

The possibility of applying the target cost technique to improve the value of the product using cost based on specifications and disjointed analysis (Research extracted from a master's thesis)

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Date of Submission: 20-09-2022

Date of Acceptance: 30-09-2022

ABSTRACT:The research aims to apply the integration approach between the two techniques of target cost and cost on the basis of specifications and based on the disjointed analysis in the heaters laboratory of the General Company for Electrical and Electronic Industries in order to improve the value of the product. Because they have an effective effect in reducing the cost of the electric heater product 120 liters. To achieve the goal of the research, the researchers relied on the company's data through field coexistence and interviews with officials in the company, the research community, as well as interviews with retailers. Relying on one of the target cost tools represented by the disjointed analysis, which will achieve excellence and superiority for the products of the laboratory sample of the research in terms of reducing cost, raising the level of quality, reducing response time, and achieving optimal use of resources compared to what competitors produce, and thus the integration of the target cost technique will be achieved successfully. As for the most important proposals that came in the research, it emphasizes the application of the above techniques in order to achieve support for the target cost technology to reach the required cost reduction.

Keywords: target cost, specification-based cost, disjointed analysis.

I. INTRODUCTION

The developments and fluctuations in the business environment today at the level of production as a result of technological developments in industry and global openness

to markets as a result of modern globalization, which has increased the ferocity of competition between economic units, it was natural that in the face of all these developments, economic units should consider reconsidering traditional accounting systems because of the criticisms that have been leveled. To neglect the considerations of the market and the developments that have taken place in it, and to carry out the search for strategic techniques in the field of cost management, perhaps the most prominent of these techniques are the two cost techniques based on specifications and target cost through the ability of these two technologies to provide support to the economic unit through the availability of appropriate information in order to make appropriate decisions that help in achieving the objectives set for them, which are represented in the production of Products at the lowest cost while providing a high degree of flexibility and the ability to respond to the requirements and needs of the customer in the least time.

First: The problem of research

The transformations and rapid changes witnessed by the contemporary business environment as a result of openness to global markets and the increase in the volume of competition through the entry of products similar to the local product at competitive prices, which made most of the Iraqi economic units suffer from the problem of high costs of their products compared to what is produced by competing economic units

due to their lack of use of modern strategic cost management techniques and their limitation to traditional systems that have become unable to provide information that suits these transformations. This made the competitive position of these units decline significantly compared to competing products and this will represent the problem of the study, so the current study has worked to adopt the use of modern methods of cost measurement, namely the cost input on the target cost technique by relying on the cost technique on the basis of specifications and disjointed analysis, and the research problem can be formulated through the following two questions:

1. Is it possible to apply the target cost technology in the heater plant of the General Company for Electrical and Electronic Industries? Is the application of the target cost technique using cost based on specifications and disjointed analysis reflected in the improvement of the value of the product in the research sample laboratory?

Second: The importance of research

The importance of research stems from the extent to which the target cost technique is able to rely on both cost based on specifications and disjointed analysis in avoiding shortcomings and weaknesses in traditional cost measurement systems, because of their effective impact on achieving the objectives of the economic unit, which is represented in the provision of products of high quality and low cost, which is reflected in improving the value of the product, which would enhance the competitiveness of the economic unit and increase its market share.

Third: Research objectives

The objectives of the research are as follows:

1. Provide a theoretical and philosophical framework for both target cost and cost techniques based on specifications and dismantled analysis.
2. Demonstrate the ability of both the specification-based cost technique and the disjointed analysis in providing support to the target cost technique and its reflection on product value improvement.
3. Apply the approach of integration between my technology and cost based on specifications and target cost and relying on disjointed analysis in order to improve the value of the product.

Fourth: Research Hypothesis

The research is based on the basic premise that "the application of the cost-target cost technique using the basis of specifications and disjointed analysis would contribute to the improvement of the value of the product."

Fifth: Limits of Research

1. **Temporal Limits:** In order to accomplish what the research aims at; the data of the year (2021) have been relied upon.
2. **Spatial boundaries:** Because the research relates to one of the laboratories of the General Company for Electrical and Electronic Industries / WAZIRIYAH branch, namely the heater factory, which specializes in the production of electric heaters of various types, so the company returned as a research community and the laboratory sampled it in order to test the research hypothesis of the effectiveness and role of the company in general in the production of products that directly affect the needs of customers, as well as the intense competition faced by the company as a result of the country's openness to the world and the entry of various products at low prices.

II. RESEARCH METHODOLOGY

The researchers have adopted the deductive approach in the theoretical aspect of the research by relying on Arab and foreign references and sources, while in relation to the applied aspect of the research, the researchers have relied on the inductive approach (case study) by studying the accounting records and statements used in the various departments and divisions of the laboratory of the research sample, in addition to field experience and personal interviews conducted with officials in the laboratory of the research sample.

The theoretical side of the research

First Section: Target Cost Technology

First: The concept of the target cost

Hilton defines target cost as a technology widely used by companies during the stages of new product development, as the target cost of a new product is the expected long-term cost that will allow the products of the economic unit to enter and survive in the market and compete successfully with its competitors (Hilton & Platt, 2019:682). AL-RUBAIE defines Target cost It is a strategy that works on cost planning at the beginning of the product development phase based on market brands to meet the expectations and desires of the customer in order to obtain a profit margin that maintains the continuity of the product and its survival in competition (Al-Rubaie,2015, 36).The researchers believe that the target cost is a management technique with a strategic dimension that enhances the ability of economic units in terms of conducting improvement during the planning, design and production process in order to maintain

the position of the product in the markets for as long as possible.

Second: Characteristics of the target cost

The target cost is characterized by a set of characteristics and agencies (kwah,2004,38):

- III. They are used in the development and design phases, unlike the production phase where the traditional method of cost control is used.
- IV. Target cost is not a standard strategy for managing and controlling costs, but a strategy aimed at reducing costs.
- V. Conduct product development and design processes using several management science methodologies in the target cost estimation process.
- VI. Directing cost targets and related resources and activities starting from the stage of product planning and design to the stage of after-sales services.

