

Impact of target cost technology in determining the dimensions of internal control (Applied study in the State Company for Soft Drinks Manufacturing)

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Abstract: *The research dealt with the role of target costs in achieving accurate control over cost elements, considered the modern approaches reduce costs by fully activating the role of internal control, identify weaknesses that increase the cost of production, increase market competitiveness and continuity, the research problem was to identify deficiencies in the traditional method used in the company, the sample of the research, led to a weakness in cost control, the researcher relied on the company's data and costs, the research recommended the need to apply the target cost and activate internal control, give a role in monitoring the production costs in the company, the research sample, training the workers, and preparing training courses for them, stressed the need to address the obstacles that prevent an effective cost system, including the application of the target cost method in the research sample company.*

Keywords: *Target cost, Cost control.*

1. Introduction

The present time was characterized by intense competition between institutions, institutions were searching for how to stay in the market and continue, not just how to get into the market, it must improve and develop pricing methods for its products, can ensure that it stays on the market as new markets sweep. Among these methods we find a target cost method that seeks to achieve customer satisfaction, focus on quality, at the right price, and on enterprise satisfaction, profit making, sweeping the market and sustaining its competitive advantage, the cost accounting system is a sub-system, provides information to improve the decision-making process, the pricing decision is one of the most important management decisions, for impact on the profitability of economic unity in the short and long term. As for the state soft drink company, it was one of the most dynamic sectors, still ranks high, its priorities is to reduce the costs and costs of services associated with it, to achieve reasonable and sufficient profit rates to maintain their survival, create new investment opportunities.

The first topic

2. Research Methodology

First: research problem

The research problem is to identify shortcomings in the traditional method used in the General Soft Drinks Company, in control of determining the costs of their products, avoid wasting your expenses, rationalization of costs, which led to a weakness in cost control, as the prevailing price of products became unbeatable in the market. The target costs were applied in the company, the researcher sees the research sample, to reduce the costs of their products, and cost control, for the purpose of starting from them in determining the prices of products, a manner that leads to the

financial and competitive success of the company and to support its survival in the market.

Second: The importance of research

The importance of research comes from the application of the targeted cost sieve, which is one of the modern approaches to cost accounting, supportive the internal control over production costs, because of the importance of this shop in the face of intense competition, by reducing the costs of the company's public soft drink products, this enables it to achieve competitive advantage in the market.

Third: The research goal

The main objective of the research is to identify the role of target costs, determining the dimensions of internal control used, reducing the costs of the company's public soft drink products. Upgrading the pricing methods used, by proposing a pricing approach, the market price is the basis for determining the cost of a product.

Fourth: The research hypothesis

The research is based on the premise that(The application of targeted cost technologies in the State Company for Soft Drinks Industries and its role in determining regulatory dimensions) leads to:

1. Reducing product costs.
2. Achieving a desirable target price for payment by customers.

Fifth: data collection methods

The researcher relied on conducting personal interviews with some of the company's sample, collect data on sales prices of products and production costs from the Cost Division of the State Soft Drinks Company, the reports of the Board of Directors, statements and final accounts of the company.

Sixth: previous studies:

A. Christian et. al. (2008) Study (The impact of competition on the adoption of target costing):

The study aimed to vary the effect of competition on adopting the targeted cost,the study was conducted in Swedish industrial companies, the study showed that there is a correlation between competition and the target cost entry, environmental impacts on the adoption of this approach, the target cost approach is less appropriate when the level of uncertainty was high about customer needs and the future behavior of competitors.

B. Talib (2010) Study (Use of Targeted Cost Technology, Total Quality Management to Achieve Competitive Advantage):

The research aimed to enhance theoretical foundations, management, cost and techniques, according to a strategic entrance, the importance in improving the quality and production and reducing its costs, as the research applied in the General Company for the manufacture of batteries, the researcher reached several conclusions, the need to apply strategic cost management techniques, attention to the accounting and non-accounting measures used to measure the data,the researcher recommended the necessity of improving the methods, methods and procedures used in cost management.

