



THE APPLICATION OF GREEN LOW-COST TECHNOLOGY IS REFLECTED IN THE LOW PRICES OF PRODUCTS STARTING FROM EACH OTHER

Hamed Fadel Murad¹, Saleh Mahdi Jawad Al-Kawaz²

¹University of Karbala – College of Administration and Economics

²University of Karbala / College of Administration and Economics

ABSTRACT

This research aims to apply the green target costing technique in the Najaf men's clothing factory, for the role of this technique in reducing the cost of products, developing green products, and enhancing competitive advantage. The researcher applied the green target costing technique in the research sample factory, and the researcher based his choice of the case on the year's data (2022), who reached a number of conclusions, perhaps the most prominent of which is that applying green target costing may contribute to employing these tools to achieve high flexibility in product manufacturing processes and optimal exploitation of resources. This is reflected in enhancing the company's competitive advantage, as applying it to the men's suit in the research sample laboratory can contribute to improving the cost of materials used in producing the suit by modifying the specifications and designs of some parts of the product based on a competing product. A cost saving of (20,028) IQD can be achieved and the quality of the product can be improved by replacing some parts with better parts. In addition, a more effective use of available resources can be achieved by eliminating parts that do not add value to the product and replacing them with parts that add value. There are also some suggestions and recommendations that the researcher mentioned, which are that the factory is supposed to apply the green target costing technique, as it will have an impact Concrete achievement of the desired goals of the men's clothing factory in Najaf. It will also contribute to improving production efficiency, reducing costs and improving product quality. In addition, it will contribute to enhancing environmental sustainability and optimal use of available resources, which enhances the factory's position and competitiveness in the men's clothing market.

KEYWORDS: green target cost, cost reduction, competitive advantage.

I. INTRODUCTION

That the world is witnessing now of rapid developments and changes at all levels, perhaps the most prominent of which is at the level of the business environment, it may witness a real revolution represented by the acceleration of developments in it and the large number of variables due to the development of means of communication and modern technological methods in the field of production and service provision to the degree that the world has become as one village, any event in the far east affects the far west. In light of all this, competition emerged in its forms, which drew the attention of economic units to their need for methods and methods in line with these developments and consistent with them if they wanted to continue in the conditions of the contemporary business environment and the developments it is witnessing, as the traditional methods, entrances and systems in the field of cost accounting and management have become unable to provide useful information that helps those economic units in general and the Iraqi ones in particular to meet the new requirements that allow them to continue in that environment and achieve them. The importance of research is evident in the need of economic units in general and the research sample laboratory in particular to modern accounting techniques consistent with the rapid developments and continuous changes and intense competition witnessed by the business environment, with which the traditional entrances and systems in cost accounting and administrative have become useless, but do not live up to the level that depends on it in providing information that enables those economic units to achieve success in managing their time and costs efficiently and effectively. Perhaps one of the most prominent of these modern accounting techniques, perhaps the most prominent of which is the green target cost technique and its effective role in achieving competitive advantage through the application of this technology in the Najaf factory for men's clothing. The research is based on a basic hypothesis: "the application of green target cost technology contributes to reducing the cost of products and achieving competitive advantage."



II. THE TECHNOLOGY OF GREEN TARGET COST

First: The concept of Target Cost Technology

As for the definition of the target cost technology, there are many definitions of this technology and no specific definition has been agreed upon, due to the different views on it and the angle through which this technology is viewed. Where (Williams et al., 2018:850) defines target cost as a customer-led process that focuses more on product design, and whose goal is to produce a product whose revenues cover the related costs and make a profit. (Hilton & Platt, 2020:681-682) define target cost as the expected long-term cost that is proactively determined in the early stages of the product lifecycle and thus helps the company enter and stay in the market to compete successfully with its competitors. Ayesh believes that the target cost is a management technique with a strategic dimension that enhances the ability of economic units in terms of carrying out 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 (Ayesh, 2022: 43). Through the identification of the target cost technology and its effective role, we will address in the following paragraph the green target cost technology and its related basic concepts.

Second: Green Target Cost Technology

(Cohen & Levinthal, 1990:128-136) suggest that green target cost is the methodology of balancing the achievement of financial and environmental goals by identifying and achieving targeted costs and providing products and services with lower environmental impact. This methodology is based on setting a financial cost target with a focus on improving efficiency and balancing environmental impact. Green target cost encourages the delivery of high-quality products and services in ways that reduce resource consumption and improve Environmental impact of processes and products where a specific and fixed cost target for the product or service is set, and strategies to improve efficiency and reduce waste and consumption are applied in order to achieve this goal. At the same time, work is being done to reduce environmental impact by reducing emissions, reducing the consumption of natural resources, and increasing recycling and reuse opportunities. (Kaplan & Anderson 2007:131-138) points out that a green target is a strategy to balance the achievement of financial and environmental goals by setting a specific financial cost goal for a product or service with a focus on improving efficiency and delivering products and services with less environmental impact. This strategy seeks to strike a balance between profitability and environmental sustainability, by setting a cost target, applying improvements, and reducing waste to achieve this goal.