Third: Principles of Target Cost

(Slater,2010:26), (Massoudi, 2010: 164-165), (Hilton & Platt, 2019: 683) indicate that there are seven basic principles of target cost:

1. Estimating the cost based on the price:
The target cost is reached by subtracting the target profit margin from the target selling price and according to the following formula:
$$\text{Target Cost} = \text{Target Price} - \text{Target Profit}$$
2. **Focus on customer:** Taking into account the tastes of the customer in all aspects of production is a necessity as knowing what customers want and knowing what competitors are doing will lead the economic unit to meet those basic needs of customers.
3. **Focus on the product design stage:** The target cost indicates that most of the costs and time are spent at the design stage where economic units can make the necessary engineering changes to the product in order to exclude unnecessary costs and time and bring the product to market at a time when the reduction is effective.
4. **Cross-functional interoperability:** The application of target costs entails coordination between the multiple functions in production performed by economic units from the beginning of the production process to its completion, represented by marketing, finance, design engineering, industrial engineering, procurement, production, sales and accounting. Costs, and from outside the economic unit are processors, customers, dealers, distributors and other service providers.

5. Participation in the value-chain involvement:

In some cases, it is expected that the cost of the new product will exceed the target cost, so efforts should be focused to exclude costs that may not add value to the new product in order to reduce the expected cost of it (Massoudi, 2010: 165).

6. **Life-cycle Cost Determination:** The application of the target cost must take into account the costs along the life cycle of the product from the point of view of the producer and the consumer, which begins with the research and development phase and continues to the after-sales service stage.

7. **Focus on process design:** The economic unit must continuously inspect all levels that the production processes go through in order to ensure the production of the product with the highest level of quality and efficiency, as the use of labor, technology and all aspects of the production process should be within the target cost range (Hilton, 2019: 683)).

Fourth: Steps to implement the target cost

The steps to implement the target cost are summarized as follows (Horngren, 2018:530-533):

1. Target Price Determination

Drury believes that the first step in the target cost technique requires conducting market research to estimate the perceived value of the product among customers, based on its functionality and qualities, the value of differentiation relative to competing goods, and competitive product pricing. As a result of this procedure, the target selling price is determined (Drury2018:594).

2. Target Profit Determination

The target profit is determined by the total return on investment and profits as a percentage of sales. The target profit for each product is then calculated by subtracting the target cost from the target price (Drury,2018:236)).

3. Target Cost

The target cost of the product is determined by subtracting the target profit from the expected selling price of the product and my agencies (Garrison,2018: 624):

$$\text{Target Cost} = \text{Target Selling Price} - \text{Target Profit}$$

4. Determine the current cost of the product

Current Cost
After determining the target cost of the product, its current cost is determined that includes all the cost elements related to the life cycle of the product, and Burns states that the use of modern strategic cost management techniques such as activity-based cost technology will contribute to the appropriate determination of the current cost (Burns, etal.2013:494).

The researcher believes that the cost technique is applied on the basis of specifications in the calculation of the current cost and this represents the essence of the integration between this technique and the target cost technique.

5. Target Reduction

The cost gap is determined by comparing the current cost of the product with the target cost with the aim of achieving the costly savings required for the economic unit at the competitive level (Bierer&Gotze,2013:437), if the current cost exceeds the target cost, then the design team must address this difference in such a way that the current cost is equal to or less than the target cost, (Datar&Rajan,2018:532).

6. Achieve of target reducing

(Burns, et.al.,2013:494) points out that the process of reaching the goal of achieving the target reduction in cost requires the use of a number of tools or methods, the most important of which are value engineering, benchmarking, and dismantled analysis.

Second Section: Cost technique based on specifications

First: The concept of cost based on specifications

Opinions and concepts about the concept of specifications have exceeded in the literature, it has defined it (Abdul Sadiq, 2005: 213) as a cost technique based on specifications as a modern accounting technique that determines costs on the basis of the specifications in which the product will be designed and also on the basis of the level of achievement reached by each of the basic specifications of the product, as Jabbar points to the cost on the basis of specifications that it is considered as an advanced technology of cost on the basis of activity and it depends directly on the fragmentation of the product into a group Specifications based on the vision of the market and the requirements of customers with the calculation of the cost of each specification and for all production levels related to the product down to the total cost of this product and the characteristics that distinguish it and its quality that distinguishes it from competing products and that aims to develop the product and satisfy the desires of customers in terms of providing the best products at a lower cost and an appropriate price (Jabbar,2021:0 27).

Second: Cost targets based on specifications

The objectives of the cost technique based on the specifications are the following:

1. Designing an accounting information system complementary to other accounting information systems to make the application of this system easy and can provide management with appropriate information about the cost and all stages of production and according to the specifications that characterize the product (Sorour,2019: 525) and (Obeidat,2004: 13) by doing the following:
2. Analyze and study the product through research and development processes to provide interdependence between the requirements and needs of customers and the optimal use of resources to achieve appropriate cost reduction and profits.
3. Providing appropriate cost information to management on the cost target of each product attribute by conducting a product cost analysis in order to contribute to the strategic decision-making process.
4. Search for transformations within the productive and sales departments of the economic unit by submitting cost reports and knowing the extent to which these departments can apply standards in the production process with a reduction of costs to achieve the objectives of the economic unit and based on the desired specifications.
5. Striving to provide the best products according to the desired specifications of customers and contemporary modern developments while conducting the process of continuous development of products while maintaining the quality and strength of the product (Al-Rubaie,2015: 27)
6. Produce the product according to specifications that are reflected in the wishes of customers with cost reduction and sale at the right price compared to the prices of competing products (Borgemas& Fridh,2004:14).
7. Contribute to the provision of appropriate information about the specifications of the product and identify the requirements of customers while making continuous improvements to the product according to the desired specifications that lead to the assistance of management in making appropriate production decisions (Azeez& others, 2020:2).
8. Assist in achieving control over the cost and at the level of product specifications and thus this will lead to reduced costs and reduced waste (Al-Sayed, 2019: 7).

Third: Steps to apply the cost based on specifications

There are a set of steps to calculate the final cost of the product and each of the specifications are as follows:

1- Determine the specifications related to the product

Determining the specifications related to the product is one of the important and basic steps in cost technology based on specifications, as in this step the specifications of the product are determined based on the requirements and desires of customers, (Al-Mahmoud, 2007: 179).

2- Classification of specifications

The classification of specifications is one of the most important steps for the economic unit, as the specifications can be classified into the following (AL Saqir, 2011:79):

1- **Basic specifications:** are the specifications that are the basis in the composition of the product and that are determined at the stage of product design, as the product can not perform its functions unless those specifications are available, as the economic unit seeks through the development of those specifications to provide a product that exceeds similar products in terms of high quality and competitive price, and who represents you these specifications are size and performance (defensive, 2019: 3)

2- **Secondary specifications:** After determining the basic specifications during the design phase of the product, there are secondary specifications, these specifications are complementary to the basic specifications or usually the economic unit adds other specifications that give aesthetics to the product, which makes the attention of customers directed towards a group of alternatives to choose the best alternative among the alternatives in terms of shape, color, perfume and other specifications that relate to the shape when designing and what the customer prefers, An example of such a specification is suitability (Nowlis&Simonson, 1997: 205-218).