C. Zaman (2004) study (Target Costing implementation in Australian Companies):

The study aimed to implement the target cost in Australia, the research was conducted on a group of Australian companies, which numbered 50 companies, 20 companies applies the target cost approach, the rest of the companies are planning to implement,as the results of this study indicate that it is not reasonable to apply the target cost, before these companies adopt the issue of cost on the basis of activity.

D. Atwi (2008) study (the role of target cost and value analysis in reducing costs):

The study examined the costs of accounting and its development, focus was also on the target cost as a basis for cost reduction, an applied case study was also carried out to drop these methods on the ground, the study touched on various modern methods, but it turned a blind eye to traditional methods and concession prices.

Distinguishes the current study from the previous study, most of the previous studies dealt with the targeted cost approach, the factors affecting the application and the importance, the current study came to show the effect of applying the target cost approach to increasing profitability, this study will be the basis for its applicability to the State Soft Drinks Company.

The second topic:

3. First: the concept of target costs:

Target cost is one of the accounting tools, it was used and adopted in Japan, success depended on adopting advanced methods in the field of organization and management, the success of the use depends on knowledge and accurate understanding of the principles of target cost.

It was defined as the system that supports the cost reduction process in the stages of developing and designing new products or making a comprehensive or simple change to an old product (Hematfar et. al., 2011).

It was also known as an integrated cost management system used during the design of a new product or when developing a previous product (Horngren, 2006).

Hilton (2005) indicated that it is one of the cost management tools that reduce the total costs of production over the life cycle of the product with the help of those involved in production engineering, design, marketing research and accounting.

While Wang et al., (2009) defined it as a cost management department that planners use during designing products to develop and improve them in order to reduce costs and increase profits.

Cooper and Slagmulder (2012) explained that it is mainly a profit management technology that aims to ensure that future products generate profits, the facility enables to achieve and accomplish long-term profit plans, this goal can only be achieved if the products are designed to meet customers' desires, they are designed at a sufficiently low cost. Garrisson and Noreen (2003) noted: It is a pricing method and a system for planning profitability cost management, it is a pricing method developed in Japan, widely used especially in the automotive industry.

Second: The advantages of applying the target cost

The advantages arising from the use of institutions for the target cost system are numerous and varied:

- A. The target cost application helps in making internal improvements.
- B. The target cost helps to improve relationships with suppliers.
- C. explain and describe the structure or development plan, taking into account the dynamics of pricing, the complexity of the product components and the relationship with suppliers.
- D. It is not an administrative method of cost control in the traditional sense, but rather a method aimed at reducing costs. (Patrick, 2004).
- E. It develops the spirit of cooperation and innovation among designers, engineers, and all workers in the project to achieve work to produce the product as required.
- F. A system that predicts the costs required for the product and prepares it for production within its limits (Cokins, 2003).
- G. The target cost is a tool to manage cost and profitability at the same time.
- H. Following the target cost entrance introduces products that are desirable for customers to achieve profitability goals at the same time.

Third: Objectives and ingredients for using the targeted cost approach:

Most of the costs are determined during the early stages of product design, therefore, focusing on costs during the early stages of design is a primary goal to ensure profit, this necessitates studying the product design and the specifications required for it before making a decision to design and develop the product, the target cost entrance is based on a number of objectives and constituents.

Fourth: The goals of the target costs:

The targets for the target costs were (Patrick, 2004):

- A. Achieving the desires of customers and satisfying their needs by providing products of appropriate quality and price.
- B. Budget events in terms of cost, prices and invested capital.
- C. Reducing the cost of the product before it occurs.
- D. Improving the company's competitive position by providing the benefits of belonging to employees and their pursuit of cost-cutting goals.

Fifth: The application factors of the target cost entrance:

The target cost method includes several basic components (Horngren et al., 2011):

- A. Lead the target selling price of the cost.
- B. Customer focus.
- C. Focus on product design.
- D. Focus on the design process.
- E. Cross-functional teams.
- F. Cost lifecycle.
- G. Directing the value chain.