Third: The importance of green target cost technology

Applying the green target cost effectively contributes to enhancing competitiveness and preserving the environment, reducing costs, and maintaining the quality and efficiency of the product. (Jain & Sharm,2020:21) The importance of the green target cost is concentrated in the following:

1. Reduce the use of hazardous and harmful substances.
2. Reduce the costs associated with raw materials.
3. Reduce the production of environmental losses.
4. Adopting modern and advanced technology to reduce environmental pollution.
5. Increase profitability through the use of waste as raw materials.
6. Providing new job opportunities for community members.

Fourth: Green Target Cost Principles

Green target cost management is based on several principles: (Jie, 2010: 80), (Ning, 2015: 9)

A. Meet and satisfy customers' green requirements: Business units should pay attention to identifying and meeting the green needs of customers and other stakeholders, including current, potential and future needs to ensure that all stakeholders, including business unit owners, employees, suppliers, partners, society, and the environment benefit .

B. Lifetime Quality (Green Quality): Management seeks to achieve a complete system of large based on the coordinated development of the economic unit, society, resources, and environment, with a focus on achieving quality throughout the product life cycle .

C. Caring for the environment: Achieving satisfaction and satisfying consumers while considering the environment leads to an improvement in the green benefits of the economic unit, customers get satisfaction and as a result, public goods, including the environment to a large extent, are achieved .

D. Zero defects and zero emissions: Green quality management places great emphasis on the pursuit of zero errors to achieve perfection, as economic units should promote energy saving, low emissions and consequently lower pollution, because they not only affect to reduce cost, but also to improve the promotion of environmental protection "environmental responsibility", and prevent possible negative consequences and consequences of violations in the environment .

Fifth: How can the green target cost provide green products

In the field of product development, it turns out that supporting and developing traditional cost management is usually through the identification of target costs. However, when it comes to ecological products or "green products", it is necessary to promote in an environmentally focused way, meaning that economic units are able to include additional costs related to environmental requirements in product pricing, thus passing these costs to customers in the form of a price premium. With this approach, economic units are able to transform a commitment to environmental sustainability into a competitive advantage. Economic units can also provide high-quality environmental products that meet environmental standards and provide additional value to customers. The price premium reflects the added value with an environmental impact and as a result, this may make ecological products a favorite for customers who care about environmental issues. Overall, this approach allows companies to achieve both environmental and economic sustainability, contributing to achieving environmental goals and enhancing their competitive performance in the market. According to the opinion of (Seidenschwarz,1992:155), what determines the fulfillment of the customer's requirements is the success of the product. However, the customer may not comment directly on the individual physical components of the product, but they look at the product as a combination of different features and functions, so the development of the product is based on Green target cost requires studying and analyzing the procedures for describing the product to be developed in more detail. This requires the use of data on the components, in addition to identifying green requirements and costs and integrating them into (green cost management) according to the following:

1. What ingredients should be green?
2. How green is the requirement (green level) of the components to be designed?
3. How much does it cost to implement green ingredients?

As addressing the high costs of the green product not only adds restrictions to the development of products, but also has the ability to improve their overall quality in the eyes of the customer, and thus make the green environment profitable (Horvath & Berlin, 2012: 25), so the starting point for developing products to be green is to identify environmental requirements where environmental requirements are converted into solutions to implement these requirements and then translated into the product design process.

Sixth: Steps to apply the target cost technique Green

Figure (4) shows the steps for applying green target costing.

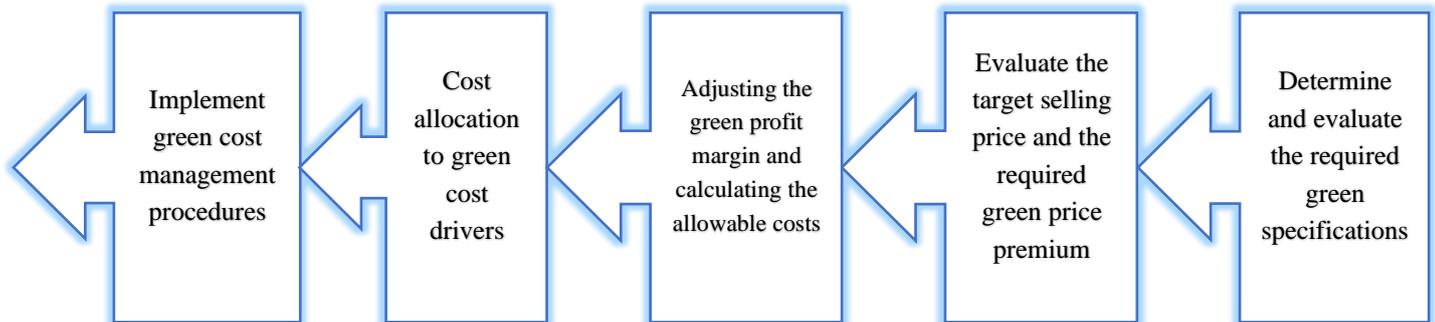


Figure (1): Steps to apply green target costing

Source: Horvath P. & Berlin S. (2012) "Green target cost: ready for the green challenge" Cost management May:26.

