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The adoption of total quality management in Algerian economic institution -a case study el sewedy cables-

تبني إدارة الجودة الشاملة في المؤسسة الاقتصادية الجزائرية– دراسة حالة مؤسسة السويدي للكابلات–

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Abstract :

The study aims to assess the role of total quality management in El sewedy Cables, and also aims to highlight the level of achievement of the dimensions of total quality management in El sewedy Cables. We also relied on the statistical analysis of the questionnaire data to test the hypotheses.

The study concluded that there is an application of total quality management principles in El sewedy Cables Corporation, but at varying levels.

Keywords: Total Quality Management; Continuous Improvement; Customer Focus; Full Participation.

JEL Classification Codes: L20; M10.

Résumé:

L'étude vise à évaluer le rôle de management par la qualité totale à El sewedy Câbles, et vise également à mettre en évidence le niveau de réalisation des dimensions de management par la qualité totale à El sewedy Câbles. Nous nous sommes également appuyés sur l'analyse statistique des données du questionnaire pour tester les hypothèses.

L'étude a conclu qu'il existe une application des principes de management par la qualité totale dans El sewedy Câbles, mais à des niveaux variables.

Mots clés : management par la qualité totale ; Amélioration continue; Orientation client; pleine participation.

JEL Classification Codes : L20; M10.

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1. INTRODUCTION

The rapid change that the world is experiencing in various areas, especially in the economic field, is one of the challenges faced by institutions that require them to keep pace with this development in order to ensure continuity and survival, and they must also be flexible to respond quickly to these changes, and among the trends of these institutions to keep pace with the current development In the world is the adoption of total quality management, the latter is one of the modern management concepts known in our current era, because of the change and development that it adds to the working methods, organizational culture and the formation of an integrated work environment, but the success of any institution in the application of the concept of total quality management depends on the extent to which the necessary requirements are provided for its implementation. Invest and pay particular attention to the factors of their success and exclude all factors that hinder their success.

Therefore, we seek through this research paper to address the following problem:

To what extent are the dimensions of total quality management applied in El Sewedy Cables Corporation?

1.1.Assumptions

As a tentative answer to the sub-questions, we make the following null hypotheses:

- The first main hypothesis: El Sewedy Cables does not apply the dimensions of total quality management.
- The second main hypothesis: There are no statistically significant differences in the respondents' opinions on the application of the dimensions of total quality management in El Sewedy Cables Corporation, according to the difference of personal and functional variables. We divide this hypothesis into three sub-hypotheses as follows:
- The first sub-hypothesis: There are no statistically significant differences in the respondents' opinions towards the application of total quality management in El Sewedy Cables Corporation according to the gender variable.
- The second sub-hypothesis: There are no statistically significant differences in the respondents' opinions towards the application of total quality management in El Sewedy Cables Corporation according to the age variable.

- The first sub-hypothesis: There are no statistically significant differences in the respondents' opinions towards the application of total quality management in El Sewedy Cables Corporation according to the work experience variable.

1.2. The significance of the study

This study draws its importance from the reality of institutions in Algeria and the changes taking place in the world, which require institutions to move from traditional to modern management modes, in order to provide high quality products and services on the one hand and meet the aspirations of consumers on the other hand, which will ensure the survival of the organization And to continue.

1.3. Objectives of the study

The study aims to achieve a number of objectives, which we can summarize in the following points:

-To provide an intellectual and theoretical presentation of total quality management.

-To clarify the possibility of applying the dimensions of Total Quality Management in Algerian establishments through the case of El Sewedy -Cables Enterprise.

- Present a number of proposals and recommendations to improve the status of the Algerian institution.

1.4. RESEARCH METHODOLOGY

The researchers used an analytical a scientific, descriptive approach which is that corresponds to the nature of the research.

1.5. STUDY DIVISIONS:

The research paper was divided into:

- A theoretical review on total quality management.
- Results presentation and analysis of the field study.
- Hypothesis test.

2. Literature Review

2.1. Total Quality Management Concept:

TQM is defined as "creation of a remarkable culture in performance, where all the organization’s individuals are continuously working to achieve the consumer's expectations; and the work performance with the achievement of the quality at the best possible level, or with high effectiveness, and at the shortest possible time (Faisa A. Al-Bourini, 2013, p. 96).