3- Identification of activities:

Activities are determined with the aim of knowing how important these activities are and how much they contribute to adding value to products so that a distinction can be made between activities that add value and activities that do not add value with the ability to get rid of activities that do not add value (Al-Sagheer, 2011: 81).

4- Determine the cost of the level of completion of each specification

In this step, the cost of each of the product specifications is calculated according to the level of completion of each specification (Jasim, 2019 :9), and in this regard the cost is divided into

A- **Cost associated with** the volume of production: It is the cost that is directly related to the volume of production such as direct materials that are directly proportional to the level of change in the volume of production.

B- **Cost related to activities:** It is the cost that has a direct link to activities such as indirect industrial costs, where attention should be paid to conducting an in-depth study to identify basic activities and exclude unnecessary activities.

C. **Energy-related cost:** It is the cost that is directly related to the acquisition of machinery and equipment that go into the production process.

d- **Cost associated with non-industrial elements:** It is the cost that has a direct link with the policy of the economic unit and the decisions it makes and is associated with the marketing of the product and after-sales services and is represented by marketing and administrative costs.

5- Determine the total cost of the product

In this step, the final cost of the product is determined by adding the cost of each level of production and each of the specifications, since each level of the product is a basic product, that is, the cost of the product at any level consists of the cost of activities that add value at a certain level of achievement and the cost of necessary activities that do not add value to the product (Mahmoud, 2018 :11).

Section Three: Disjointed Analysis

First: The concept of disjointed analysis

Also called dismantled analysis, it is one of the target cost tools as its primary goal is to achieve the target cost, and both (Kaplan & Atkinson, 2016:287) believe that reaching the target cost under the application of disjointed analysis It is done by identifying the specifications of the design of the products that compete with the product of the economic unit in order to prepare the ground for their analysis and know the mechanism of work of the design of these products and make appropriate adjustments to the product of the economic unit in order to be better than the competing products. Drury (2018:618) defines dismantled analysis as the study and logical examination of competing products and the indication of their mechanism of action with the aim of identifying opportunities to reduce or improve the cost of a product in order to

outperform competing economic units. Datar&Rajan, 2018:488) adds in this regard that under the application of dismantled analysis, the product of the competing units is studied and analyzed with the aim of determining its functionality and design while providing sufficient information on the processes that contribute to its production as well as its cost.

Second: Advantages of applying the technique of dismantled analysis

According to Jacob, disjointed analysis is a design tool that adopts reciprocal relationships aimed at achieving the target cost through several advantages, perhaps the most prominent of which in this regard are (Jacob and Saleh, 2013: 259):

1. The behavior taken by design engineers (reverse) contributes to reducing the cost of the product as well as reducing the product development cycle.
2. Contributes to the identification of parts and components of great importance and the most complex from the point of view of design, performance and function.
3. Knowledge of the processes for the manufacture of parts and components by competitors and the continuous search for alternatives and appropriate solutions that contribute to improving the value of the product.
4. It is an important method in product cost planning because it expresses a common analysis between the dismantling of competing products and market analysis as well as the determination of product specifications.
5. It is one of the most important tools of targeted cost technology appropriate to the requirements of diversity through its ability to collect financial and non-financial information (design, operational processes).

Third: The Role of the Integration Approach between ABCII and TC in Improving Product Value

Modern strategic cost management focuses on the external environment (markets, customers) unlike traditional cost systems that are more focused on the internal processes of the economic unit, where the goal of cost management can be achieved by the ability of the economic unit to provide products to markets with diverse and superior specifications, high quality, low cost and competitive selling prices. Where the method of pricing based on cost plus a profit margin has become inappropriate, as pricing has become mainly dependent on the market and the competitive environment, and from this point of view it requires the economic unit to adopt the two

cost techniques on the basis of specifications and target cost within an integrated methodology especially in order to improve the value of products and relying on one of the target cost tools represented by disjointed analysis (Muharram, 1995: 652). The basic steps to implement the integration of ABCII and TC technologies can be summarized as follows:

1. Study the reality of the market

It requires a thorough study of the market according to a strategic perspective in order to obtain the necessary information to contribute to the achievement of proactive knowledge of needs and desires where this knowledge achieves the realization and determination of the basic specifications of the product and the extent to which these specifications contribute to the satisfaction of those needs and desires, and also facilitates the process of determining the specifications that add value to the product and those that do not add value from the customer's point of view (Mahmoud, 2007: 179):

2. Specification of the product

When the economic unit determines the specifications of the product, it should take into account that the customer may request the greatest amount of specifications and also may want to obtain them at low prices, while the economic unit may not be able to provide those required specifications based on these low prices, as the one who determines the provision of specifications and is the main controller of the synthesis of specifications and their costs in addition to the prices of their sale is the capabilities and resources owned by the economic unit, In this case, the economic unit determines the specifications from its own perspective and not from the customer's perspective, provided that these specifications are compatible with the wishes of the customers as much as possible (Al-Shami,1999: 465).

3. Determine the relative importance of each specification

(Al-Rubaie,2015: 59) believes that the main objective of determining the relative importance of each specification is the following:Realize the value that the standard adds to the product.

Analysis of the product according to its core specifications.

It should be noted that determining the relative importance of each specification is done through the design of a special questionnaire in which the basic specifications of the product are

determined and based on the opinions of customers for these specifications with the determination of the value of those specifications and the importance they may constitute to them, which may be formal specifications or fundamental specifications.

4. Analyze and determine the cost of each specification

It analyzes the costs of each specification into four types (costs related to the volume of production, costs related to activities, costs related to energy, and costs related to decision).

5. Setting the target price

Drury believes the first step in the target cost technique requires conducting market research to estimate the perceived value of the product among customers, based on its functionality and qualities, the value of differentiation relative to competing goods, and competitive product pricing. As a result of this procedure, the target selling price is determined (Drury2018:594).

6. Determine the target profit

The target profit margin is determined by the total return on investment and profits as a percentage of sales. The target profit for each product is then calculated by subtracting the target cost from the target price (Drury,2018:236).