III. COMPETITIVE ADVANTAGE

First: The concept of Competitive Advantage

Acquiring and maintaining competitive advantage has become essential to ensure the long-term success of any economic unit. In the twenty-first century, all economic units are racing to attract customers and build sustainable relationships with them. Not only does it achieve competitive advantage, but also an economic unit must work hard to maintain it and adapt to the constant changes in the economy. Modern businesses and customers are the center of attention in the current battle, and they are the ones who give economic units the opportunity to grow and prosper. Therefore, the business strategy must be oriented towards meeting the needs of customers effectively and at a high level of quality and obtaining competitive advantage is an important first step, and several definitions of competitive advantage have been mentioned, as defined by (Heizer & Render, 2008: 36) as the process of obtaining an economic unit an advantage that makes it unique in it and in a way that achieves excellence over all other competitors. (David & David, 2017:36) defined competitive advantage as "any activity that an economic unit



does well, compared to activities carried out by other competing economic units (Kuo et al. 2017:356) defines competitive advantage as the implementation of strategies that cannot be applied by other economic units under which they can influence cost reduction, increase market opportunities, and reduce levels of competition. Ayesh believes that competitive advantage is the level reached by the economic unit when it has a set of resources, characteristics and specifications, which, by combining them with its own capabilities and skills, achieve excellence and superiority of its products compared to competitors (Ayesh, 2022: 57).

Second: And the dimensions of achieving competitive advantage

Competitive advantage has many dimensions, perhaps the most prominent of which is summarized as follows (Al-Khalifa, 2017: 76:75) (Al-Bakri, 2012: 110:4) (Chiou et al. (Celtekliligil & Adiguzel 2014:10) (Lin&Tseng, 2014:10):

1. Cost/ Cost is defined as the sacrifice that leads to an expected benefit, and cost is one of the most important features of a competitive advantage or is the first priority of competitive priorities that should be taken into account in order to maintain a competitive advantage in the market and strive to produce low-cost products. This means that the cost elements of materials, wages and other expenses must be reduced, and in order to achieve this, inventory must be reduced to its minimum levels, the skills of workers must be developed, quality control and tight control must be improved to get rid of waste and damage, and the proper organization of the means of production to ensure an effective flow within the factory, all these factors lead to the provision of products at low prices compared to competing products, and that achieving competitive advantage by reducing cost should not be at the expense of product quality.

2. Quality/ Quality is defined as "the ability of products or services to meet the desires and requirements of customers" or is "the suitability of the product to the desires of customers and the extent to which it performs the function for which it was made effectively and efficiently", and the product must be characterized by high quality, conformity to specifications, durability, good performance, beautiful shape and design. Quality is one of the main pillars to achieve competitive advantage and is a success factor for economic units, and quality is of great importance to customers and is an important factor for forming a good reputation in the market and a key to increasing sales and achieving profits.

3. Time/ Time whether it is for production management or services is of great importance at the moment, reaching the customer faster than competitors, adhering to delivery deadlines and speed of development is crucial to enhance competitive advantage as it is a priority of competition.

4. Flexibility/ It represents the ability to generate diverse ideas that are often unexpected ideas, and also means the adoption of unspecified patterns so that the ability to change and respond quickly to this change according to the needs of customers, and flexibility is seen as the ability to change operations from one way to another as well as change the method or time of performance of operations, and forms of flexibility diversification and flexibility of size, as the interest has become focused on the diversity of ideas for the first form, while the second focuses on the interest in providing sizes Different products.

5. Invention/ It is also called creativity, and the innovation process often results in new, valuable and innovative products, and innovation occurs as a result of responding to changes in the tastes and needs of customers, and innovation or creativity is produced either through the development of modern technology or through continuous improvement and permanent reduction in costs or when meeting the requirements of fast delivery and on-time delivery of products. And fulfill the wishes of customers. Innovation can be categorized into product innovation and process innovation.

IV. THE APPLIED ASPECT OF THE RESEARCH

First- Steps to apply the green target cost technology

1. Determine the target selling price

The process of determining the target selling price needs to know the prices of competing products and similar to the men's suit product of the research sample laboratory and offered in the local markets, so the researcher conducted some interviews with some workers in the marketing department and sales specialists in the laboratory research sample as well as the field tour carried out by the researcher on some retailers for this product It was found that the prices for each of the similar products competing for the men's suit product of the sample laboratory The search is as shown in the following table:

Table (1)

Shows the prices for the sale of men's suits similar to the men's suit product for the laboratory Research sample for the year 2022

N	Competitor Product Name	Sale price
1	Men's suit of Turkish origin Zoya	100000
2	Men's suit of Turkish origin FALCO MILANO	75000
3	Men's suit of Turkish origin	65000
4	Men's suit of Chinese origin – first class-	55000
5	Men's suit of Chinese origin – second class-	50000
6	Men's suit of Chinese origin – third class-	35000
7	Men's suit of Italian origin TOMMY TRAP	95000
8	Men's suit Italian origin mohair fabric VRL1	110000
9	Men's suit Italian origin mohair tarket fabric	85000

Source: Prepared by the researcher based on interviews with retailers and specialists from the marketing Department in the laboratory Research sample.

