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APPROPRIATE STRATEGIES FOR STRATEGIC COST MANAGEMENT AND ITS ROLE IN ACHIEVING COMPETITIVE ADVANTAGE-AN APPLIED STUDY IN A LIGHT INDUSTRIES COMPANY

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Abstract:
Reducing costs is considered one of the most prominent concerns of management, companies use the following traditional tools or strategies such as cost accounting styles or approaches administrative styles or approaches, operations studies and research strategies, industrial engineer in strategies styles or approaches it developments in comp rose of the faller garter meteor and changes, have become useless because they focus on cost without focusing on quality on the one hand, and as a result of changing the composition of cost elements thanks to automation on the other stay hand, comp rose of the faller garter meteor cost management in these companies had to adopt modern strategies that keep pace with the current changes and focus on both dimensions. The comp rose of the faller garter meteor modern cost management strategies are the activity-based costing system and reverse flow, on-time production, target cost improvement value engineering analyses comp stay rose of the faller garter meteor total quality management for metros and cycle cost analysis products life.

Introduction

What distinguishes the modern manufacturing environment at the present time is the presence of cost management within business companies, as this management plays the role of a guide that sets for any activity within that environment its cost and the mechanism for calculating it. The one who examines the objectives of cost management sees that it was created to keep pace with the rapid changes occurring in production systems. In light of these technical developments, it has become impossible to apply traditional strategies to the current situation, because traditional strategies were addressing a specific problem, while modern strategies are a framework through which business companies work to survive, grow, and develop. Many cost management strategies have emerged, including activity-based costing and costing. Targeting, continuous improvement, comprehensive quality management, and value engineering analyses. Through it comp rose of the faller garter meteor these companies are service or production comp rose of the

faller garter meteor for achieving goals through the dimensions of cost and quality, in addition to other goals, including (time, creativity, expansion), and that for these goals does not come comp rose. These strategies are important for cost management on which the success and superiority of these companies depend, as through them costs can be truly reduced and thus competitive advantage can be achieved.

The first section: Research methodology:

1-1Researchproblem:

Iraqi companies in general, especially industrial ones, suffer from the problem of high production costs (whether this rise is due to the scarcity of raw materials, a rise in workers' wages, or bearing high indirect industrial costs), and therefore this rise will have a negative impact. On the price of the product and the profitability of the company, in addition to these companies relying on traditional that these strategies do not keep pace with taking place in their internal or external environment, so it is necessary to comp rose of the faller garter meteor with these changes and search for a strategy that is compatible with the work environment of each company, So that costs can be reduced and quality maintained.

1-2Researchimportance;

The importance of the research lies in presenting the role played by modern cost management strategies in business companies in enabling the company to control costs to a large degree, as well as improving the required quality, and directing the company's attention to the appropriate strategy that achieves these goals at the lowest cost. This is possible by applying one of the important strategies, which is total quality management, with the identification, measurement and disclosure of quality costs with the aim of reducing costs and achieving competitive advantage.

1-3 Research goals:

The research aims to present traditional strategies, then move to modern strategies for cost management, and then identify appropriate strategies that companies can adopt with the aim of reducing costs, improving or maintaining the required level of quality, and then enhancing the company's competitive position. It will be Focus on comprehensive quality management to implement it in the researched company to achieve the desired goal.

1-4 Research hypothesis:

The research is based on two basic hypotheses, which are as follows:

1. Adopting modern cost management strategies in industrial companies can help them reduce costs and thus achieve competitive advantage.
2. The technique of comprehensive quality management can be applied and quality costs can be identified, measured and disclosed in the researched company in a way that enables it to reduce its costs and achieve competitive advantage.

1-5 Research approach:

To achieve the objectives of the research, the descriptive analytical method was followed, relying on Arab and foreign books, periodicals, theses, and university dissertations.

1-6 Research sample:

The research sample was the Light Industries Company / Mixed Joint Stock Company, and it was chosen for several reasons, the most important of which are: It produces many products that are directly in contact with the needs of customers, and the company is currently facing intense competition in terms of quality and price, in addition to Management's need to identify modern strategies to reduce costs in order to achieve competitive advantage. This research was applied in one of the company's laboratories, which is the heaters and stoves laboratory, for the fiscal years 2007, 2008, and 2009, considering that these years are closer to the current reality of the company's performance than other years, which helps In fulfilling the requirements of the practical side of the research, which are related to calculating and measuring hidden quality costs and disclosing them.