2.2. Total Quality Pillars

The basic pillars of the total quality are of vital importance within the practical application framework in the different working human organizations. These pillars may refer to the basic facts that must be relied upon when we start use this method to be applied in the different organizations.

a. Continuous Improvement: Continuous improvement is accomplished by placing emphasis on the processes by which quality improvements are achieved. In a typical organization, there are interrelated processes: design, manufacturing, marketing and customer service. Improvement made on a particular process will lead to the overall improvement of the organization and every employee and department is responsible for quality. Process improvement becomes an exercise in optimizing effectiveness and efficiency while improving process control and strengthening internal mechanisms for responding to changing customer demands (Hassan, 2011, p. 1652).

b. Customer Focus: Organizations depend on their customers and therefore should understand current and future customer needs, should meet customer requirements and strive to exceed customer expectations. (Ali Saleh Ahmad Mohammed, 2013, p. 329)

The main advantages of applying this principle are:

- Ensuring customer loyalty leading to repeat the work successfully.
- Ensure the achievement of organization goals.
- Measuring customer satisfaction and expectations.
- Organizing the relationship of called people with the World Islamic Call Society.

c. Management by Facts: Effective decisions are based on the analysis of data and information in order to provide accurate information to decision makers inside the World, whereas the providing of accurate information about the daily activities inside the Society in general and the performance of personnel in particular is very important for decision making by the senior management.

The main advantages in applying this principle: (Ali Saleh Ahmad Mohammed, 2013, p. 325)

- Precise decisions.
- Increased ability to demonstrate the effectiveness of previous decisions.

- Increased ability to review, challenge and change opinions and decisions.
- Ensure that the data and information accurate and reliable.

d. Full Participation: Focus on human resource development through training workers by acquiring technical skills to achieve quality performance they have, and training in order to increase their awareness of the quality and relevance. Serve on the principle of full participation by those working in the organization in order to benefit from their expertise, and removing barriers between them, and their participation in identifying problems, analyzing and providing solutions to address them, quality is to start from their inside. Providing the right climate for workers, and encouraging them to cooperate and the formation of teams and teamwork, and to the principle of cooperation on the principle of competition, so that all employees feel that the organization belongs to all, and all of them are responsible to make a change. (Mahmoud Mohamed Ali, 2017, p. 43)

E. Focus On Results and Processes: Providing the information and feedback system are very important and necessary for the requirements of the TQM, as they are the most meaningful factors to achieve the success of the organization, especially the existence of the quality important standards, specifications and criteria, which are of vital effect in achieving the objectives. Right decision taking is closely tied to the availability of the correct data and information which the targeted success requires. Furthermore, the continuity of improvement and development is effectively coupled to the information flow and effective retrieval systems. (Faisa A. Al-Bourini, 2013, p. 120)

3- RESULTS AND DISCUSSION

Through this topic, we will present and analyze the results of the field study, where we relied on the SPSS statistical standards, through which we will analyze the personal and functional characteristics, then we will move on to the description of the study variables represented in the principles of total quality management.

3.1. RESEARCH METHODOLOGY AND PROCEDURES

a. Population And Study Sample:

El sewedy Cables Corporation, located in the province of Ain Defla, Algeria was chosen to be the field study, and the population and

study sample represent all executives of El sewedy Cables, at their different levels.

We distributed 81 questionnaires and left enough time to answer them, we waited about 20 days to retrieve the questionnaires, On which there were 79 questionnaires out of 81 questionnaires distributed, we lost 2 forms, and after examining the recovered forms, we found 78 valid forms for analysis and we excluded one form.

b. Reserch Methodology:

We used the questionnaire as a basic tool to collect the data to be obtained on the subject of the study, where the questionnaire was divided into three axes, which we will explain in the following:

The first axis

Includes general information about the employee who will answer the questionnaire, and this information includes the following: gender, age and professional experience.

The second axis

Contains phrases related to total quality management.

The study relied on the Likert pentaton scale, which included five grades according to the following (Strongly Disagree, Disagree, Neutral, Agree, Strongly Agree), and we explain it through the following table:

Table 01: Illustrates the Likert scale

axes	**answers**	**Strongly Disagree**	**Disagree**	**Neutral**	**Agree**	**Strongly Agree**
	Coefficient	**1**	**2**	**3**	**4**	**5**

Source: analyzed by the authors

Starting from the previous table, we divide (100/5) we get (20%), and subtract (0,2) from (1) we get (0,8) which represents the length of the range for each category, so we get five rankings for the arithmetic mean index which we show in the following table:

Table 02: classification of the degree of indicators for the arithmetic mean

average	**1-1.79**	**1.80-2.59**	**2.60-3.39**	**3.40-4.19**	**4.20-5**
indicator	very weak	low	average	high	very high

Source: analyzed by the authors

c. VALIDATE THE STUDY TOOL

Before performing various statistical analysis, we must ensure that the obtained data follows the normal distribution, in addition to assess the internal consistency and consistency of the study tool.