Through the researcher's field tours as well as personal interviews with some retailers, it was found that the Turkish product at the level of most types of clothing offered in the markets, especially the men's suit, is completely desired through the high demand of customers for these products and due to their modern separations and attractive models, as well as their high quality and consistent colors, in addition to the prices for their sale are somewhat low compared to what is offered from competing products According to what came from the desire of customers for Turkish products, the target price for the suit product will be according to the average prices for competing Turkish products and their three types, which was estimated at (80,000) IQD and according to the levels of demand in the markets for each of the imported products competing for the men's suit product and offered in the local markets .

2- Determining the target profit

In light of the conditions in the modern business environment of intense competition and global openness to local markets, the laboratory has relied on the minimum profit margin ratio, which is (10%) of the target selling price, so the target profit will be calculated through the following equation:

$$\text{Target profit} = \text{target selling price} \times \text{profit margin percentage}$$
$$80,000 \times 10\% = 8000 \text{ IQD}$$

3- Determining the target costs

In this step, the target cost is determined, as it can be calculated by subtracting the target profit from the target selling price, which has been challenged in the first step of this section, as shown in the following equation:

$$\text{Target cost of men's suit product} = \text{Target selling price} - \text{target profit}$$
$$80,000 - 8,000 = 72000 \text{ IQD}$$

4- Setting the green target price

The men's clothing factory draws many goals, perhaps the most prominent of which is to provide a green product to the markets through which it seeks to maximize its sales and increase its market share as well as improve its competitive position and this may be reflected in achieving the competitive advantage of the products of the laboratory research sample, by working to add some characteristics and specifications of the production of use, which may increase the quality, effectiveness, aesthetic and acceptability of this product to current and prospective customers at the present time and the future, provided that These characteristics are useful and of great relative importance for the men's suit product and not an additional excess cost that increases the total cost of the product, as the type of fabric will be changed in the men's bulb product of the laboratory The research sample is from the current type used to the fabric (pure cotton) as this type of fabric is made of 100% cotton, which is a durable and very comfortable type and its appearance More attractive, as well as the addition of the third piece of the suit, which is called the middle coat (breastplate) as is applicable in imported products and will form an additional part of the price and represented by the price premium, and since the green product may be new to the Iraqi business environment, this matter will generate pressure on the factory by adding a somewhat acceptable price premium to these added properties so that the factory maintains the appropriate prices in order to enhance its competitive advantages and maintain price competition within Local markets, so the price premium will not exceed 10% may be added to the target price, as will be shown by the following equation:

$$\text{Price premium} = 80,000 * 10 \%$$
$$\text{Price premium (cost of middle coat)} = 8000 \text{ IQD}$$



Green Target Price = Target Price + Price Premium

$$80000 + 8000 = 88000 \text{ IQD}$$

5- Determining the Green Profit Margin

After the factory has determined the green selling price as a first step, then comes the stage for determining the green profit and is considered the second step of the application of the green target cost technology, as the laboratory has determined a special percentage of profits (5%-15%) Since it aims to provide a green product with a low cost and be long-term sustainable taking into account the environmental effects of this product, and features and features of production that are not offered in the markets comparable to all international brands offered in Markets, meaning that this green product is not widespread in the local markets as a modern product and that customers may not have sufficient knowledge about it, and thus it will be highly exposed to market risks, so it is necessary to add additional fees to the profit margin as 50% has been determined as a percentage of the normal profit margin as a percentage that is mainly to face the potential market risks resulting from the introduction of a new product, and this percentage was determined based on the opinions of some specialists in the field of marketing inside the laboratory Research sample, so the green profit margin will be determined through the following equation :

Desired Green Profit Margin Ratio = (Normal Profit Margin × Additional Percentage for the Purpose of Market Risk Treatment) + (Normal Profit Margin)

$$(10\% * 50\%) + (10\%) = 15\%$$

The factory seeks to choose the minimum profit rate in order to entice customers by selling the product at a low price.

Green Profit Margin = Green Target Price * Desired Green Profit Margin Percentage

$$88000 * 15\% = 13200 \text{ IQD}$$

6- Determining the Green Target Cost

During this, the green target cost is determined based on the green target price, which has been determined based on the target price of the competing products with the addition of the price premium, and through the following equation, the green target cost will be calculated::

Green Target Cost = Green Target Price – Green Target Profit

$$= 88000 - 13200$$

= 74800 IQD cost per men's suit after introducing the green product on it

7- Determining the current cost

In order to determine the target reduction in the cost of the men's suit, it is necessary to determine the current product cost, which is compared with the target cost, and as evidenced by the steps of applying the green target cost technique, the cost of the men's suit product by applying this technique is (187617.1) IQD.