The second section: Theoretical framework of the research

2-1 Cognitive Underpinnings to Reduce Costs :

There is no doubt topics receives special attention from management, because reducing production costs to the lowest other things also focus on the fact that reducing costs always requires setting standards, and all administrative levels must work in light of that goal by penetrating the standards and reducing them in various ways possible extent must lead to increased profitability (Al-Kassab, 2014: 28).

Although the concept of cost reduction varies in expression from one writer to another, it is consistent in content, which must be a real reduction in the cost of products and processes. Al-Bakri and Ismail see that cost reduction is a group of activities that focus on reducing the cost of one unit by reducing costs. total for a certain volume of production (Al-Bakri and Ismail, 2001: 208).

As for Ibrahim, he believes that the reduction is a real and permanent reduction in the cost of the products that establishments deal with, on the condition that the quality level remains the same (Ibrahim, 2004: 93). Al-Sheikh considered cost reduction to be an attempt to make the cost at the lowest possible level (Al-Sheikh, 2000, 2). Other researchers also focus on the fact that reducing costs always requires setting standards, and all administrative levels must work in light of that goal by penetrating the standards and reducing them in various ways (Jomaa et al., 1999: 62).

A distinction must also be made between real cost reduction and unreal (imaginary) cost reduction, as real cost reduction means those activities that focus on maximizing the company’s profits with the aim of reducing the cost of one unit. This type of cost reduction is achieved in two ways according to the following: (Al-Bakri, 1992: 3)

1. Increasing production, as increasing production leads to reducing the share of fixed costs per unit only, without affecting variable costs, even though they represent the largest portion of total costs.

2. Increasing the selling prices of products and this leads to a decrease in the share of each unit in the total costs without there being any measures to reduce production costs.

Real and permanent cost reduction does not come by making random decisions to reduce the level of spending by a percentage without prior study of the possibilities of achieving this reduction on the one hand and the extent of its impact on the cost of performing the activity on the other hand, and on its effectiveness and efficiency on the third hand (Al-Jabr and Abdel Aziz, 1999: 1).

2-2 Modern strategies to reduce costs:

The presence of cost management in any company is in itself evidence of its focus on monitoring its costs, and the fact that this company follows one of the modern strategies is evidence that this management is the one who comp rose of the faller garter meteor chooses the appropriate strategy for its company. The researchers will be exposed to some modern strategies that are concerned with reducing costs, according to the following: :

First: Activity-Based Costing Strategy: The activity-based costing (ABC) system is one of the best tools in improving traditional cost systems in that it focuses on activities individually due to the reliability of the cost objective, as it calculates the cost of activities individually and then allocates the costs to their objectives, such as products or services, according to a specific basis that represents the product's need for that. The activity, that is, the task of (ABC) is to analyze the additional costs and reclassify them as direct costs after they were indirect costs by dividing the complexes of costs and linking them to different activities (Al-Shaabani, 2005: 60).

Second: Back Flush Strategy: Companies have resorted to a technical method called Back Flush (Al-Shaabani, 2005: 58), as there is no need for detailed cost records, but rather the costs flow into one account, which is the inventory of raw materials and in-process, and are charged to the products after the product has been produced and charged. These costs are imposed on products according to standard rates determined in advance (Garrison and Noreen, 2002: 249).

Third: Target Cost Management Strategy : It is one of the modern strategies for cost management. It is a market-oriented strategy. Under this strategy, companies set the prices of their products at the level that gives them the best competitive advantage. Target costing is a new tool in management accounting that has been used in Japan and reflects Japanese excellence in research comp rose of the faller garter meteor and development activities and the success of its application on Japanese companies have adopted advanced methods in the field of organization in management, and this does not mean that it is difficult to apply in other countries with a different culture (Al-Fadl and Nour, 2002: 34).

Fourth: Value Engineering Analysis Strategy : Value engineering analyzes are one of the important strategies for cost management. There are similar terms, but each one has a meaning, as many researchers have addressed the topic of value engineering and value analysis as two methods that aim to improve job performance and reduce cost. Value engineering is related to

the research, development and design phase, while value analysis is related to With the other stages of the value chain, that is, it begins with production until delivering the product to the customer, and thus it is noted that these two concepts are linked to the value chain. Basile believes that the value chain is a useful tool in identifying activities that add value and begins with research and development and even customer service (Basseley, 2002: 138).