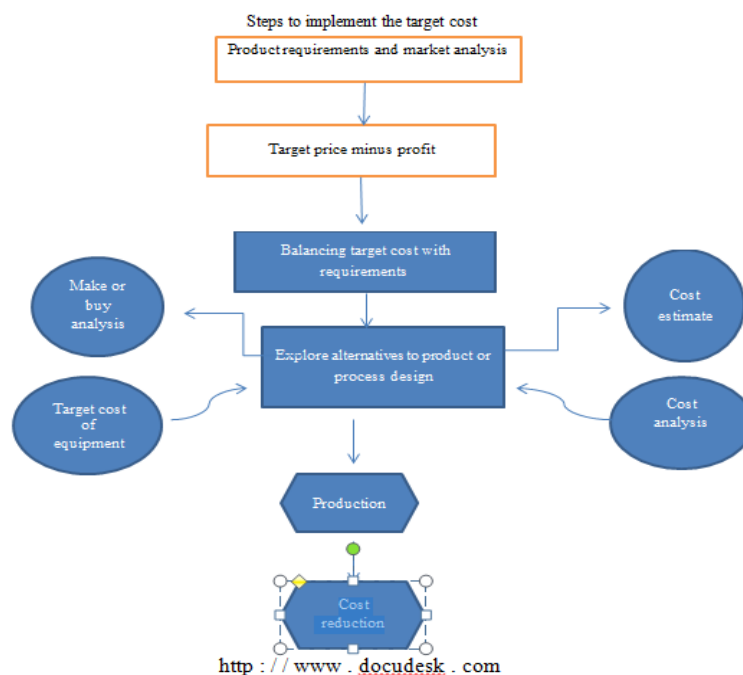
Sixth: The stages of implementing the target cost:

There are four main stages to implementing the target cost (Hergeth, 2002):

- A. Determine the product that meets and meets the needs of potential customers.
- B. Choose the target price: the price that customers will pay to obtain the product, this is done through market research on the prices of competing products and the functions performed by the product.
- C. The target cost is calculated as the allowable cost, the target operating income is subtracted from the expected selling price while maintaining the quality and functionality of the product desired by customers, as the goal of the target cost is to achieve that cost by pressuring product engineers and designers to innovate ways to reduce the cost of product manufacture (Kwah, 2004).
- D. The application of value engineering to achieve the targeted costs and value engineering is a systematic evaluation of all aspects and functions of the value chain, aiming to reduce costs while achieving and meeting customer needs (Wang et al., 2009).

Seventh: The mechanism of using the target cost system:

Organization engineers and product designers use the target cost system to determine the maximum cost, material and other resources required in the product design and manufacturing process, responsibilities were to create products with costs equal to or less than the targeted costs, provides managers with the ability to control new product costs at the planning stage, enables managers in the competitive environment to analyze potential products to be produced before committing to allocating the resources needed to produce (Needles et al., 2008).



The third topic

4. Control:

First: cost control:

Control can be defined as the work devoted to achieving the conformity of operations with the goals and objectives previously identified, in addition to that oversight includes the processes for measuring the performance of subordinates and the organization and correcting them to ensure that the goals and plans drawn up have been properly implemented, the importance of oversight is evident in its fundamental relevance to the components of the administrative process and to all its functions, whereas, oversight is a prior work that accompanies the function of planning and other functions such as organization and direction, as the link of oversight to planning is solid and powerful, it is a way to ensure that goals are achieved and plans are developed.

Control in several types can be identified as follows:

1. Control in terms of time context: be precedent, inherent, suffix.
2. Source control: indoor and outdoor.
3. Oversight in terms of interest: Organizational, social, and subjective.
4. Control in terms of framework and scope of work: Holistic, partial.

The important aspect that must be taken into consideration in the issue of oversight is how effective it is, which is expressed by the difference between the results achieved and the improvements it provides, and a model of the effectiveness of control can be built through cost-benefit analysis, as shown in Figure 1.