7. Determine the target cost

The target cost of the product is the difference between the target price and the target profit (allowed) after being determined by the economic unit, so that the economic unit harnesses its efforts and possibilities to reach it, and determines the target cost according to the following equation (Al-Rubaie,2015: 61)):

Target Cost = Target Price – Target Profit

8. Determine the target cost of each specification

The target cost of each product specification after determining the total target cost of the previous step is determined by the relative importance of each specification in the third step, and is found by the following equation (Al-Rubaie,2015: 61))

Target cost of the standard (A) = target cost of the product * The relative importance of the standard (A)

9. Identify the gap between the current cost of the standard and the target cost of the standard

The gap between the current cost of the standard and the target cost is determined by finding the difference between the two costs through the following equation:

Cost gap = current cost of the standard – target cost of the standard

10. Achieve the target cost

After the implementation of all the previous steps, the basic tools of the target cost technique are applied which contribute to reducing the gap between the current and target cost, mentions (Berk, 2010:121-124). Achieving the target reduction requires an in-depth study of all the cost elements related to the product in order to find opportunities to reduce the cost as much as possible without affecting the quality of the product, and there are many tools that will contribute to reaching the cost reduction, perhaps the most prominent of which is the disjointed analysis method that was addressed earlier.

The researchers believe that all of the above is just a theoretical clarification whose results are difficult to predict correctly unless it is delved into in practice, which will be the focus of the next chapter.

III. THE APPLIED SIDE OF RESEARCH

Fourth Section: Application of Target Cost and Cost Techniques Based on Specifications in the Research Sample Laboratory

First: Overview of the General Company for Electrical and Electronic Industries

The General Company for Electrical and Electronic Industries is one of the subsidiaries of the Ministry of Industry and Minerals, which was established in (1965) following the joint cooperation agreement between the Soviet Union and Iraq, where it began its experimental work in (1967) as one of the economic institutions of the Iraqi Ministry of Industry and Minerals.

Second: Selection of the laboratory research sample

This plant represents one of the important laboratories of the General Company for Electrical and Electronic Industries, and its establishment was in (1969). For the purpose of achieving the research requirements and in order to improve the demand for the company's products and the research community, the electric heater laboratory was selected as a sample for research for the following reasons:

1. The efficiency and quality of this product compared to the competing products offered in the markets.
2. Most of its components are manufactured inside the laboratory.
3. Its high cost compared to the products offered in the markets in addition to the importance of
4. this product in the local markets because it is used in daily life during the winter. This product can be divided into a set of specifications.

Third: Product Pricing

The pricing process of the 120-liter electric heater product is carried out through several stages, where the first stage begins when the Costs Division receives the work order, through which the production path of the -120liter electric heater product is indicated according to the quantities and types of materials involved in production and the times necessary for the completion of the work and then the total cost of the product is calculated based on the cost elements related to the product as follows::

1. The Inventory Accounts Division determines the cost of direct materials through the use of the weighted rate method.
2. The share of direct work in the cost is determined by dividing the salaries of employees by the number of heaters produced.

3. Indirect industrial costs are borne on the electric heater product based on the number of employees in the research sample laboratory.

4. Marketing and administrative costs are distributed on the basis of their respective ratio to the manufacturing cost of the product.

The second stage is through which the first sale price of the electric heater product is determined with the addition of a profit margin to the total cost of one heater, which ranges from 10% to 25%, and then the proposed sale price that has been determined is sent to the marketing department for study and determination in line with the markets, and finally the process of approving the final sale price is carried out by the board of directors or modifying it based on the opinions provided by the marketing department and then approving it. Table (1) Total cost and sale price with exchange rates for electric heater product (120 liters) for the year 2021.

Table No. (1): The cost and sale price of an electric heater product is 120 liters according to the standard exchange rates of raw materials

Pronounced like t	Part Name	Unit of Measurement	Standard Quantity	Weighted Price	Cost per part/dinar
1	Outer cover of the tank	Kg	5.93	1410	8361.3
2	Internal tank	Kg	14.8	1410	20868
3	The rule	Kg	1.31	1410	1847.10
4	Heater cover	Kg	1.13	1410	1593.30
5	First plug	Kg	4	380	1520
6	The second plug	Kg	0.911	1000	911
7	Outer cover of the heater	Kg	10.12	102	1032.24
8	Top cover of the heater	Kg	1.225	4100	5022
9	Bottom cover of the heater	Kg	1.225	4100	5022
10	Nylon cover	Kg	0.025	1351	33.775
11	Cable	Kg	1.5	1000	1500
12	Water pipe	Meter	0.3	2454.5571	736.3713
13	Welding wire	Kg	0.837	974	815.238
14	Sealing tape	Meter	2	37	74
15	Sodium hydroxide	Kg	0.0723	300	21.690
16	Nitric acid	Kg	0.1	12000	1200
17	bright	Kg	25	1124	28100
18	Fiberglass wool	Number	1	4496	4496
19	screw	Number	20	31	620
20	Sealer	Number	1	300	300
21	Nail Tonk	Number	16	15	240
22	Hurt with thermostat	Number	1	12794	12794
23	Metal lead wire	Number	1	130	130
24	Power lamp	Number	1	105	105
25	Water exit signal	Number	1	50	50
26	Water Entry Signal	Number	1	50	50
27	4/3Angie Connection	Number	1	400	400
28	Tliertinal	Number	2	100	200

29	Big Bousha	Number	1	1000	1000
30	Blue dye	Litre	1	3000	3000
31	colorize	Litre	0.5	1412	706
32	(Lable)	Number	1	100	100
Total cost of raw materials				102849.0143	
Cost of direct action				11600	
Indirect industrial costs				1770.5	
Cost of manufacture				116219.5143	
%7administrative and marketing costs				8135.435	
Total cost				124354.95	
Profit margin				11%	
Sale price of heater				140000	

Table (1) shows that the total cost of the electric heater product 120 liters is (124355.949) dinars, and this cost is the basis for the process of determining the sale price which, as it is noted that this cost is very high for this product, which leads to a rise in the sale price, which in 2021 amounted to (140,000) dinars for the heater product, noting that this price is very high for this product compared to the competing products offered in the markets, which made the sales levels of this product decline significantly in the markets Local. It must be addressed with one of the strategic cost management techniques, represented by the cost technique based on specifications, so we will address in the next paragraph the application of the steps for the application of the ABCII technique, which is considered as a prelude to the completion of the procedures of the integration approach between) (ABCII)) and (TC).

Fourth: Application of cost technology based on specifications on the product of electric heater 120 liters

1. Study the reality of the market

In order for a particular product to be produced according to the wishes of the customer, an in-depth study of the reality of the market should be carried out, in order to obtain the necessary information that contributes to the identification of the wishes and requirements of the customer, which may enable the laboratory research sample to produce a product that achieves response to the wishes and requirements of customers and continuously.