Fifth: Continuous improvement strategy (Kaizen) : Kaizen is the Japanese expression for continuous improvement, and the concept of continuous improvement means the relentless pursuit of developing performance and improving quality with the aim of maximizing the benefit obtained by the customer and reducing costs to the lowest possible extent without compromising quality (Basile, 2001: 109).

Sixth: Product Life Cycle Strategy : It is strategies for cost management that aims to reduce costs, as in turn, the life of the product means the series of stages through which the product passes (Al-Ali, 2000: 126) and comp rose of the faller garter meteor the product life cycle is divided into the pre-production cost stage, which includes development and design, and the production cost stage. The post-production cost stage includes marketing, distribution, and consumer service.

Seventh: Management of things concerned with quality Strategy : It is one of the modern cost management strategies. Since the beginning of the nineties, many companies have become interested in this concept. At that time, it was new and known as total quality management. Many of the best managers considered total quality management to be one of the most important weapons of competition and reasons for success in the modern manufacturing comp rose of the faller garter meteor environment, and this opinion was based to the actual results achieved as a result of applying this concept, in the form of substantial reductions in costs and an increase customer satisfaction (Al-Jamal, 2000: 101).

2-3 Quality costs:

Interest in quality costs emerged as a result of the negative effects resulting from poor quality and the necessity of avoiding these effects by producing high-quality products and eliminating defective ones (Evans, 1997:128). Several definitions of these costs have been given, as Feigenbaum defined them as those costs. In addition to the costs incurred by the corporations as a result or finished of internal and external failure (Feigenbaum, 1991:110),

Thus, quality costs can be defined as costs that the corporations spends (prevention and evaluation) in order to prevent the production of inferior products that do not conform to specifications, discover them, treat them, and identify their causes, in addition to the costs that they bear as a result of internal and external failures and their treatment. As for the importance of quality costs, they help determine the material importance of quality, as studies have shown that managers do not estimate the costs of comprehensive quality because they are comp rose of the faller garter meteor integrated with the costs of other departments and are not calculated through the cost system (Garrison and Noreen, 2006: 1002).

Quality costs consist of four main elements, which are as follows:

First: Costs of Prevention: Prevention costs take first priority compared to other elements of comprehensive quality costs, as increasing these costs helps reduce the costs of evaluation and failure of both types, in addition to improving the level of quality (Slack, et.al, 1998:774). That is, prevention costs are the costs that arise as an attempt to prevent the occurrence of problems, failures, and errors from the beginning, and are often incurred before making products or providing services (Dilworth, 1992: 611). Examples of prevention costs (Feigenbaum, 1991:116)

Second: Costs of Appraisal: studies have shown that managers do not estimate the costs of comprehensive quality because they are integrated with the costs of other departments and are not calculated through the cost system conformity with quality (Drury, 2008:549), examples of evaluation costs include: costs of inspecting raw materials, costs of inspection during the production stages, costs of final inspection and other costs related to inspection (Jackson, et.al, 2009:449).

Third: Internal Failure Costs: Internal failure costs occur when the product does not conform to its design specifications, as these costs disappear if there is no defect in the product before it is shipped to the customer. This means that internal failure costs appear due to the lack of Conformities or defects at any stage of production processes before shipping products to customers. Economic units seek to reduce these costs as much as possible because their decrease indicates the quality of their operations. Examples of these costs include: scrap, remanufacturing, the cost of failure analysis, and others (Stevenson, 2007 :410).

Fourth: External Failure Costs: External failure costs occur in the event that products fail with customers, that is, they are the costs that the economic unit bears after delivering the defective products to customers (Heizer & Render, 2001: 137), and they are defined as the costs related to errors that occur. Customers discover them after purchasing, as they report them and return them to the economic unit. This means that these costs occur after the sale. Examples of external failure costs include: warranty costs, repair costs for returned defective products, customer complaints, and other costs that occur after the sale (Drury, 2008 :549).

Hidden quality costs are those costs the poor quality of products shipped to customers, which leads to the loss with these products. Hidden quality costs are an important part of the costs of the production of inferior products that do not conform to specifications, discover them, treat them, and identify their causes, in addition to the costs that they bear as a result of internal and external failures and their treatment. As for the importance of quality costs, they help determine the material importance of quality, as studies have shown that managers do not estimate the costs of comprehensive quality because they are integrated with the costs of other departments and are not calculated through the cost system and because these (hidden) costs constitute a large percentage of the costs of external failure as well as their connection to customer satisfaction with the products and thus their connection to the reputation of the economic unit and its market share.