The figure shows the amount of oversight required, as oversight in a small amount, the organization may incur high costs and do not guarantee a good benefit to it, that is, oversight in the organization is ineffective. The greater the amount of control, the more effective it is, the amount of control exceeds the threshold in question, its effectiveness is reduced due to higher costs. The figure also shows the two equal points, which express the beginning of the transformation of control activities from a costly state to an active one, and the opposite is also true. The management of the organization must maintain the dimensions of its oversight activity between these two points.

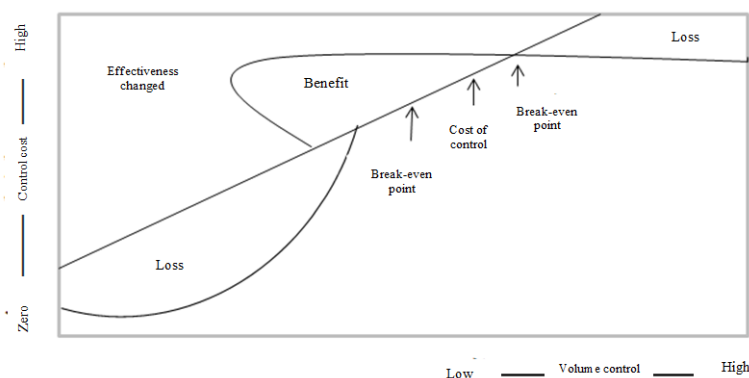


Figure 1. model of the effectiveness of the control system.

(Jawad, 2000) source

Second: Accounting control:

The accounting dimension of cost control can be defined in the simplest form, as it is a set of decisions that will attempt to keep the actual costs close, as far as possible from the predetermined standard costs, its main characteristics were:

1. It focuses on several control methods and tools and is not limited to the financial side by all technical and economic standards and standards.
2. It is not a substitute for the administrative control system, but rather an integral activity for it, and it requires reaching a case of consistency between the two. The best expression of this case is the system of planning budgets.
3. That this control includes costs of all kinds and forms, which are commodity supplies, labor, and other costs, whether or not they are exhausted.

To ensure the safety and effectiveness of this type of control, a standard cost system is required first in the facility based on setting standards for each component of costs, the cost criteria are the financial translation of the technical production equations, a standard is a scale, rate, or number that is determined in advance in accordance with objective studies to estimate each cost component, it depends on setting these standards on several sources, the most important of which were:-

- 1. Technical sources:** This provides the primary source for data on specifications and requirements for requirements in light of the level of performance.
- 2. Engineering sources:** This type of resource is useful for studying and determining time and movement.
- 3. Accounting sources:** This source is useful for providing the necessary information regarding the records contained in all the activity of the organization.
- 4. Behavioral sources:** This source is useful for providing data on individuals' behavior and work patterns, because this behavior is an important factor in the production process.

Comparing actual costs with benchmarks results in deviations, therefore, the system of standard costs is one of the important control methods on costs and their components.

The analysis of deviations of costs takes the following paths:

1. Merchandise supplies (direct materials):

The analysis of the total direct material deviation is the total deviation of the materials

= (Standard quantity x standard price) - (actual quantity x actual price) and this deviation is analyzed as follows:

A. material price deviation = (standard price - actual price) x actual quantity.

B. deviation of the quantity of materials = (standard quantity - actual quantity) x standard price.

C. Variation deflection (mixture of materials) = (the cost of actual materials used in production on a standard basis - the cost of actual materials on the basis of the actual formation ratio).

2. direct wages:

Total deviation of direct wages = (standard wage cost - actual cost) and this deviation is analyzed as follows:

A. wage rate deviation = (standard wage rate - actual wage rate) actual hours.

B. Efficiency deviation = (standard hours - actual hours) standard wage rate.

C. Formation deviation of work = (actual time cost based on the standard mix ratio) - (actual time cost based on the actual mix ratio).