8- Target reduction amount (gap between target cost and current cost of product)

At this stage, the gap between the green target cost and the current cost of the men's suit product of the research sample laboratory is measured, as this will be done through the following equation::

Target Gap (Target Reduction Amount) = Green Target Cost – Current Cost

$$= 74800 - 187617.1$$

$$= 112817.1 \text{ IQD}$$

As the gap between the current cost of the men's suit product of the men's clothing factory in Najaf and the green target cost has reached (112817.1) IQD, so we must work hard to close this gap and work to achieve the target reduction of the men's suit product of the above factory in order to achieve the desired goals of the research sample laboratory, which is to reduce the cost of the product and increase quality, as well as achieve good time management and control taking into account Sustainability of the product by taking into account environmental conditions, which may be reflected in achieving competitive advantage.

9- Determining the target reduction in the cost of the men's suit product

In the previous step, the amount of the target reduction was determined by comparing the green target cost and the current cost, so the next step will witness the achievement of the target reduction according to one of the three target cost tools, which are reverse engineering, reference comparison and process engineering.

10- Achieving the target reduction in cost

During this step or stage, the target reduction is achieved and work to close the target gap between all the green target cost and the current cost of the men's suit product of the research sample laboratory, through the use of one of the targeted cost technical tools represented by reverse engineering or what is known as (disjointed analysis), which will depend mainly in this section in order to close the gap and achieve the target reduction on the men's suit product of the laboratory research sample, where the next paragraph will include Steps to apply this tool in detail.

Second- Steps to apply disassembled analysis (reverse engineering)

The following paragraphs will show the basic steps for applying reverse engineering:

A. Reduce the cost of direct materials

Where this step represents reducing the cost of raw materials by identifying some fundamental differences between both the men's suit product of the research sample laboratory and the competing product (Turkish suit), as the application of reverse engineering to the direct material element between each of the above producers will determine the differences in the type and nature of the components between each of the competing product producers and the product of the research sample laboratory, as well as the differences in exchange rates for each component of the above producers, As shown in table (2) as follows:

Table (2)

Illustrates the comparison between the exchange rates of direct materials used in the production of both the producers of the men's suit of the research sample laboratory and the competing product (Turkish suit)

N	Details	The men's suit of the laboratory research sample		Turkish Rival (Turkish Suit)	
		Used material	Exchange rate	Used material	Exchange rate
1	Width liner 150	Chinese Tetron fabric width 150 cm	1.7 m	Eco-friendly chambray fabric first class (Turkish) Bahari suitable for the Iraqi atmosphere	1.5 m
2	Adhesive front	Light gauze width 150 cm with adhesive granules added	0.9 m	Light gauze width 150 cm with adhesive granules added	0.7 m
3	Qanuja	Thick, coarse fabric made of animal dander	0.5 m	Tweed light fabric	0.40 m
4	Textile adhesive padding	Coarse thick fabric width 150 cm	0.25 m	Sheer fabric width 0.90 cm	0.15 m
5	Pocket lining	Soft Tetron fabric or rough coastal fabric strong type	1 meter	Original cotton satin fabric	0.6 m
6	Muslin	Japanese type thick adhesives	0.0133 m	Light adhesives width 7 cm	0.01 m
7	Prem 50 Offer	Reinforced tape coated with transparent fabric used to strengthen the shoulder	0.0666 m	Sponge tape coated with transparent fabric used to strengthen the shoulder	0.05 m
8	Non-stick non-textile filling	Insert on the sides of the jacket for strengthening	0.15 m	Using the tail of excess fabrics in the fillings in order to strengthen the sides of the jacket (jacket)	-
9	Neck (cuff) collar	Wool fabric width 90 cm	0.1 m	Felt treated cotton fabric (wrinkle resistant and lasts longer) width 150 cm	0.10 m
10	Buttons size 23	Good quality plastic	6 Items	Nugget metal quality	6 Items
11	Buttons size 32	Good quality plastic	4 Items	Nugget metal quality	4 Items
12	Transparent yarn	Soft threads used for trouser cuff	30 m	Soft threads used for trouser cuff	20 m
13	Plain yarn	Natural cotton, linen or wool yarns	45 m	Synthetic synthetic yarn of nylon or polyester	15 m
14	Over yarn	Ordinary linen-like yarn used in pants	30 m	Ordinary linen-like yarn used in pants	20 m
15	Silk threads	Rayon	30 m	-	-
16	Threads of the House of	Good quality soft to the touch yarn	25 m	Coarse original threads	10 m