2-4 Role of costs of quality (COQ) in achieving competing advantage:

In the industrial world today, quality has become a sales milestone, and quality has resulted in an increase in costs, which constitute high percentages of the sales quantity, ranging between (15-20%) in developed countries (Al-Shaabani, 2004: 106), as the costs of quality are divided into There are two parts: prevention costs and failure costs. With a simple equation, (total quality costs = prevention cost + failure cost), as prevention costs include (prevention cost + correction cost), and failure costs include (internal failure cost + external failure cost), and the question that The question here is how to balance the two sides of these costs (prevention and failure) in order to reduce them? (Al-Shaabani, 2004: 112).

To answer this, it requires a balance between the costs of prevention on the one hand and the costs of failure on the other hand bear as a result of internal and external failures and their treatment. As for the importance of quality costs, they help determine the material importance of quality, as studies have shown that managers do not estimate the costs of comprehensive quality because they are comp rose of the faller garter meteor as when the costs of prevention increase to reach a state of non-failure, it leads to a decrease in the costs of failure, but in return, an increase in the costs of prevention and vice versa.

Accordingly, adopting total quality management means quality, starting with the selection of suppliers for the company, the quality of raw materials, manufacturing methods, and lines of work, as total quality management is linked to the concept of (do it right the first time) to reach the principle of zero defect or zero damage, which in turn leads to reducing costs.

Based on the above, it most important cost management strategies. It takes care of the quality of the product while constantly reducing the cost, and this also coincides with the purposes of cost management.

Thethird section: applied aspect of theresearch

3-1introductory overview for Light Industries Company :

Light Industries corporation is one of the mixed sector companies. It was established in 1959 in accordance with the provisions of the Iraqi Companies Law No. 31 of 1957, with a capital of 500,000 Iraqi dinars. It is the basis through which other industries were established, represented by the establishment of subsequent mixed companies. Since its founding until now, the company has tried to develop Its products are compatible with the market's need for heaters, cookers, refrigerators and freezers. At the beginning of the seventies, the company contacted companies that supply the parts it needs in order to equip it with these parts of various sizes and types in order to expand and develop production. The company also took the necessary measures to increase the capital, as the company's current capital reached 1500000000 dinars. The company is located in Baghdad / Al-Zafaraniya on an area of 283,000 square meters and includes the company's management and its three factories (heaters, cookers, refrigerators, and freezers). As for the workshops, it has two workshops, namely the Rusafa workshop and the Karkh workshop, which receive customers to repair their products in the event of their failure during the warranty period. It is one year old.

3-2 Calculating quality costs in the light industries company :

Although the company's financial affairs department requires a balance between the costs of prevention on the one hand and the costs of failure on the other hand, as when the costs of prevention increase to reach a state of non-failure, it leads to a decrease in the costs of failure, but in return, an increase in the costs of prevention and vice versa quality will be determined and measured and disclosed in one of the company's laboratories, bear as a result of internal and external failures and their treatment. As for the importance of quality costs, they help determine the material importance of quality, as studies have shown that managers do not estimate the costs of comprehensive quality because they are comp rose of the faller garter meteor which is the heaters and stoves laboratory, for the years 2021, 2022, and 2022, as explained in the following:

First: Prevention costs :

Prevention costs take first priority compared to other elements of comprehensive quality costs, as increasing these costs helps reduce the costs of evaluation and failure of both types, in addition to improving the level of quality prevention costs are the costs that arise as an attempt to prevent the occurrence of problems, failures, and errors from the beginning, and are often incurred before making products or providing services. Prevention costs can be clarified during the following table:

Table(1):Prevention costs for the heater and stove factory for the years 2021, 2022, 2023

No.	Details	2021	2022	2023
1	Quality planning	1056608	1133101	1408539
2	Product design	2304952	2365081	2800380
3	Programs for Quality systems	13083668	13276467	15298422
4	Training for reducing the warriors	1379800	1379800	1574400
5	Costs of Obtain the Information	396228	424913	528202
6	Maintenance for quality	14392110	9218733	11901729
7	Audit for quality	924532	991463	1232471
8	Other costs concerned with prevention	6375240	5892943	5949392
	Total(IQD)	39913138	34682501	40693535

From the table above, it is noted that preventive maintenance costs recorded the highest amount in the year 2021 compared to other prevention costs due to the obsolescence of machinery and equipment, as the administration does not have the financial capacity to renew these assets. However, in the years 2022 and 2023, the costs of developing quality systems recorded the highest amount in comparison. With other costs of prevention, which indicates the administration's interest in developing these systems in order to achieve the required levels of quality, and the costs of prevention in the year 2023 were their highest amount compared to the previous two years.

