Paints Company leaders should focus their attention to continuously improve the quality of paints products by providing adequate training and educate the staff and raising their awareness by the quality concepts, tools and tequenichs and enabling them to innovate and introduce new ideas to continuously improve their performance.

Nile Paints Company top management need to increase attention to quality culture, where the organization must adhere to demonstrate integrity in managing promotions and awards system. Encouraging open communication between managers and supervisors, which leads to the development of a culture of continuous improvement in different areas of the business, and encourages employees to innovate by creating an atmosphere of trust and respect among all members of the organization.

Though the level of implementation of strategic planning principle is good, management should prioritize the development of a long-term strategic plan for quality and communicating the vision and mission of the organization and the quality objectives and quality policies for all employees.

Suggestions for Future Researches:

Through the theoretical and field analysis that has been highlighted in this study, many topics that may worthy further research have emerged for their theoretical and field importance:

- The impact of technical and administrative factors on the quality of paints products.
- Conducting a study on measuring the impact of demographic factors on the implementation of total quality management in Nile Paints Company or any other company.

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