	Buttons (Dukm)				
17	Apauettes	Sponge wrapped in transparent fabric	1 pair	Sponge coated with fabric appendages resulting from the production process	1 pair
18	Tape Dyer Jacket	Double-sided adhesive tape used for reinforcement	1.5 m	Single-sided adhesive tape used for reinforcement	1 meter
19	Ready beam	Thick paper adhesive wrapped in fabric	1.32 m	White raw fabric in the form of a beam free of filling	1.25 m
20	Clouds	Thick fabric with metal wire for fastening	1 Count	Thick fabric with nylonic wire for fastening	1 Count
21	Relationship (Gencal)	Hanging on the inside collar used for hanging	1	Hanging on the inside collar used for hanging	1 Count
22	Sensitive thermal paper	Double-sided adhesive of the strong stick type used on the tips of the trousers' feet and the ends of the jacket sleeve prevents the lining from slipping out	0.5 m	Single-sided adhesive of the weak-stick type to give flexibility and freedom to open it and make zoom out and enlargement in measurements	0.25 m
23	Marking paper	Thick type cardboard paper used as a mold for separation.	0.5 m	Light type cardboard paper	0.25 m
24	Mito Bar	Paper punctuation tapes	Number 50	Paper punctuation tapes	Number 30
25	Size mark	A small cloth with the size of the suit, the country of origin, the name and mark of the factory attached	2	A small cloth with the size of the suit, the country of origin, the name and mark of the factory attached	2
26	Care Mark	Bag with three spare components (fabric, buttons, plain thread)	1 Count	Bag with three spare components (fabric, buttons, plain thread)	1 Count
27	Qanuja adhesive	Resin for fixing cloth	0.35 m	Resin for fixing cloth	0.25 m
28	Beam adhesive tape	Thick paper material with added resin	1 meter	Transparent paper material with added resin	0.60 m
29	Radhana pit tape	A tape that gives the appropriate texture to the pit of the frond and prevents its sagging	1.5 m	A tape that gives the appropriate texture to the pit of the frond and prevents its sagging	1 meter
30	Cloth	Indian First Class Fabric	3.75 m	100% Turkish cotton fabric (First Class)	3.40 m
31	Relationship	Plastic type hanger	1 Count	Plastic type hanger	1 Count
32	Nylon bag	Nylon bag for suit packing	1	Nylon bag for suit packing	1 Count
33	Suit bag	Fabric and long zipper	1 Count	Fabric and long zipper	1 Count

Source: Prepared by the researcher based on, on the data of the engineers working in the laboratory research sample

From the above table, we can see some of the components used in the production of the men's suit product, which may coincide in each other in terms of type and exchange rate, and some may differ in quality and also exchange rates. In addition, some of them may be present in the local product and not in the competing product, as indicated in the following points:

1. As the type of fabric used in the suit product of the men's clothing laboratory of the laboratory research sample of the original Indian cloth type and this type is high-cost, compared to the type of fabric that may be used in the competing product (Turkish suit) where a type of cloth (100% cotton) Turkish origin is used and this type is considered one of the good fabrics and suitable for the local atmosphere that surrounds this country and desired from Before customers, in addition to the low cost as a result of the low purchase price of cloth and also the exchange rates of cloth for the competing product have become less than the exchange rates of the local product of the laboratory sample research and attractive appearance as may be longer use period of Indian cloth used, which may support the encouragement and motivation of current and prospective customers to use the green product in the local markets, which enhances the achievement of competitive advantages for the products of the sample laboratory.

2. The display lining fabric is also used in the local product of the Chinese tatton type, unlike what is used in the competing product (Turkish suit), where a fabric was used for lining of the type of chambray fabric of the first

degree (Turkish), as this type of fabric is spicy and suitable for the Iraqi atmosphere and environmentally friendly, as well as the rate of exchange of the amount of material of this type is less than the material used in the local product.

3. Some components may be present in the product of the research sample laboratory and not present in the competing product (Turkish suit) such as artificial silk threads and non-stick non-textile fillings, and this may also contribute to reducing the cost of the product.

4. There is also a difference in the type of material used for some of the components included in each of the two products, such as thermal paper, as the laboratory product of the research sample uses the two-sided adhesive of the strong type, which is used to connect the ends of the pants foot and the edges of the jacket’s sleeve, while the competing product (Turkish suit) is used in which a one-sided adhesive of the weakly adhesive type is used to give flexibility and sufficient freedom in the opening in order to zoom in or out in measurements, and the buttons used in the suit The men of the laboratory The research sample is of the plastic type, while the buttons used in the competing product are the type of fragment metal, which may add more beauty to the jacket, while the ready-made beam uses a thick paper adhesive in the local product of the laboratory Research sample, unlike what is found in the competing product, in which a white raw fabric is used in the form of a padding-free beam, and there are many simple fundamental differences between each of the two producers

5. There is also a difference in the exchange rates of many raw materials in each of the producers, as many of the components involved in the production of the competing product (Turkish suit) are less weight and less in size than in the components of the local suit product of the research sample laboratory, which may be reflected mainly on their prices, which may constitute a weight on the customer. Based on the above-mentioned presentation of some differences in each of the producers of the suit product of the research sample laboratory and the competing product (Turkish suit), this in turn will contribute to the modification of the components of the local product of the research sample laboratory, and according to the opinions of specialists from the engineers working in the research sample laboratory, such changes and modifications in the features and special features in some components of the competing product (Turkish suit) has been intended to search for productivity gaps aimed at Producing a product that may meet the requirements of the markets and the aspirations of customers to achieve their desires, including competitive prices, quality and appearance of the men’s suit product as is applicable in the Turkish suit (competing product) as well as product sustainability and environmental compatibility with the environment in which the customer lives.