Second: Appraisal costs :

Evaluation costs in the heaters and stoves factory they are integrated with the costs of other departments and are not calculated through the cost system conformity with quality costs of inspecting raw materials costs of inspection during the production stages, costs of final inspection and other costs in addition to inspection and testing reports and other evaluation costs, as shown in the following table:

Table (2): Appraisal costs for the heater and stove factory for the years 2021, 2022, 2023

No.	Details	2021	2022	2023
1	Costs concerned with inspection and costs concerned with testing of direct or raw materials	2244823	2303374	2914218
2	Costs concerned with Inspection and costs concerned with testing during production	7057161	7267613	9211661
3	Final inspection and testing	2806028	2864115	3324030
4	Costs concerned with Maintenance of inspection and Costs concerned with testing equipment	550000	320000	675000
5	Costs concerned with Calibration of inspection and Costs concerned with testing equipment	168362	172370	218566
6	Depletion of inspection Costs concerned with and testing equipment	120000	120000	120000
7	Costs concerned with Inspection and Costs concerned with testing reports	264152	283275	352135
8	Costs concerned with Other evaluation	4100263	970321	4719495
	Total(IQD)	17310789	14301068	21535105

From the previous table inspection and testing during production recorded the highest amount compared to other costs of evaluation during the three years of the study. This can be explained by the fact that there are multiple points of inspection during production that require more costs than others. The total evaluation costs for bear as a result of internal and external failures and their treatment. As for the importance of quality costs, they help determine the material importance of quality, as studies have shown that managers do not estimate the costs of comprehensive quality because they are comp rose of the faller garter meteor the laboratory recorded their highest amount in the year 2023 compared to the previous two years.

Third: The costs of internal failure:

Internal failure cost for samples in heater and stove factory consist of a group of items, namely scrap, re-manufacturing, inspection, failure, and failure analysis, as shown in the following table:

Table (3): Internal Failure costs for the heater and stove factory for the years 2021, 2022, 2023

No.	Details	2021	2022	2023
1	Scrap	8683665	4396220	8789590
2	Remake	4572690	4277677	5900245
3	Re-examination	3024497	3114691	3947855
4	Failure analysis	2725856	2765942	3187426
	Total	19006708	14554530	21825116

From the table above, it is noted that the scrap costs recorded the highest amount in the three years of the study compared to other types of internal failure costs, and they are outside the standard limits or the permissible limits for several reasons mentioned previously, so that the laboratory can reduce the scrap costs it recorded the amount in the types of internal failure costs, and they are outside the standard limits or the permissible limits for several reasons mentioned previously, so that the laboratory can reduce the scrap costs.

Fourth: Costs of external failure:

The costs of external failure in the heaters and stoves factory consist of the following paragraphs : Visible external failure costs: This element represents costs that can be determined by referring to accounting records. After researching this element to determine its cost, it was found that the factory only bears warranty costs as apparent external failure costs. After referring to quality control reports and disbursement documents, it was found that customers during the warranty period for the years 2021, 2022, 2023 (1786, 391, 1943) units, and the costs of repairing them amounted to (6,768,170, 1,396,800, 8,621,436) dinars, respectively. Hiddenexternal failure costs: After reviewing the records and reports of the Light Industries Company regarding the manufacture of heaters and stoves, it was found that there is a possibility to calculate hidden quality (HQ) costs of this factory according to the Taguchi loss function (Quality Loss Function QLF). External Failure costs for the heater and stove factory for the years 2021, 2022, 2023 as follows:

Table (4): External Failure costs for the heater and stove factory for the years 2021, 2022, 2023

No.	Details	2021	2022	2023
1	Warranty costs	6768170	1396800	8621436
2	Hidden costs of external failure	457528	985582	6983363
	Total	7225698	2382382	15604799

It can be noted that the increase in the number of units rejected by customers due to their failure during the warranty period leads to an increase in the ratio of hidden quality costs to the total external failure costs, which means an increase in these costs, as it is noted that this percentage increased in the year 2023 compared to previous years, which reached 44.8%. The reason bear as a result of internal and external failures and their treatment. As for the importance of quality costs, they help determine the material importance of quality, as studies have shown that

managers do not estimate the costs of comprehensive quality because they are comp rose of the faller garter meteor for this is the increase in rejections from customers during this year.

