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The Role of The Cost Leadership Strategy Using the Activity-Based Cost Accounting (ABC) System in Reducing Costs

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Abstract: This study aims the application of the activity-based cost accounting system (ABC) in cost leadership strategies for economic units. The research challenges companies to adopt the ABC system due to neglecting their role in lowering product costs while maintaining quality for customer satisfaction and high profit. The study used actual cost, semantic, and technical data from the sponge company (Hymen Group) in Duhok Governorate in 2021. The ABC system significantly aided in the success of the cost leadership strategy and reduced costs for the business. The reduction was achieved through accurate non-direct cost allocation and the elimination of non-value-adding activities. The study highlights the close connection between cost reduction and the ABC system-based cost leadership strategy. Recommendations include establishing a separate department for cost accounting, promoting communication and cooperation between private sector businesses and academic institutions, and encouraging industrial company employees to become more cost-conscious by offering specialized scientific and technical courses. Experts advocate applying the ABC system in industrial companies, particularly the sponge company (Hymen Group), as the study's findings demonstrate differences between cost systems in Favor of the ABC system. The ABC system is recommended for use in industrial companies, particularly the sponge company (Hymen Group).

Keywords: Cost Leadership Strategy, Activity-Based Costing ABC System, Reducing Costs.

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INTRODUCTION :

Due to the competitive environment, which has been exacerbated by recent technological advancements, economic units today must adopt strategies appropriate for the changes in their environment. The cost leadership strategy is the fundamental method that aids the economic unit in confronting the competitive environment and continuing through the use of the ratios that allowed it to survive and grow, and whose effects could be seen in the expensive prices of its advanced products when compared to those of its rivals. For economic units to find a way to improve the level of quality of their operations and products, as well as through cost control, they now need to find ways to reduce the shortcomings of their layered systems. This search must be accompanied by a high level of customer satisfaction because higher sales mean higher profits for the economic unit.

RESEARCH METHODOLOGY:

Research Problem: The Kurdistan Region's economic units struggle with high industrial costs, causing inaccurate cost distribution and reduced profit margins. The research investigates the impact of Activity-Based Costing System (ABC) on costs in the sponge industry, supporting cost leadership strategies. Accordingly, it was possible to address the research problem with the following questions:

1. Does the application of activity-based costing (ABC) support the implementation of the cost leadership strategy?
2. Does the application of activity-based costing (ABC) lead to accurate allocation of industrial costs rather than directly on products?
3. Does the application of the activity-based costing ABC system lead to a decrease in the costs of the economic unit's products?

The Importance of Research:

1. The scientifically interesting and modern topics that the research shed light on in order to make this research a work without including knowledge and scientific subjects.
2. Bringing together the disciplines of accounting and management and highlighting the vital elements in literature and accounting and administrative thought is the supporting approach to scientific research that works to create integration between different sciences.
3. This research dealt with one of the most vital economic sectors in the Kurdistan Region of Iraq, which is the sponge industry sector, bearing in mind that all economic units in this sector seek to achieve profitability, growth and a better reputation. It is worth noting that these economic units compete nationally and internationally.

Research Objectives:

1. Encouraging and encouraging economic units to explore the modern issues in costing in general and the cost strategy in particular.
2. To highlight the necessity of applying the cost leadership strategy in the sponge company (Hemin Group).
3. Demonstrating how the ABC system works, and how it reduces costs.
4. To attempt to highlight the necessity of applying the ABC system in the sponge company (Hymen Group) as one of the modern systems in low cost.

Research Hypotheses:

The research adopted the following hypotheses:

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a. The application of the activity-based costing system (ABC) leads to the accurate allocation of industrial costs, not directly on the products.

b. The application of the activity-based costing (ABC) system leads to a decrease in the costs of the economic unit's products.

Research limits:

The research limits are as follows:

1- Dokani Borders: The Sponge Company (Hymen Group) in Duhok Province.

2- Temporal limits: the company's accounting data for the current year 2021. The second axis: the theoretical framework of the cost leadership strategy and the activity-based costing system (ABC)

LITERATURE REVIEW

First: What the Cost Leadership Strategy:

1- The Concept of Cost Leadership Strategy: We will attempt to present the most significant definitions of the cost leadership strategy below. "An integrated set of procedures that are introduced to produce goods or provide services with characteristics and features acceptable to customers at the lowest cost compared to competitors" defines the cost leadership strategy (Mohamed et. al., 2019). Other definitions include "the competitive strategy in which the economic unit has the lowest cost of poultry in the industry sector in which it operates (or at least the lowest cost of poultry compared to its competitors) while maintaining the same target level of the quality of the products" and "the lowest cost of poultry in the industry sector in which it operates" (Al-Gharib, 2021). We conclude that the ability of the economic unit to produce goods or services at the same calibre as those provided by other competitors while delivering it to the market at the lowest manufacturing costs, which results in either lowering prices or keeping them without divestment, is the definition of the cost leadership strategy.