Table (3)

Illustrates the process of reducing the cost of components, for direct materials, used in the production of the men’s suit of the research sample laboratory for the year 2022

N	Component	Men’s suit for the factory			Men’s suit of the Turkish competitor			The amount of reduction in Melasma when adjusting according to For competitor product specifications
		Price	Exchange rate	Cost	Price	Exchange rate	Cost	
1	Width liner 150	1750	1.7	2975	600	1.5	900	970
2	Adhesive front	3150	0.9	2835	3150	0.5	1575	1332
3	Qanuja	2500	0.51	1275	1350	0.4	540	760
4	Textile adhesive padding	1560	0.3	468	750	0.15	113	293
5	Pocket lining	1500	1	1500	750	0.5	375	1150
6	Muslin	3000	0.0133	40	2000	0.01	20	20
7	Prem	3000	0.08	240	2000	0.05	100	100
8	Non-stick non-textile filling	1635	0.15	245	-	-	-	245
9	Collar cuff	3500	0.1	350	1250	0.1	125	125
10	Buttons size 22	100	6	600	40	6	240	420
11	Buttons size 32	200	4	800	60	4	240	560
12	Transparent yarn	10	3	30	5	20	100	200
13	Plain yarn	0.66	360	238	0.5	15	8	29
14	Over yarn	0.5	330	165	0.3	20	6	6
15	Silk threads	0.6	50	30	-	-	-	18
16	Threads of the House of Buttons	0.6	60	36	0.5	10	5	10
17	Apaulettes	1000	1	1000	750	1	750	750
18	Tape Dyer Jacket	350	1.5	525	90	1	90	53



19	Ready beam	1500	1.32	1980	850	1.25	1063	984
20	Clouds	250	1	250	125	1	125	125
21	Relationship (Gencal)	150	1	150	50	1	50	50
22	Sensitive thermal paper	720	0.5	360	500	0.25	125	250
23	Marking paper	400	0.5	200	500	0.25	125	275
24	Mito Bar	10	25	250	5	30	150	200
25	Size mark	150	2	300	75	2	150	150
26	Care Mark	100	1	100	100	1	100	150
27	Qanuja adhesive	1600	0.35	560	1600	0.25	400	160
28	Beam adhesive tape	250	1.5	375	1024	0.6	614	410
29	Radhana pit tape	150	1.5	225	100	1	100	125
30	Cloth	7650	3.76	28764	6000	3.4	20400	8364
31	Relationship	250	1	250	150	1	150	100
32	Nylon bag	100	1	100	50	1	50	50
33	Suit bag	2400	1	2400	900	1	900	630
Total				49616	Total		29688	19064

Source: Prepared by the researcher based on the information of the division, costs and specialists in the marketing department, within the research sample laboratory.

Through Table (3), it is clear that the amount of reduction that resulted from the application of the reverse engineering tool (disassembled analysis) is (20.028) IQD, which represents (18%) the percentage of the amount of the target reduction, which has been planned in advance for the application of the green target cost technique, which is (112817.1). Therefore, it may require the research sample laboratory to modify the specifications of the men's suit product of the research sample laboratory according to the specifications of the competing product (Turkish suit), in order to benefit from the amount of cost reduction, which has been shown in the table above.

2. Reduction in marketing and administrative costs

After making the process of reducing the cost of direct materials in the previous step as a result of modifying the specifications of the men's suit product of the research sample laboratory according to the specifications of the competing product (Turkish suit), we also have to reduce another process for both marketing and administrative costs in order to reach the desired target reduction, so it will be to reduce administrative and marketing costs by taking a percentage of the costs of manufacturing, as a percentage will be adopted by (10%), and therefore it will be The amount of reduction resulting from the application of reverse engineering from the element of direct materials and marketing costs is (37084.1) IQD, which is equivalent to (51%) of the amount of the total target reduction that was planned in the previous steps, and the amount of reduction that has been achieved under the application of the green target cost technique is not at the desired level. Through what has been presented, it becomes clear to the researcher the effective role that green target costing technology employs in reducing the cost of products and enhancing competitive advantage, through its ability to improve the quality of products and inputs, reduce production costs, reduce idle energy consumption, and adopt new technology. In addition, it is possible to achieve the production of green and environmentally friendly products that meet the desires of customers by meeting their requirements and preferences. Thus, the research hypothesis is proven correct: "Applying the green target costing technique contributes to reducing the cost of products and achieving competitive advantage," as applying the steps for each of the above techniques has effectively contributed to reducing the cost of the men's suit product, reducing time, increasing the level of quality, Increasing the level of flexibility and, as a result, achieving a competitive advantage for the laboratory sample of the research. In addition, the arrangement of the paragraphs for applying the above technology steps has effectively resulted in achieving a streamlined results for this research.