3-3 Quality cost analysis:

After determining the comprehensive quality costs for the stoves and stoves factory in its four categories of prevention costs, evaluation costs, internal failures, external failures, and calculating the hidden quality costs for the years 2021, 2022, 2023, some observations can be made, which are as follows:

1. First type percentage of comprehensive quality costs compared to other quality costs, as they amounted for the three years of the study (47.82%, 52.61%, 40.83%) respectively and the increase in preventive maintenance costs is also noted. In the year 2007 as a result of the obsolescence of used machines and equipment, and in the years 2008 and 2009, it was noted that the costs of developing quality systems increased as a result of management's interest in maintaining and developing the achieved quality levels.
2. The ratio of evaluation costs to comprehensive quality costs for the three years of study reached (20.74%, 21.69%, 21.61%) respectively. Despite the closeness of the ratio between these years, these costs for the year 2023 amounted to 21,535,105 dinars, which is high compared to the previous two years, as they increased. For the year 2021, the amount was 4,224,316 dinars and for the year 2022, the amount was 7,234,037 dinars. in general, especially the costs related to inspection and testing.
3. The ratio of internal failure costs to comprehensive quality costs for the three years of study was (22.78%, 22.08%, 21.90%), respectively. It is noted that these costs for the year 2009 were higher than the previous two years, as they amounted to 21,825,116 dinars, and they increased over the year 2021 by an amount of 2,818,408 dinars. In 2022, the amount was 7,270,586 dinars. This is due to the high costs of scrap, as well as the costs of remanufacturing, re-examination, and the costs of failure analysis.
4. The costs of external failure to the costs of comprehensive quality recorded the lowest ratio compared to other costs, which amounted to (8.66%, 3.62%, 15.66%) for the years of study, respectively. It is also noted that the costs of external failure were their highest amount in the year 2023, amounting to 15,604,799 dinars, as they increased. For the year 2021, the amount was 8,379,101 dinars and for the year 2022, the amount was 13,222,417 dinars. rise in the apparent and hidden costs of its.

Section Four: Conclusions and Recommendations

4-1 Conclusions :

1. What business companies need at the present time is to costs of external failure to the costs of comprehensive quality recorded the lowest ratio compared to other costs, which amounted market penetration, and multinational companies.
2. The strategy is considered a plan pursued by the company, and cost management within business companies is the one who contributes to formulating those plans. Cost management had to develop several strategies and then choose what suits the

environment of the company in question, that is, choose a strategy that is compatible with that company and achieves its important goals.

3. The intensity of competition in business companies at the present time has led these companies to view cost as the key to success, and that controlling this key leads to maximizing the company's role.
4. Cost reduction is considered one of the important strategies that the company's management may adopt by directing the cost management towards searching for procedures through which the costs can be continuously reduced in that company, as reducing costs is not an easy decision and the cost management must balance between costs and quality.
5. The role of cost management is to work constantly in order to reduce the cost to the lowest possible amount and raise the level of required or acceptable quality.

4-2 Recommendations :

1. it was new and known as total quality management. Many of the best managers considered total quality management to be one of the most important weapons of competition and reasons.
2. for success in the modern manufacturing environment, and this opinion was based to the actual results achieved as a result of applying this concept, in the form of substantial reductions in costs and an increase customer satisfaction.
3. The necessity of analyzing the internal and external environment of the economic unit in order to identify the most important opportunities and enhance them, as well as identifying the threats that these units face and working to address them and striving hard to gain competitive advantage and distinction over other competitors in the market.
4. In order to achieve competitive advantage through modern technologies to reduce costs, a set of matters must be adhered to possible to provide sufficient flexibility in responding to any new changes that may occur in the needs and desires of customers.
5. Finally, the researcher recommends that the company should rely on the data of this study in order to take the initial steps towards identifying and measuring quality costs (prevention, evaluation, internal failure, and external failure) and disclosing them in separate reports for each of its three laboratories.

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