- Experts Validity: the researchers presented the questionnaire to a group of specialists in the field to give their opinion on it. The researchers took the comments of the specialist and performed the necessary modification needed, and thus questionnaire was finalized.

- Normal Distribution Test: We performed the Kolmogorov-Smirnov test to make sure that the obtained data follows the normal distribution, and we got the following results, which are shown in the following table:

Table 3: test of the normal distribution of data

Axis	Sig
total quality management	0.085

Source: analyzed by the authors from SPSS / 22 results

Table n ° (03) shows that the probability value of all the study axes was greater than the assumed significance level 0.05, so we conclude that the study data follows the normal distribution, and this is what allows us to do various tests.

- Internal Consistency:

In order to ensure the correlation between the different study sentences and the axes to which they belong, we will calculate the Pearson correlation coefficient, and we will present the results through the following table:

Table 4: Correlation coefficients between the sentences of total quality management and its axis

continuous improvement		**customer focus**		**full participation**		**focus on results and processes**		**zero error**		**management by facts**	
Q	P.C	Q	P.C	Q	P.C	Q	P.C	Q	P.C	Q	P.C
1	0.86	5	0.73	11	0.71	16	0.86	21	0.52	26	0.60
2	0.83	6	0.78	12	0.69	17	0.83	22	0.65	27	0.90
3	0.91	7	0.81	13	0.81	18	0.91	23	0.89	28	0.87
4	0.84	8	0.84	14	0.86	19	0.84	24	0.76	29	0.85
		9	0.78	15	0.80	20	0.69	25	0.70	30	0.89
		10	0.83								

Source: analyzed by the authors from SPSS / 22 results

Q: Number of question

P.C: Pearson correlation coefficient

We notice through the table n ° (04) which represents the correlation coefficients between the dimensions and the axis to which they belong, the lowest Coefficient of 0.528 for Enterprise examines the final products before presenting them to customers, while the highest estimated average is 0.912 for Senior management works to continuously improve working conditions within the organization, which affects employee performance and product quality

Table 5: The value of the Alpha Kronbach coefficient

Axis	Number of questions	Alpha Kronbach coefficient
total quality management	30	0.945
continuous improvement	04	0.859
customer focus	06	0.880
full participation	05	0.834
focus on results and processes	05	0.826
zero error	05	0.759
management by facts	05	0.891

Source: analyzed by the authors from SPSS / 22 results

In the table above, we note that the Alpha Kronbach coefficients are high and approach, because we recorded the highest value of coefficients for the dimension of management by facts with a value of (0.891), and the lowest for the dimension of zero error with a value of (0.759), and these are good coefficients which indicate the stability and the validity of the study tool.

3.2. SAMPLE CHARACTERISTICS

We present the characteristics of the sample in order to give it a clear picture. Here are the demographic and professional data of the personnel interviewed: Age; gender; and experience;

a. GENDER

We will present the distribution of the study sample by sex, through the following table:

Table 6: Gender distribution of respondents

Category	Effective	Percentage
Men	56	71.8%
Women	22	28.2%
Total	78	100%

Source: analyzed by the authors from SPSS / 22 results

In the previous table, we note that the majority of the study sample represents the male category, the number of which reaches 55 men, which is equivalent to 71.8%, while the number of women is 22 women, or 28.2%.

b. AGE

We will present the distribution of the study sample according to age, through the following table:

Table7: age distribution of respondents

Category	Effective	percentage
Age 20 -29	9	11.5%
Age 30-39	52	66.7%
Age 40-49	17	21.8%
Total	78	100%

Source: analyzed by the authors from SPSS / 22 results

The first category (20 to 29 years old) represents 11.5% of respondents being the least important, the second category (30 to 39 years old) represents 66.7% of respondents thus representing the most important category, the third category (40 to 49 years old) represents about 21.8% of the population. The age group of 50 and over is not on the table due to the absence of respondents belonging to this age group.