2. Define the basic specifications

Market research surveys conducted by the marketing department of the laboratory of the research sample indicate that the specifications that the customer wants to provide in the product and that meet his requirements are as follows:

A - Size: which means providing the heater product to the customer with a size of different areas to accommodate the amount of water.

B- Performance: It represents the extent of the operational capacity of the electric heater, which is represented in the process of receiving, heating and transferring water to the user.

C. Safety: which is represented by the rigidity and durability of the outer cover of the electric heater and the degree of protection included in the use of electrical insulators.

D. Shape (aesthetic): which reflects the external appearance of the product as it is one of the motivating reasons that drive the customer

3. Determine the relative importance of each specification

In this step, the relative importance of each of the product specifications is determined by knowing the benefit, value and importance of these specifications to the customer in order for the laboratory to produce products of importance that suit the wishes and requirements of the customer, and therefore the customer must have a role in determining the relative importance of each of the specifications for the product of the electric heater 120 liters, and the determination of the relative importance of each specification can also be used in determining the cost of each product specification, especially in relation to the costs related to the decision. The researcher prepared a questionnaire that would contribute to achieving the above purpose, which was distributed to a sample of (60) individuals, which included a group of customers, retailers and a number of engineers and technicians working in the laboratory of the research sample in order to survey their views on the importance that enjoys It has each of the product specifications for them as shown in the following table:

Table (2): The sample to which the questionnaire was distributed

DETAILS	NUMBER
ENGINEERING STAFF IN THE COMPANY	10
Retailers	20
Customers	30
Total	60

Table (2) shows the description of the sample selected by the researcher and to which the questionnaire form has been distributed

Where (56) questionnaires were retrieved from among the distributed forms .Table (3) shows the results of the questionnaire reached by the two researchers.:

SPECIFICATION	THE RELATIVE IMPORTANCE OF THE SPECIFICATIONS %
Volume	34.7
Performance	28.7
Security	28
Figure (aesthetic)	8.6
Total	100%

Table 3: Relative Importance of Specifications

Source: Preparation of the researchers (results of the questionnaire)

The results of the questionnaire in Table (3) indicate that the volume specification has obtained the highest percentage in terms of relative importance among the other three specifications of the electric heater product 120 liters, as it achieved a degree of relative importance of (34.7%), while the performance specifications came in the second degree of customer interest, while the model specification (aesthetic) got the lowest percentage where the percentage of importance reached (8.6%) This indicates that the customer may not focus on form) aesthetics).

4- Analyze and determine the cost of each specification

In this step, the costs of each specification are analyzed and determined, and these costs are divided into four main types of agencies.:

1- Costs related to the volume of production for each specification: The costs of this element include everything related to the cost of the raw materials used in the production of each of the component parts of the product and according to the relationship of the part or component to each of the specifications of the product specified in the second step (size, performance, safety, shape). The following table summarizes the costs related to the volume of production and the four specifications of the 120-liter electric heater product:

Table (4): Summary of costs related to the volume of production for each specification

SPECIFICATION	COST ASSOCIATED WITH PRODUCTION VOLUME
volume	37559.694
performance	17060.3713
Security	44184.174
Figure (aesthetic)	4044.775
Total	102849.0143

Source: Prepared by the researchers

Table (4) indicates that the total cost related to the volume of production for 2021 is (102849.0143) dinars and highest cost was for the safety standard, which amounted to (44184.174) dinars, while the minimum cost was for the specification of the form (aesthetic) where it amounted to (4044.775) dinars.

Costs related to activities for each specification: Costs related to activities include two parts of the costs, the first is direct work costs, the second is indirect industrial costs (except extinction), and to determine the costs of work first assumes the determination of the time

required for the completion of each of the activities related to each of the activities related to each The specification and then the cost of this time is calculated. The following tables show the time required to complete each of the four specifications (volume, performance, safety and shape) of the electric heater product, noting that this time has been determined based on the technological path of the electric heater 120 liters. Table (5) shows the summary of the time required to complete each of the specifications for the electric heater product 120.

Table (5): Summary of the total time required to complete each specification

SPECIFICATION	TOTAL TIME/MINUTE	TIME RATIO %
volume	104	51.4
Performance	20	10
Security	56	27.7
Figure (aesthetic)	22	10.9
Total	202	100%

Source: Prepared by the researchers

A- Direct work costs per specification: The laboratory of the research sample adopts a rate of pay per hour of direct work of 3000 dinars, as the rate of pay per minute is equal to 50 IQD (3000 /

60) IQD) /min, so the process of determining the share of each specification of the cost of work will be based on the time required to complete each of the specifications shown in Table (6).

Table (6): Labor Costs for Each Standard

SPECIFICATION	TOTAL TIME REQUIRED FOR EACH SPECIFICATION/MINUTE	AVERAGE PAY PER MINUTE	LABOR COSTS FOR EACH SPECIFICATION/IN DINARS
volume	104	50	5200
performance	20	50	1000
Security	56	50	2800
Figure (aesthetic)	22	50	1100
Total	202	-	10100

Source: Prepared by the researchers

It is noted from Table (6) that the Specification-Based Cost Technology (ABCII) has contributed to achieving a fair distribution of working times for the completion of each of the specifications, which has led to a reduction in the cost of direct work by (1500) dinars,

B- Indirect industrial costs (except extinction) for each specification: Indirect industrial costs (with the cost of extinction) for-2021 amounted to (1770.5) dinars, as the cost of

the product will be excluded from extinction and that the cause Behind the exclusion of the cost of extinction is to calculate it within the paragraph of energy-related costs, while the process of determining the cost of extinction in the laboratory of the research sample is carried out based on the available production capacity in accordance with the policy followed in the laboratory and through the following :

$$\text{Share of one heater in the cost of extinction} = \frac{\text{annual cost of extinction of the heater department}}{\text{Available Production Capacity}}$$

The cost of a single heater product from extinction = $\frac{346799}{600} = 578$ IQD

So indirect industrial costs (except extinction) = $1770.5 - 578 = 1192.5$ IQD

Therefore, indirect industrial costs (except extinction) will be distributed among the specifications of the product and based on the time ratio previously specified in Table 5, as shown in Table 7:

Table (7): Indirect Industrial Costs (Except Extinction) Related to Electric Heater Specifications

SPECIFICATION	T.S.G.M. (EXCEPT EXTINCTION)	TIME RATIO %	T.S.G.M. (EXCEPT EXTINCTION) OF THE STANDARD
volume	1192.5	51.4	612.95
performance	1192.5	10	119.25
Security	1192.5	27.7	330.32
Figure (aesthetic)	1192.5	10.9	129.98
Total	-	100	1192.5

Source: Prepared by the researchers

Table (7) shows the total indirect industrial costs (except extinction), as they were distributed to the specifications of the product through the process of multiplying indirect

industrial costs by the percentage of time consumed, while table (8) shows the total costs of each of the specifications of the heater in relation to the activities.