3. Indirect cost deviation:

Since these elements of costs are multiple and varied, the task of calculating their deviations is more complicated than work and direct materials, there are several levels for analyzing this type of deviation, namely:

1. Binary analysis: A. controlled deviation. B. volume deviation

2. Triangular analysis: A. spending deviation. B. energy deviation. C. efficiency deviation.

3. Quadrant analysis: A. spending deviation. B. variable efficiency deviation.

C. constant efficiency deviation. D. energy deviation.

Third: Control the quality costs:

Quality costs in the past few decades have taken on great importance in business establishments, tangible percentages of the total costs or of sales to the extent, which requires control provisions with it as it represents another dimension of cost control, quality costs are all costs, that has been spent in any facility to ensure the provision of goods or services to customers in a manner consistent with their needs, quality costs can be classified according to the following:

1. Costs of compatibility (conformity) and includes:

A. The costs of prevention and prevention:

They are related to the product and its correction, application and care of the quality system and prevention of defects in the product or service, such as planning, designing and developing quality and quality improvement programs.

B. Quality evaluation costs:

It is related to measurement, evaluation, audit and examination of products to ensure compliance with quality requirements or standards and specifications followed, for example, selection and inspection equipment and field performance testing.

2. cost mismatch (or non-conformity) and include:

A. The costs of internal failure: It includes all costs associated with a product that is against specifications and was discovered before reaching customers.

B. External failure costs: They are the costs of defective production upon discovery by customers, and include complaints, rejected and returned products, and sales losses.

An effective quality control system is needed to achieve an economic balance between the cost of prevention and the value of the benefits expected from it, there was a point where the cost of aligning with the specifications must stop so that they do not exceed the value of the desired interest, through this model, the cost of maintaining quality or conformity is calculated and then constantly monitored so that it does not exceed the value of the expected benefits, the cost of total quality can be reduced to a minimum by noting the relationship between the cost of quality and the

degree of conformity, the degree of conformity is very high, breakdowns and failure costs are low, but the Quality Control costs are high, the degree of conformity is low the malfunctions are large, but control costs are low,

failure costs are high, an optimum level of matching between the two terms, as it reduces the costs of total quality, quality management must balance the costs of preventing breakdowns with the costs of evaluation, to define quality costs for all relevant levels, affecting the quality of the commodity. Measuring the cost of quality is important in facilities, it focuses on attention in the area of high costs and wastage, determine the scope of potential problems and reduce costs and search for opportunities for continuous improvement and development, provides an opportunity to provide a basis for internal comparison of goods, services, operations, and divisions, the cost measurement of quality shows private industries and anomalies in cost allocation, standards and procedures for arranging goods, may remain unappreciated by production, used operations, or even work-specific analysis, measurement is the first step for monitoring, evaluating and improving performance.

While there are several methods for identifying quality problems, which were:

1. Control maps.
2. graphs.
3. Impact, Graphic and schematic reason.

At the same time, there are several measures to measure the cost of quality, and these are of two types:

1. Financial metrics.
2. non-financial measures.

Financial metrics are those that are financially reversible, however, improving quality also has non-financial, descriptive or qualitative effects, including improving the company's reputation in the market in the future, reducing the number of customer complaints from the company's products, delivery time, reducing consumer response time from the scheduled delivery date and the requested date, from this we see that cost control has multiple dimensions and aspects, not just an accounting dimension, the dimensions mentioned above are related to one another, it shall be a comprehensive control system, the enterprise management must take this concept into consideration, for cost control to be effective and efficient, in order to ensure that the objectives of the establishment are properly achieved, the cost deviations do not have an accounting and financial dimension, takes several aspects and revolves in a single circle and wheel, the periphery of which is accounting, management, economy and quality, ensure the proper functioning and rotation of this wheel, one of these ends should not be broken or removed, as shown in the following figure:

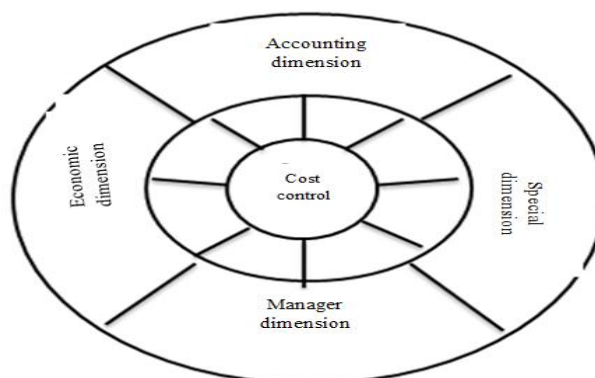


Figure 2. the relationship between the various dimensions of cost control.