V. CONCLUSIONS

1. The cost information provided by the traditional costing system differs from that provided by the four-stage time-oriented activity-based budgeting approach. This difference is due to the superior accuracy provided by these approaches, particularly with regard to the cost of raw materials and direct labor costs. By doing so, cost reductions can be achieved when implementing this approach.
2. The application of green target cost technology with the help of one of its tools enhances the ability of economic units to improve the planning, design and production processes, with the aim of maintaining the competitiveness of their products in the markets for a longer period.
3. Green target cost technology can improve a company's internal operations. By analyzing and evaluating the impact of different activities on cost and environmental performance, the company can improve planning, organization and strategic decision-making.



4. The cost system applied in the research sample laboratory is managed by a group of workers who lack sufficient knowledge in the application of modern techniques for cost management, perhaps the most prominent of which is the green target cost technique.
5. The research sample laboratory needs to apply the two green target cost techniques, due to the role of this technology and relying on one of its tools in achieving excellence and excellence for the products of the research sample laboratory by reducing costs, raising the level of quality, reducing response time, and achieving optimal use of resources compared to competitors. In this way, competitive advantage will be successfully achieved.
6. The application of the green target cost may contribute to employing these tools in achieving high flexibility in product manufacturing processes and optimizing resource utilization. This is reflected in enhancing the competitive advantage of the company.
7. Application of the green target cost tool on the men's suit in the laboratory The research sample can contribute to improving the cost of materials used in the production of the suit by modifying the specifications and designs of some parts of the product based on a competing product. Saving a cost of JD (20.028) and improving product quality can be achieved by replacing some parts with better parts. In addition, more efficient use of available resources can be achieved by eliminating parts that do not add value to the product and replacing them with parts that add Value.

VI. REFERENCES

1. Al-Bakri, Riyad Hamza (2012) "The concepts of conformity to specifications and suitability, for use and its impact on product quality and customer satisfaction", accepted research published within the activities of the Third Arab Forum - Total Quality Management and Institutional Capacity Building - Arab Administrative Development Organization - League of Arab States - Sharjah.
2. Al-Kawaz, Saleh Mahdi Jawad, (2009): "The role of integration between the two costing techniques based on time-oriented functions and the deployment of the quality function in achieving added value for the customer - an applied study", unpublished doctoral thesis, submitted to the Council of the College of Administration and Economics, Al-Mustansiriya University.
3. Al-Khalifa, Salma Omar.(2017) "The shortcomings of management information systems and their impact on achieving a sustainable competitive advantage" from the perspective of workers in the banking sector in Khartoum State - Sudan, Semi-Annual Journal of Economic Sciences, Volume (181), Issue (1).
4. Ayesh, Hussein Ali Hussein (2022) "Applying target costing and specification-based costing techniques to support an effective manufacturing strategy and achieve sustainable competitive advantage" Master's thesis, College of Administration and Economics, University of Karbala.-
5. Celtekliligil Kudret, and Adiguzel Zafer, (2019): "Analysis of The Effect of Innovation Strategy and Technological Turbulence on Competitive Capabilities and Organizational Innovativeness in Technology Firms", 3rd World Conference on Technology, Innovation and Entrepreneurship (WOCTINE), Procedia Computer Science, No. 158, pp. 772-780, 2019.
6. Cohen, W. M., & Levinthal, D. A. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative science quarterly*, 128-152.
7. David, Fred R. & David, Forest R. (2017), " Strategic Management a Competitive Advantage Approach, concepts and cases ".16th Edition, Global edition, Pearson Education Limited.
8. Heizer, Jay, Render, Barry, Munson, Chuck, (2017), " operations management, Sustainability and Supply Chain Management ", 12th Ed, Pearson Education.
9. Hilton, Ronald W. and Platt, David E., (2020): "Managerial Accounting Creating Value in a Dynamic Business Environment" 20th ed. Mc Graw -Hill, Education
10. Horvath P., Berlin S.(2012), " Green target cost: ready for the green challenge ", Cost management, may, 2012.
11. Kaplan & Anderson, Robert S., Steven R. (2007),"Time-Driven Activity- USA Based Costing a simpler and more powerful path to higher profits", Harvard Business School Press.
12. Kuo, T. T., Kim, H. E., & Ohno-Machado, L. (2017). Blockchain distributed ledger technologies for biomedical and health care applications. *Journal of the American Medical Informatics Association*, 24(6), 1211-1220.
13. Lin, - Yuan-Hsu, Tseng, - Ming-Lang, (2014) "Assessing the competitive priorities within sustainable supply chain management under uncertainty" - *Journal of Cleaner, Production*.
14. Ning, X. (2015). *The Application of Green Quality Management System in Ship Industry Research*. Huazhong University of Science and Technology.
15. Seidenschwarz, W. (1992), *Target Costing: marktorientiertes Zielkostenmanagement*, Diss. An der Universität Stuttgart, München ,1993.
16. Sharm, M., Dubey, S., & Jain, N. (2020). A Review on Cloud Computing Services and issues. *International Journal of Advanced and Innovative Research*, 9(4), 1-6.