Table (8): Costs related to each of the specifications of the heater in relation to activities for 2021

Specification	Labor costs	T.S.G.M. (except extinction)	Cost of activity per specification
volume	5200	612.95	5812.95
performance	1000	119.25	1119.25
Security	2800	330.32	3130.32
Figure (aesthetic)	1100	129.98	1229.98
Total	10100	1192.5	11292.5

Source: Prepared by the researchers

Table (8) shows the total costs related to the activities associated with each of the product specifications, where they were calculated by combining the cost of direct work with indirect industrial costs after excluding the cost of extinction from indirect industrial costs to be calculated later within the paragraph of energy-related costs.

3- Energy-related costs: Energy-related costs include the extinction costs specified for the product unit in the previous paragraph, which amounts to (578) dinars, and therefore their distribution will be based on the percentage of time required to complete each product specification shown in the table. (9).

Table (9): Energy Associated Costs for each 2021 Standard

Specification	The costs of extinction of the heater	Time Ratio %	Energy-related costs per specification
volume	578	51.4	297.09
performance	578	10	57.8
Security	578	27.7	160.11
Figure (aesthetic)	578	10.9	63
Total		100%	578

Source: Prepared by the researchers

4- Costs related to the decision: The costs related to the decision include both marketing and

administrative costs, which will be distributed on the basis of the degree of relative importance of

each of the specifications of the product, as the relative importance was determined by a questionnaire prepared by the researcher as its results were previously clarified in the third step of

this section, and Table No. (10) will show the costs related to the decision for each specification For the year 2021 as follows:

Table (10): Costs related to the Resolution for 2021

Specification	Administrative and marketing costs of the heater	Relative importance %	Decision-related costs for each specification
volume	8135.435	34.7	2822.995
performance	8135.435	28.7	2334.87
Security	8135.435	28	2277.92
Figure (aesthetic)	8135.435	8.6	699.65
Total	—	100%	8135.435

Source: Prepared by the researchers

Table (10) shows the process of calculating the costs related to the decision for each specification and for the year 2021 through the process of multiplying the marketing and administrative costs by the degree of relative importance of each of the specifications of the product.

Table (11) summarizes the results extracted in each of the previous tables, which represent the amount of cost of each of the

specifications of the electric heater product 120 liters, where the total rows represent the total cost for each of the cost corrections related to (volume, activities, energy, and decision) and for all product specifications (volume, performance, safety, and shape), while the column representing the total cost of the specification represents the total cost of the electric heater product 120 liters, which represents the result of the application of the cost technology based on the specifications.

Table (11): Specification-based cost of electric heater 120 liters for 2021

SPECIFICATION	COSTS RELATED TO THE VOLUME OF PRODUCTION	COSTS RELATED TO ACTIVITIES	ENERGY-RELATED COSTS	COSTS RELATED TO THE DECISION	TOTAL COST OF THE STANDARD
Volume	37559.694	5812.95	297.09	2822.995	46492.73
Performance	17060.3713	1119.25	57.8	2334.87	20572.3
Security	44184.174	3130.32	160.11	2277.92	49752.52
Figure (aesthetic)	4044.775	1229.98	63	699.65	6037.40
Total	102849.0143	11292.5	578	8135.435	122854.95

Source: Prepared by the researchers

Fifth: Application of the target cost technology to the electric heater product 120 liters

Therefore, this paragraph will deal with the application of the steps of this technique, which are described below, which have already been exposed to in the theoretical aspect, in order to complement the procedures for the integration approach between the ABCII and TC technologies and in a way that achieves the goal of the research through the following steps:

A. Determination of target profit

This step entails the process of determining the target price of the product by conducting an in-depth study of the local markets in order to investigate the sale prices of competing products offered in the market and similar to the 120-liter electric heater product of the laboratory of the research sample, and the researcher has been able through conducting a field survey of the market to determine some of the sale prices of competing products similar to the product of the laboratory sample of the research and has reached the results shown in the following table:

**Table (12): Sale prices of electric heaters 120 liters for competing products of the factory product
Research sample**

PRODUCT NAME	MANUFACTURING COUNTRY	PRICE
Amin heater	Iraqi	125000
Water heater of faith	Iraqi	110000
Grinder heater	Iraqi	125000
Stabbing heater	Iraqi	95000
Prince Water Heater	Iraqi	120000
Al , Rayyan	Iranian	90000

Source: Prepared by the researchers

Therefore, the target selling price of the electric heater product 120 liters represents the average sale price of competing products shown in the previous table, which is 120,000 dinars, calculated:

$$\text{Target Price} = \frac{125000+125000+110000+120000}{4}$$

$$= 120000 \text{ IQD}$$

B. Determine the target profit

The laboratory of the research sample wants to achieve a profit margin ranging from 10% to 25%, and as a result of the market conditions and the intense competition imposed on the 120-liter electric heater product by the competing products offered in the market, the researcher believes that the choice of the minimum profit margin of 10% of the target sale price is one of the necessities of competition. Therefore, the target profit is calculated as follows:

$$\text{Target Profit} = \text{Target Selling Price} \times \text{Target Profit Margin Ratio}$$

$$= 120000 \times 10\%$$

$$= 12000 \text{ dinars}$$

c. Determine the target cost

After determining the target profit, the target cost of the electric heater product will be calculated in this step 120 liter by subtracting the target profit from the target sale price of the product Wadalite:

$$\text{Target Cost of Electric Heater Product} = \text{Target Selling Price} - \text{Target Profit}$$

$$= 120000 - 12000$$

$$\text{Target cost} = 108,000 \text{ IQD}$$

c. Determine the target cost of each specification

After determining the target cost of the 120-liter electric heater product, the process of determining the target cost of each of the specifications of the above product, which was previously determined in the second step of the previous section, is carried out as shown in the following table: **Table (13): Target cost per specification of the electric heater product is 120 liters**

SPECIFICATION	TARGET COST OF THE PRODUCT	THE RELATIVE IMPORTANCE OF THE STANDARD %	TARGET COST OF THE STANDARD
volume	108000	34.7	37476
Performance	108000	28.7	30996
Security	108000	28	30240
Figure (aesthetic)	108000	8.6	9288
Total	—	% 100	108000

Source: Prepared by the researchers

Table (13) shows the target cost of each of the specifications for the electric heater product 120 liters by multiplying the target cost by the ratio of relative importance of each of the product specifications shown in Table (3).