c. THE EXPERIENCE

We will present the distribution of the study sample according to experience, through the following table:

Table 8: distribution of respondents by experience

Category	Impactive	Percentage
From 0 to 1 year old	7	9%
From 1 to 5 years	28	35.9%
From 6 to 10 years old	20	25.6%
Over 10 years	23	29.5%
Total	78	100%

Source: analyzed by the authors from SPSS / 22 results

The category of less than 1 year experience represents a rate of 9%, the category of 6- 10 years has acquired a rate of 25.6%, the category of 1-5 years occupies the first place with a rate of 35.9%, and finally the category with more than 10 years of experience acquired a rate of 29.5%.

3.3 THE CHARACTERISTICS OF THE VARIABLES

Through this requirement, we will describe the study variables, which are continuous improvement and organizational excellence, using some statistical methods such as arithmetic mean and standard

deviation, in order to identify the attitudes of respondents regarding the terms mentioned in the questionnaire, we will show through the following table the mean and the standard deviation for each statement included in this principle

a. Continuous Improvement

Table 9: Arithmetic means and Std. deviation paragraphs of continuous improvement

The sentences	mean	Std. deviation
The organization relies on new systems and methods to improve products.	4.42	0.655
Enterprise is always striving to improve its production processes to comply with the principles of total quality management.	4.38	0.586
Senior management works to continuously improve working conditions within the organization, which affects employee performance and product quality.	4.27	0.607
The facility encourages employees to take initiative and participate in improving product quality.	4.03	1.032
continuous improvement	4.27	0.635

Source: analyzed by the authors from SPSS / 22 results

In Table 09 we note that the average of all dimensions of continuous improvement is known as high degree of acceptance, we recorded the highest arithmetic mean of the organization relies on new systems and methods to improve products of (4.42) and a standard deviation of (0.655), while the lowest mean of The facility encourages employees to take initiative and participate in improving product quality was a mean of (4.03) and a std-deviation of (1.032).

b. Customer Focus

Table 10: Arithmetic means and Std. deviation paragraphs of customer focus

The sentences	mean	Std. deviation
Enterprise is constantly working to identify the needs and desires of customers.	4.23	0.882
Enterprise constantly monitors customer complaints and offers appropriate solutions.	4.22	0.595
Enterprise is interested in achieving ongoing customer satisfaction and even exceeding their expectations.	4.21	0.745
The organization provides explanatory instructions to customers for the use of any new technology it adopts.	4.12	0.644
There is communication between employees	4.09	0.856

and customers to identify and anticipate correct customer needs.		
Customers feel confident and honest when dealing with the company.	4.04	0.780
customer focus	4.14	0.599

Source: analyzed by the authors from SPSS / 22 results

In Table 10 we note that the average of all dimensions of customer focus is known as high degree of acceptance, we recorded the highest arithmetic mean of Enterprise is constantly working to identify the needs and desires of customers of(4.21) and a standard deviation of (0.559), while the lowest mean of Customers feel confident and honest when dealing with the company was a mean of (4.04) and a std- deviation of (0.780).

c. Full Participation

Table 11: Arithmetic means and Std. deviation paragraphs of full participation

The sentences	mean	Std. deviation
There are work teams in the organization involved in solving problems that arise during work.	3.92	0.834
Workers participate in making the decisions necessary for improvement, opening the way for their ideas and suggestions to be heard	3.82	0.990
The facility's management encourages and motivates workers when they perform well, giving them various rewards.	3.91	1.142
The organization's management invests in employees' ideas and encourages them to present them.	3.85	1.033
Employees have the power to change the way they do their jobs.	3.59	0.904
full participation	3.81	0.764

Source: analyzed by the authors from SPSS / 22 results

In Table 11 we note that the average of all dimensions of full participation is known as high degree of acceptance, we recorded the highest arithmetic mean of There are work teams in the organization involved in solving problems that arise during work of (3.92) and a standard deviation of (0.834), while the lowest mean of the the Employees have the power to change the way they do their jobs of (3.59) and a standard deviation of (0.904)

d. Focus On Results and Processes

Table 12: Arithmetic means and Std. deviation paragraphs of focus on results and processes