There is another dimension that is not less important than the one previously discussed and needs thorough study, which is the behavioral dimension of supervisors, as the individuals working in the facility are involved in decision-making, achieving goals, it must be taken into consideration and linking human behavior to control systems, this is

what MACS embodied by looking at the assumptions that individuals desires to make the work a success, the first attempts to explain motives for more recent models are through:

1. Looking at working individuals as a creative and important force, and this came in the beginning of the last century, in harmony with the theory of scientific management.
2. the emergence of the theory of human relations in the late 1930s, it focused on the humanitarian aspects, employee respect and the use of moral incentives in working with financial incentives.
3. The most recent development is the human resources model and this model embodies its concept that individuals do not find work boring and that they participate in setting and achieving decisions and goals, as this model focuses on the fact that individuals have a great tendency towards participating in the work of the organization in the framework of information and knowledge they hold about their work, their path defines this ethical system in which the organization operates, which consists of a number of elements, the most important of which were:
 1. The legal rules.
 2. Social customs and traditions.
 3. Professional relations.
 4. Organizational traditions (group traditions).
 5. Personal habits.

Such a system of ethical and human behavior includes a set of elements, the most important of which were:

1. A statement that includes the moral values of the organization so that individuals can relate it to their individual actions.
2. Specific and clear statements of individuals' responsibilities and ethical behavior for each job description, to be the basis for each performance review and control.
3. Appropriate training to help individuals identify ethical problems in reality and ensure their proper handling of those problems that are expected to occur.
4. Submit a report on the ongoing internal control of the efficiency of the ethical control system and the behavior of individuals in the organization.

In fact, this ethical behavior is considered one of the most important dimensions of cost control because it will affect in one way or another on it, which requires it to take this into consideration.

The fourth topic

5. The practical side:

First: About the General Company for Soft Drinks:

Baghdad Soft Drinks Company was established in accordance with the provisions of the Companies Law No. 36 of the year, the company registrar issued a decision, company registration in the name of Baghdad Soft Drinks Company, with a capital of 70 million Iraqi dinars until 133 billion years ago, by this, the company has acquired the moral character, where the company produces soft drinks in five brands were (Pepsi Cola, 7UP, Miranda, Affair, and Maw Net Dew), among the company's factories are the Al-Zafaraniya soft drink factory and the Baghdad soft drink factory, the company is currently facing difficult conditions, extreme competition, especially after entering good quality competitive products, which requires making great efforts for the purpose of reviewing the structure of the stages of product design and research and development in order to make the product of high specifications and accuracy in quality while reducing the cost of the products of this company, as for the costs of the products,

they differ from time to time as a result of the market turmoil that the country is going through, the difference in the prices of the raw materials represented by sugar and soda water, as this water is produced industrially, as the raw materials are provided according to the required specifications, which is the main source of the soft drink industry, where carbon dioxide is mixed in water in special filling stations, soda water is then bottled.

Caramel color is used in its manufacture, and it is the most used food coloring, in addition to sugar, phosphoric acid, potassium and carbonated water, this water contains carbon dioxide and is the reason gas is released from Pepsi, as for the salaries of working individuals, they include salaries, wages, allowances and incentives, and these differ according to their job grades, as for other indirect expenses, these include the depreciation expenses for machines and equipment.

Second: The production phase of the Baghdad Soft Drinks Company:

- A. Water treatment stage: Water is the main component of the Pepsi industry and must be taken care of extensively, as the quality of water makes a clear difference in the quality of the drink.
- B. The stage of filtering water and removing chlorine: To get rid of the very small components, the water is passed through a special filter, it is then sterilized to get rid of all microbes, assemble it in tanks and treat it with chlorine for several hours, the chlorine is then removed with a carbon filter, which removes all suspended organic matter.
- C. The material mixing stage: where sugar and other flavors are dissolved and mixed according to a specific sequence, then transfer it to the water tanks, mix the ingredients together under the conditions of observation, ventilation is monitored as it may spoil the product.
- D. Product Carbonization Stage: Carbonization is a stage in which carbon dioxide is dissolved with the liquid, it is a stage that takes place under very high pressure, the temperature of the liquid and its monitors must be maintained.