h. Setting the target reduction

After determining the target cost of each of the product specifications, the target reduction in the electric heater product of the laboratory is determined in the research sample and for each

of its specifications as shown in the following table:

Table (14): Target reduction in the electric heater product of the laboratory research sample and for each specification

SPECIFICATION	CURRENT COST OF THE STANDARD	TARGET COST OF THE STANDARD	DIFFERENCE (GAP)
Volume	46492.73	37476	(9016.73)
Performance	20572.3	30996	10423.7
Security	49752.52	30240	(19512.52)
Figure (aesthetic)	6037.40	9288	3250.6
Total	122854.95	108000	14854.95

Source: Prepared by the researchers

Table (14) shows the difference between both the target cost and the current cost, which is a fundamental reason for the high price of the 120-liter electric heater product of the research sample laboratory, which led to a decline in demand for it in front of the competing products offered in the market, so appropriate solutions should be found to achieve the target reduction in the cost of the product of the laboratory heater research sample in order to reach the target cost and seek to sell the product at the target price, and the researcher believes that the target cost technology has a great impact in achieving the desired goal.

Achieving the target reduction

During this step, the purpose of achieving the target reduction of the current cost of the electric heater product of 120 liters is sought in order to reach the target cost, as in this step one of the tools for the target cost is used, perhaps the most prominent of which in this regard is the dismantled analysis in order to reach the target reduction, which was exposed to in the theoretical aspect of the research.

Sixth: Application of Dismantled Analysis

Disassembled analysis or what is called dismantled analysis is one of the most important target cost tools that will be adopted in this research in order to reach the target reduction in the cost of electric heater 120 liters and according to the steps of this tool that, noting that the main

reason behind choosing this tool over other target cost tools is because it clearly focuses on the component parts of the product, This may support the integration approach between the two cost techniques based on specifications and target cost in a way that contributes to reducing costs in terms of working to meet the requirements of the customer, as the procedures for applying disjointed analysis (dismantled analysis) directly depend on the analysis and dismantling of the competing product into its original components in order to facilitate the process of comparison between the parts. It should be noted in this regard that the researcher has chosen the competing product (Prince heater) to apply the dismantled analysis to it, so as to easily obtain the necessary information about this product, so we will address in table (15) the rates of disbursement of materials for each of the producers in order to determine some aspects of reducing the cost of the electrical heater product of the laboratory research sample by applying the dismantled analysis tool. Through the adoption of dismantled analysis (dismantled analysis) to reduce the cost of raw materials that enter the production process, it is found that most of the differences between the electrical heater product of the laboratory of the research sample and the competing product (Prince heater) may be centered on the nature of the raw materials involved in the production of most of the components of this product as follows:

Table (15): Comparison between the exchange rates of direct materials, for a product, an electric heater of 120 liters, for the laboratory and for the competing product

Pronounced like t	Part	Electric heater product for laboratory research sample			Competing electric heater product		
		Material	Unit of Measurement	Exchange	Material	Exchange	Unit of Measurement

				rate		rate	
1	Outer cover of the tank	Built-in iron 1.5 mm	Kg	5.93	Iron Plate 1mm	4.20	kg
2	Internal tank	Iron Plate 1.5	Kg	14.8	2mm Iron Plate	15.7	kg
3	The rule	Plate 2mm	Kg	1.31	Iron Plate 1.5mm	1.2	kg
4	Heater cover	Plate 2mm	Kg	1.13	Plate 1.5mm Boiled	1	kg
5	First plug	Solid steel material	Kg	4	-	-	-
6	The second plug	Solid steel material	Kg	0.91 1	-	-	-
7	Heater cover	Plate 0.7 mm	Kg	10.1 2	Compressed plastic	1	number
8	Top cover of the heater	Aluminum Plate 1.2 mm	Kg	1.22 5	Aluminum palette 1 mm(550mm)	1.10	kg
9	Bottom cover of the heater	Aluminum Plate 1.2 mm	Kg	1.22 5	Aluminum palette Plate1 mm	1.10	kg
10	Nylon cover	Plastic material	Kg	0.02 5	Sulafi Article	0.10	
11	Cable	Connecting cable	Meter	1.5	-	-	-
12	Water pipe	Iron pipe ¾	Meter	0.3	Pipe ¾ inner tooth	0.5	meter
13	Welding wire	3mm welding wire	Kg	0.83 7	3 mm meat wire	10	number
14	Sealing tape	Lisq tape for fixing wool	Meter	2	Plastic tape for fixing wool	3	meter
15	Sodium hydroxide	Material for cleaning iron metal	Kg	0.07 23	-	-	-
16	Nitric acid	Material for cleaning iron metal	Kg	0.1	-	-	-
17	bright	Al Zahi Material	Gallons	25	Al Zahi Material	12	Gallons
18	Insulating wool	Fiberglass	Number	1	Rock wool	1	number
19	screw	Quick Screw (Burnie))	Number	20	Fast screw (brina)	20	number
20	Sealer		Number	1	Cupburi (stopper)	2	
21	Nail Tonk		Number	16	-	-	-
22	Heater with thermostat	Hitter Turki	Number	1	Italian Heter	1	number
23	Lead wire	Solder material	Number	1	-	-	-
24	Power lamp	Running signal	Number	1	Signal lamp	1	number
25	Water exit signal		Number	1	Water exit signal	1	number
26	Water		Number	1	Water Entry Signal	1	number

	Entry Signal						
27	3/4 Angie Connection		Number	1	Connection ¾	2	number
28	Tlierminal		Number	2	Tlierminal	2	number
29	Big Bousha	Pusha for Installing Heater	Number	1	Pusha for Installing Heater	1	number
30	Blue dye	-	Litre	1	-	1.5	litre
31	colorize	Colored material	Litre	0.5	-	-	-
32	Water heater sign		Number	1	Prince heater sign	1	number
33	Water meter	-	-	-	Water Capacitance Meter	1	number

Source: Preparation of the researchers based on the data of the competing product

It is clear from the results of the previous table that there are some differences, including that some parts of the raw materials involved in the production of the 120-liter electric heater may match in both the product of the laboratory research sample and the competing product, while there are some components that will not be originally used by the competing product such as the first electrical plug, the second electrical plug, the electric cable, the metal lead tape, sodium hydroxide, nitric acid, the tonk nail and coloring, which may not constitute a value to the product if added as much as It forms an additional cost that may increase the price of the product. Some materials have also been designed from materials that differ in nature between each of the producers such as the size and thickness of the pallet material used, as some of the basic parts of the heater have been designed from materials of higher quality than the materials used in the product of the laboratory research sample and some parts have been designed from materials of lower thickness or quality than the materials used in the heater product of the

laboratory research sample as these parts do not pose any impact on the quality of the product Consider it an additional cost that may be charged to the cost of the product.