2- Importance of Cost Leadership Strategy:

The cost leadership strategies for the economic units are represented in the following points:

a. Achieving the best competitive position by knowing the objectives and goals of other economic units,

b. A delicate balance between the economic unit and the internal and external environment, so it seemed to guarantee cost superiority.

c. Facilitating the task of cost auditing on all activities of the economic unit and getting rid of weak business units,

d. It helps the decision-maker to know the correct assumptions - (problems and decision making) (Hamad, 2018).

3- Advantages of Cost Leadership Strategy:

The implementation of this strategy achieved the following benefits:

a. Increasing the market share of the economic unit to be able to generate profits in the industry above average and for a long period of time as a result of the increase in the amount of donations,

b. The ability of the economic unit to produce and deliver goods or services to customers at a lower cost than that of competitors, due to the increase in the amount of donations.

c. The ability to encourage customers in the industry to purchase something that provides after-sales services in a streamlined manner,

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d. The ability to set stages of change and refine prices within the industry and convince the customer that prices will remain stable for a period of time..

e. Benefiting from loans more as a result of increasing administrative efficiency by reducing the opportunistic behaviors of managers and reducing the influx of discretionary spending (Valibour et. al., 2012)

4- Implementing the cost leadership strategy using the ABC system.

The economic unit seeks, through the application of the cost leadership strategy, to reduce costs to a minimum, so as to produce products of high value and quality comparable to the quality of the products offered by competitors, but at a lower price in order to gain a competitive advantage and thus increase market share and maximize profits. This strategy was successfully implemented using the ABC system, which will be discussed below.

Sconed: Activity Based Costing System (ABC):

1- System Concept: The ABC system has many definitions, which we will try to present below, According to its definition, the ABC system is "the system that streamlines the cost system by focusing on activities as fundamental cost objectives, and as a result of this system, the costs of these activities are allocated to cost objectives like products, depending on appropriate cost models" (Quesado, Patrícia & Silva, Rui. 2021). It was further described as "one of the contemporary management accounting tools that seemed to meet the needs of the developing and deteriorating business environment, and it is a system that aims to achieve a high level of accuracy in calculating cost data by calculating the activities within the economic unit, and as a result it is based on A main principle aimed at linking the costs of activities and the final product, by linking the consumed revenues with the activities that consume t According to their uses for the activities and because of the relationship, it distributes the cost of resources to activities and who distributes the cost of activities to cost targets. Additionally, it was described as "a system that measures the cost and effectiveness of activities, resources, and cost targets" Depending on their uses for activities and because of the causal link between cost drivers and activities, it distributes the cost of resources to activities and who distributes the cost of activities to cost targets (Bojnah and Barbara, 2018).

The aforementioned information leads us to the conclusion that the ABC system is one of the accounting and administrative development systems that aims to lower industrial costs without accurately and objectively directing the activities required to produce the products and without connecting them to the products as final cost objectives to calculate their cost.

2- Objectives of the ABC system:

The ABC system seeks to achieve the following objectives:

a. Posting the cost of the product with the required accuracy (de Almeida et. al., 2017.)

b. Provides information that helps identify areas relevant to Person (Bvumbi, 2017).

c. Assists the management of the economic unit in identifying supportive activities that are directly related to products or services, which does not add value, so to reduce the cost of these activities (Abdi et. al., 2016).

d. Eliminate the problem of distributing costs without judging randomly between different products (Quesado & Silva, 2021).

e. Person and develop relationships with customers and thus improve customer satisfaction by convincing them of the cost of the product and the basis for calculating it (Samah 2018)

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3- **Activity-Based Costing System (ABC)**

The ABC system has a number of principles, from the top ((Bashn, 2020:22)

- The activities consume the resources, and the acquisition of the resources leads to the occurrence of costs.
- that products consume activities.
- The following figure illustrates this process