Table 1. The current operations of Baghdad Soft Drinks Company for the year 2017.

Accounts guide	Cost elements	The cost of the item
31	Salaries and wages	1431493767
32	Commodity supplies	1696656559
33	Service supplies	641642430
35	Purchases for selling purpose	105784200
36	Benefits and land rents	39313653
37	Depreciation	849516929
384	Taxes and Fees	70000
Comprehensive costs		4764477538

Source: company data

Revenue - overall costs = operating income

$$4961800197 - 4764477538 = 197322659$$

Third: Applying the target costs system in the company, Sample of the research:

Determining target prices and target costs requires four steps:

1: Appointing the product that satisfies the customers 'desire and controlling:

This step involves looking for a product that the company can develop and meet customers' desires, it was chosen as Pepsi Cola 250 mm and Fanta cans of all kinds with a packaging of 250 mm.

2: choosing a target price:

This step includes determining the selling price of Coca-Cola and Fanta, taking into consideration that the target price is suitable for the targeted customer category, competitor for the prices of commodities offered on the market by

competitors, the management of the company wants to reduce the box price from 5,000 dinars to 4,500 dinars, in light of this low price, the company's marketing manager expects an increase in annual sales from 400000 to 500000 boxes.

3: Deriving the target cost of one box:

by subtracting the target operating income for the unit from the target price, where the company's management wants to achieve a targeted operating income of 12% on sales revenue.

Total revenue target	$4500 \times 500,000$	2250,000,000 dinars
Total target operating income (10%)	$2700,000,000 \times 12\%$	270,000,000
The target operating income of the unit	$270,000,000 \div 500,000$	540 dinars / unit
Unit target cost = target price - target operating income / unit		
= 4,500 dinars - 540 dinars = 3960 dinars / unit		
Total current total costs of the product = 4764477538 dinars		
Total cost per unit = $476447753.8 \div 400,000 = 1191$ dinars		

Source / researcher preparation based on company data

The target cost of the unit of 3,960 dinars was significantly lower than the current cost of the unit of 4,500 dinars, the goal of the company is to reduce the unit cost by 540 dinars, this requires that cost reduction efforts extend to all parts of the value chain, from research and development to customer service, without affecting its basic properties and specifications, and developing it through value engineering.

4: Implementing value engineering to achieve the targeted costs:

Value engineering is the systematic evaluation of all value chain functions with the aim of reducing costs, as it is useful in distinguishing activities and costs that add value from costs and activities that do not add value, where it is noticed to the reader that there is an application for the target cost, value engineering and an introduction to the activity basis, and this is part of the application of the cost approach to target pricing, also, it is not possible to apply the company's traditional cost system to be in line with modern technologies, especially since the cost of its products is large, it can only be reduced by adopting a modern pricing approach that reduces the cost of its products, and that is to target cost.

Table 2. the profitability of Baghdad Soft Drinks Company for the year 2017, based on the analysis of the value chain activities.

the details	Total revenue for industrial costs to produce 400,000 units
Revenue (sales)	4961800197
Cost of production sold	
Direct material costs	2328683189
Industrial labor costs directly	1431493767
Machine costs	115400000
Indirect industrial additional costs	859606964
Total production costs sold	4735183920
Operating costs	
Research and development costs	6500000
Costs of product and process design	7000000
Marketing costs	7290499
Distribution costs	4500000
Customer service costs	4003119
Operating costs	29293618
Costs of comprehensive products	4764477538
Operating income	197322659

Source / researcher preparation based on company data

Table 3. Using the activity basis approach to compare the quantities and rates of cost engines to produce (400,000) and (500,000) units.