The sentences	mean	Std. deviation
Quality is measured in all departments of the organization.	3.83	1.133
The institution works on the development of regulations and instructions for the operations carried out by the employees.	4.10	0.891
The good performance of the workers is linked to the improvement that occurs in the processes.	4.18	0.752
Procedures for each process are defined and deviations are identified in each process.	4.00	0.773
Enterprise works to improve the production systems responsible for the production of goods and services.	4.01	0.730
focus on results and processes	4.02	0.667

Source: analyzed by the authors from SPSS / 22 results

In Table 12 we note that the average of all dimensions of focus on results and processes is known as high degree of acceptance, we recorded the highest arithmetic mean of The good performance of the workers is linked to the improvement that occurs in the processes of (4.18) and a standard deviation of (0.752), while the lowest mean of Quality is measured in all departments of the organization was a mean of (3.83) and a std- deviation of (1.133).

e. Zero Error

Table 13: Arithmetic means and Std. deviation paragraphs of zero error

The sentences	mean	Std. deviation
Enterprise examines the final products before presenting them to customers.	4.37	0.537
The Foundation focuses on the disposal of all types of waste.	4.14	0.575
The organization sets criteria for selecting suppliers based on the quality of their materials.	4.03	0.925
Enterprise trains and educates workers to produce defect-free products.	4.15	0.685
The organization relies on practical measures to avoid damage during the production process.	4.15	0.823
zero error	4.16	0.5168

Source: analyzed by the authors from SPSS / 22 results

In Table 13 we note that the average of all dimensions of zero error is known as high degree of acceptance, we recorded the highest arithmetic mean of the Enterprise examines the final products before presenting them to customers of (4.37) and a standard deviation of (0.537), while the lowest mean of The organization sets criteria for selecting suppliers based on the quality of their materials was a mean of (4.03) and a std- deviation of (0.925).

f. Management by Facts

Table14: Arithmetic means and Std. deviation paragraphs of management by facts.

The sentences	mean	Std. deviation
The organization relies on past results to make decisions.	4.28	0.682
The organization relies on the information system to make decisions.	4.15	0.823
The information system influences the execution of tasks with the required speed and quality.	4.21	0.843
The organization has clear standards by which it determines product quality.	4.38	0.793
The organization cares about customer reaction to products and works to improve them.	4.19	0.869
management by facts	4.16	0.671

Source: analyzed by the authors from SPSS / 22 results

In Table 14 we note that the average of all the sentences of management by facts

is known a very high degree of acceptance, because we have recorded the highest mean for the sentence that The organization has clear standards by which it determines product quality with a mean of (4.38) and a standard deviation of (0.793), While the paragraph The organization relies on the information system to make decisions has shown the lowest mean of (4.19) and standard deviation of (0.869).

4. HYPOTHESIS TEST

Through this section, we will present the test of the study hypotheses, which are represented by two main hypotheses, in

addition to three sub-hypotheses linked to the second main hypothesis.

4.1. THE FIRST HYPOTHESIS: In order to test this hypothesis, we will rely on at-teste to test Total Quality Management dimension application in el sewedycables

Table 15: Results of T-TESTE

Model	t	mean	Std. deviation	Sig.
Total Quality Management	71.079	4.1094	0.51065	0.000

Source: analyzed by the authors from SPSS / 22 results

In Table 15, we note that the calculated value of mean estimated at (4.1094), as that the calculated value (T) was (71.079), and that the significance level which is (0.000), Looking at the previous results we have, the sig is lower than the assumed significance level which is (0.05), which allows to reject the null hypothesis H0 and this means that the hypothesis H1 is confirmed, then we can say that El sewedyCables Corporation applies total quality management dimensions.

4.2. THE SECOND HYPOTHESIS:

We have divided this hypothesis into three sub-hypotheses, where each sub-hypothesis is related to a gender or age and the experience variable, and they are as follows:

a. SECONDARY HYPOTHESIS N°01:

In order to test this hypothesis, we will rely on INDEPENDENT-SAMPLES-T-TESTE to test the opinions differences the study sample according to the gender criterion about Total Quality Management dimension application in el sewedy cables.