Through the interview with the engineering and technical staff of the laboratory research sample and inquiring about these changes, which if adopted, especially at the level of specifications of some parts that enter into the competing electric heater product, they will carry great effects in terms of reducing the cost and quality of the heater product of the laboratory Research sample, as planning to produce a product within the contemporary business environment requires that it be related to the requirements, desires and tastes of the customer or the market, Within the limits of the permissible cost, this is what will be shown in Table (16), as it shows the exchange rates of the materials used in the production of both the electrical heater product of the laboratory of the research sample and the product of the prince heater (competitor). ,

Table (16): Reducing the cost of direct materials for the component parts of the electric heater product 120 liters

N O	Part	The company's electric heater				Competitor Product			Reduction amount
		Unit of Measurement	Exchange rate	Price	Cost	Exchange rate	Price	Cost	
1	Outer cover of the heater	kg	5.93	1410	8361.3	4.2	1250	5250	3111.3
2	Internal tank	kg	14.8	1410	20868	15.7	1800	28260	-7392
3	The rule	kg	1.31	1410	1847.1	1.2	1200	1440	407.1

4	Heater cover	kg	1.13	1410	1593.3	1	1200	1200	393.3
5	First plug	kg	4	380	1520	-	-	-	1520
6	The second plug	kg	0.911	1000	911	-	-	-	911
7	Heater outer cover	kg	10.12	102	1032	1	2000	2000	-968
8	Top cover of the heater	kg	1.225	4100	5022	1	3600	3600	1422
9	Bottom cover of the heater	kg	1.225	4100	5022	1	3600	3600	1422
10	Nylon cover	kg	0.025	1351	33.775	0.1	1000	100	-66.225
11	Cable	meter	1.5	1000	1500	-	-	-	1500
12	Water pipe	meter	0.3	2454.56	736.371	0.5	6000	3000	-2263.6
13	Welding wire	kg	0.837	974	815.238	10pcs	90	900	-85
14	Sealing tape	meter	2	37	74	2	25	50	24
15	Sodium hydroxide	kg	0.072	300	21.69	-	-	-	21.69
16	Nitric acid	kg	0.1	12000	1200	-	-	-	1200
17	bright	Gallons	25	1124	28100	10	1000	10000	18100
18	Fiberglass wool	number	1	4496	4496	1	8000	8000	-3504
19	screw	number	20	31	620	20	50	1000	-380
20	Sealer	number	1	300	300	2	250	500	-200
21	Nail Tonk	number	16	15	240	-	-	-	240
22	Heater with thermostat	number	1	12794	12794	1	14000	14000	-1206
23	Metal lead wire	number	1	130	130	-	-	-	130
24	Power lamp	number	1	105	105	1	350	350	-245
25	Water exit signal	number	1	50	50	1	50	50	0
26	Water Entry Signal	number	1	50	50	1	50	50	0
27	Connection 3/4	number	1	400	400	2	750	1500	-1100
28	Therminal	number	2	100	200	2	200	400	-200
29	Big Yosha	number	1	1000	1000	1	1000	1000	0
30	Blue dye	litre	1	3000	3000	1	4000	4000	-1000
31	colorize	litre	0.5	1412	706	-	-	-	706
32	Water heater sign	number	1	100	100	1	250	250	-150
32	Water meter	number	-	-	-	1	2000	2000	-2000
Total				102849	Total			92500	10349

Source: Prepared by the researchers

Table (16) shows the amount of reduction in the cost of the electric heater 120 liters of the laboratory of the research sample, which amounted

to **(10349.0143)** dinars, which may be equivalent to (70%) of the amount of the target reduction, and therefore it requires adjusting the specifications of

the electric heater product of the laboratory Research sample according to the specifications of the product of the competing prince heater (homemade), as this reduction in the cost of raw materials is a necessary step in improving the value of the product And exclude parts that are considered an additional cost that does not add value to it.

Therefore, the researchers believe that the application of dismantled analysis through the provision of information is a good step in supporting the target cost, which was reflected in reducing the cost of the heater product of the laboratory of the research sample compared to competing products to be able to meet the requirements of customers.

From the foregoing, it is clear the effective role of the cost technology based on the specifications and dismantled analysis performed by each of them in achieving support for the TC target cost technology and the reflection of that effect in the management and reduction of the cost of the 120-liter electric heater product for the research sample laboratory while maintaining its quality, and thus the validity of the research hypothesis has been proven "The application of the target cost technique using the cost on the basis of specifications and dismantled analysis would contribute to improving the value of the product ". The application of cost technology based on specifications and dismantled analysis has directly contributed to supporting the application of the target cost and its reflection on improving the value of the product by reducing the cost of materials used in the production of the 120-liter electric heater product of the laboratory of the research sample. In addition, the results obtained from the application of both techniques above have proved the correctness of the formulation of the integration approach between them.

VI. CONCLUSIONS

This section deals with a set of conclusions that the researchers were able to reach through what was presented earlier and may contribute to the diagnosis of some shortcomings and weaknesses in the performance of the laboratory sample research and as follows:

1. The General Company for Electrical and Electronic Industries does not adopt any of the modern costly and administrative systems to calculate and manage the costs of its products, as it relies on traditional cost systems in the process of recording and controlling costs, which made the above company unable to keep pace with the developments in the modern business environment

and the decline of its market share and the decline of its competitive position.

2. The dependence of the research sample laboratory in the pricing of its products on the traditional method (cost + profit margin) ignoring market considerations as well as the sale prices of competing goods which are low relative to the prices of the products of the laboratory research sample.

3. The laboratory of the research sample needs to apply the target cost technique in order to improve the value of the product through the use of cost based on specifications and disjointed analysis, which will achieve excellence and superiority of the products of the laboratory research sample in terms of reducing cost, raising the level of quality, reducing response time, and achieving optimal use of resources compared to what competitors produce, which is reflected in improving the value of the product..

4. ABCII technology analyzes and classifies the product into a set of basic specifications (size, performance, safety, and shape). It then determines the cost of each of the product's specifications.

5. The application of the disjointed analysis tool is sure to support the integration approach between the two cost techniques based on specifications and target cost in a way that contributes to achieving a reduction in the cost of the product to meet the requirements of the customer with the possibility of achieving high flexibility in the manufacture of products.

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