Total cost	Cost engine	The amount of the cost engine to produce 400,000 units	Unit cost from the cost engine	The amount of the cost engine to produce 500,000 units	Unit cost from the cost engine
Direct cost					
Direct materials	Produced units	300000	5821.7	500000	3881
Direct wages	Direct business hours	286298,7534	5000	2862,987534	5000

Machine costs directly	Machine operating hours	40000	385	30000	138,48
Indirect industrial costs					
Costs of examination and testing	The number of examination and test hours	5000 hours	15260	3000 hours	15000
Setup and setup costs	The number of initialization and setup times	15,000 times	4359	12,000 times	3000
Fee for restarting defective items	Number of defective units	980 units	4370	420	4000
Packaging costs	The number of orders delivered to clients	939,364	1000	920,150	1000
Material handling costs	The number of handling times	2600	10000	2200	8000

Table 4. The targeted industrial costs for the new Pepsi-Cola product for 2017.

Details	Estimated industrial costs for the production of (500,000) units	Estimated industrial cost per unit (500000 ÷ 1)	Industrial cost based on (400000) column units in Table No. (3)
Direct industrial costs			
Direct materials (500,000 x 4000)	2000000000	4000	5821.7
Direct wages (286298,7534 x 5000)	1431493767	2862,987534	286298,7534
Direct machine costs (30000 x 138,48)	4154400	138,48	385
Total industrial costs	2018469338	4036,938676	294445,7534
Indirect industrial costs			
Examination and testing costs (3000 x 15000)	45000000	90	254
Setup and setup costs	36000000	72	217,95
Restarting costs for stadiums	1680000	3,36	14,275
Packaging costs	920150	1,8403	3,1312
Material handling costs	17600000	35,2	87
Total indirect industrial costs	101200150	202,4003	576,3562
Total industrial costs	2119669488	4239,338976	295022,1096

Source / researcher preparation based on company data

Table 5. profitability of the Baghdad Soft Drinks Company for the Pepsi-Cola product for the year 2017.

The details	Total estimated costs for (500000) units 1	The total estimated cost of the unit is 500,000 ÷ 1 = 2
Revenues	2500000000	5000
Cost of production sold		
Direct materials	2000000000	4000
Direct wages	14314938	28,629876
Direct costs of the machine	4154400	8,3088
Industrial additional costs	101200150	202,4003
Total cost of production sold	2119669488	4239,338976
Operating costs		
Research and development costs	26330000	52,66
Costs of product and process design	26500000	53
Marketing costs	25540000	51,08
Distribution costs	27960000	55,92
Customer service costs	24000512	48,001024
Total operating costs	130330512	260,661024
Overall product costs	2250000000	3705

Operating income	250000000	500
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Source / researcher preparation based on company data

Conclusions and recommendations:

First: the conclusions:

The findings of the research in the theoretical and practical aspects, the following conclusions can be reached:

1. There is a lack of management of the company to search for extravagant aspects and get rid of them and can be filled by activating the role of internal control.
2. The internal control of costs and target cost technology, the process of reducing costs through monitoring production processes and searching for areas of extravagance and activities that do not add value in preparation for disposal.
3. If the public soft drink company applies the target cost method, gets an effective role of pre-control, it would gain a greater market share in the domestic market, will return to it with a long-term profit margin.
4. From Table No. (1), it is noted that the overall costs of the current operations of Baghdad Company are high, reached 4764477538 dinars, causing the rise in the total unit cost to reach 1191, whereas, after applying the company's target cost entrance, the overall costs decreased by (795) (from 4,500 to 3,705) dinars in Table No. (5).

Second: Recommendations

According to the findings, the researcher recommends the following:

1. Providing the company's oversight department with scientific and practical competencies and holding training courses for them in this field.
2. Like applying any approach to cost management, it may face some difficulties, however, these difficulties do not constitute an impediment to the application of the initial control approach to production costs and the target cost, this in turn supports the adoption of this approach.
3. The necessity of granting the Internal Control Section and the Cost Management Section broad work powers in determining the work plan.
4. Giving the control process the most attention, especially in the pre-production stage, because this stage is important in avoiding errors and faults.

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