Table 16: Results of the INDEPENDENT- SAMPLES-T-TES

Model	Category	effective	mean	Std. deviation	T	sig
TQM	Men	22	4.342	0.4065	0.284	0.595
	Women	56	4.017	0.5206		

Source: analyzed by the authors from SPSS / 22 results

It is clear from Table 16, that the calculated value of (T) amounts to (0.284), in addition to the fact that the significance level is (0.595), Looking at the previous results we have, the sig is greater than the assumed significance level which is (0.05), which allows to accept the null hypothesis H0, then we can say that there are no statistically significant differences in the respondent's opinions towards the application of total quality management in El sewedyCables Corporation according to the gender variable.

b. SECONDARY HYPOTHESIS N ° 02:

In order to test this hypothesis, we will rely on ONE WAY ANOVA to test the opinions differences the study sample according to the age criterion about Total Quality Management dimension application in el sewedycables.

Table 17: Results of the ONE WAY ANOVA

Model	Category	effective	Mean	Std. deviation	F	SIG
TQM	20-29 age	09	4.122	0.752	0.007	0.993
	30-39 age	52	4.110	0.504		
	40-49 age	17	4.098	0.398		
	total	78	4.109	0.510		

Source: analyzed by the authors from SPSS / 22 results

In Table 17, we note that the calculated value of (F) estimated at (0.007), and that the significance level which is (0.993) is greater than the significance level assumed at (0.05).
Looking at the previous results we have, the sig is greater than the supposed significance level which is (0.05), which allows to reject the hypothesis H1 and This means that the null hypothesis H0is confirmed, then we can say that there are no statistically significant differences in the respondent's opinions towards the application of total quality management in El sewedy Cables Corporation according to the age variable

C. SECONDARY HYPOTHESIS N ° 03:
In order to test this hypothesis, we will rely on ONE WAY ANOVA to test the opinions differences the study sample according to the experience criterion about Total Quality Management dimension application in el sewedy cables.

Table 18: Results of theONE WAY ANOVA

Model	Category	effective	mean	Std. deviation	F	SIG
TQM	From 0 to 1 year old	7	4.2714	0.42965	7.402	0.000
	From 1 to 5 years	28	4.2976	0.51743		
	From 6 to 10 years old	20	3.7017	0.40007		
	Over 10 years	23	4.1855	0.42980		
	Total	78	4.19094	0.51061		

Source: analyzed by the authors from SPSS / 22 results.

It is clear from Table 18 that the calculated value of (F) amounts to (7.402), in addition to the fact that the significance level is (0.000) and that it is below the assumed significance level which is (0.05).

Looking at the previous results we have, the sig is lower than the supposed significance level which is (0.05), which allows to reject the null hypothesis H0 and this means that the hypothesis H1 is confirmed, then we can say that there are statistically significant differences in the respondent's opinions towards the application of total quality management in El sewedy Cables Corporation according to the experience variable.

5. Conclusion:

Total quality management is a modern management philosophy that aims to establish quality controls and concepts in institutions, performing accurate and competent work, to avoid wasting the various resources of the institution, as well as to achieve customer satisfaction in addition to achieving the objectives of the institution of general survival and continuity.

Through the field study that we have done At the level of El sewedy Cables Corporation, we have arrived at a number of results, including the following:

- El sewedy Cables applies the dimensions of total quality management, but at different levels, as we noticed that it focuses on applying two dimensions more than the other dimensions, namely the principle of continuous improvement and the principle of customer orientation.

- Through the study, we recorded the highest average of continuous improvement at 4.27, while after full participation, the lowest average of 3.81 was known.
- El sewedy Foundation applies the principles of total quality management, which negates the validity of the first main hypothesis.
- There are no statistically significant differences at the level of significance ($0.05 < \alpha$) in the level of application of total quality management due to the variables (gender, age), which confirms the validity of the first and second sub-hypothesis that is derived from the second main hypothesis.
- There are statistically significant differences at the level of significance ($\alpha < 0.05$) in the level of implementation of total quality management due to the variable (work experience) in El sewedy Cables Corporation, which negates the validity of the third sub - hypothesis, the main hypothesis.

Based on the results obtained, we propose some recommendations, which we summarize as follows:

- Strengthen the application of the principle of continuous improvement by encouraging employees to take initiatives and participate in decision making.
- Reinforce the customer's interest by meeting their requirements and desires, making customers feel confident and honest when dealing.
- The organization must emphasize the human resource, through the dimension of full participation, involving them in the decision-making process, and giving employees the authority to change the way they do their work.
- Increase the focus on operations and results by measuring quality in all departments of the organization and adjusting procedures for each process.
- Pay more attention to the zero error dimensions, by setting clear and good criteria for supplier selection.
- Relying more on the management dimension with facts, adopting a special information system that helps in decision making.

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