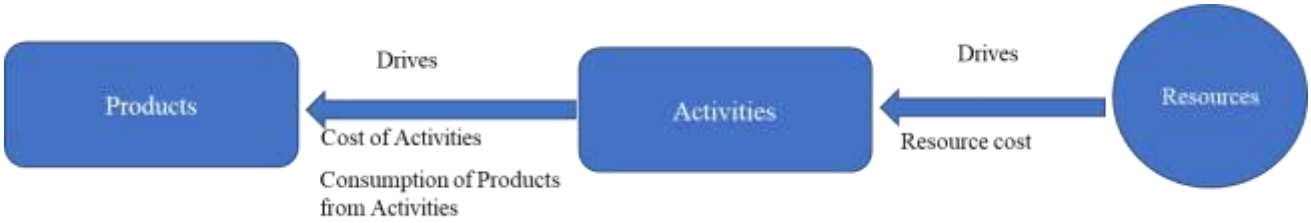

Figure 1: Basic principles of the ABC system

4- Steps To Design and Implement The ABC System

The necessary steps to design and implement the ABC system as follows:

a. **The first step**: defining and analyzing the activities in this stage is the beginning of the application of the system, as the economic unit is studied and the nature of the work in each section is known and how to enact the production process, through this step the activities necessary to produce a specific product are known, but the studies The process showed that the greater the number of specific activities, the more difficult it would be to identify the relationship between the activity and the manufacturing unit, which would lead to a higher cost of implementing this.

(1)Value-adding activities: These are the activities that add characteristics (value) to the product from the customer's point of view, and its cancellation leads to a reduction in the product service, and it also contributes to achieving the goals of the economic unit, and the customer is willing to pay sums for these activities, such as the activity of buying raw materials,

(2)Non-value-adding activities: These are the activities that can be excluded without affecting the achievement of the unit's objectives.

b. **The second step:** Determining the cost drivers for each activity. In this step, the activities are expressed with a quantitative measurement of the correlation between the size of the activity and the amount of cost. For example, the number of purchase orders is considered the cost factor for the activity of purchasing tools, and the number of maintenance hours is the cost factor for the maintenance activity, and it is rich ((Bashna: 2018).

c. **The third step**: Determining the cost pools and the cost of each activity in this step by collecting the industrial costs without directing the activities that have the same economic behavior in a single center or the so-called cost pools where they have the same costs (59). Each activity through the factors of production consumed to produce each activity, which can be people, machines, and animals that 134-: are included in the traditional cost systems (Qadoori, 2217). The fourth step: the allocation of indirect costs on products, is done in this step by decreasing the industrial costs, not direct on products, according to the number of units to be produced, and this is done using cost figures as a measure of demand and the demand for products on activities is measured by the number of transactions that were established for the cost figures (Horngren et al. al., 2021).

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The local and regional market and includes a good human composition of workers and employees, as their number reached (60) workers and employees. It will be a test that we covered in the theoretical research in the sponge company (Hymen Group), and to get acquainted with the system of the company currently applied and try to design and implement the ABC system in it, and then compare the results of calculating the cost of the units produced in both systems. It is clear to us the steps of designing and implementing the ABC system, which begin with defining the activities and their costs, and then projecting these costs on products based on cost drivers to obtain the cost of the product.

PRACTICAL RESULTS:

First: Applying The (ABC) System In The Research Sample Company

Where the company in question produces (12) products, and the focus has been on the Super B sponge product as a sample for the study. The group has several reasons, the most important of which are:

1. About The Economic Unit In Question: The Sponge Company (Hemin Group) is considered among the leading Iraqi companies in the sponge industry. It was founded on 6/10/2004. It occupies a distinguished position at the local level in the field of the sponge industry because of the volume of its production and turnover. The demand for it is high in the Iraqi market. It works to finance

Most of the sales volume is concentrated on this type of product to get all data about this product. There needed to be more time to generalize the search to all products company.

2. Studying the system currently applied in the company and applying the system (ABC) in it.

The company in question determines the cost of its products using conventional accounting methods. It uses the total costs method to calculate its various products' final costs and selling prices. As a result, it bases its charges on the total number of units produced and includes both direct and indirect costs (136,653 units for the year 2021 AD). Based on the following, the same-year indirect costs on products totaling 1,514,901.97 were allocated as follows:

There are several steps in the production process, including preparation, mixing, pouring, and cutting.

Indirect costs are received by secondary or auxiliary departments (non-producing departments) that support the primary departments in carrying out their duties. Examples of such departments include the purchasing department, maintenance, and stores, all of which are indirect costs for goods. The percentage of loading each product is calculated from these costs after charging all direct and indirect costs to the major departments. The following table demonstrates how to compute the Super B sponge production cost using the adopted traditional system.

Table 1: The cost of producing Super B sponge according to the company's traditional system

	Super B sponge (20683)		
Statement	The cost of the first (primary) raw materials used	Industrial costs, without the ad hoc directives	total production costs
Total costs ($)	19,34,634.00	2,29,286.72	21,63,920.72

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cost per unit ($)	93.54	11.09	104.62

Note: Prepared by the researcher based on the data presented in the company for the year 2021

The table above demonstrates that the Super B sponge product's direct costs and a few other direct costs were recorded when it was sold for $ 124.62 per unit. The cost of producing a Super B sponge was determined using a cost-computing system currently used in the company for the research. Using the ABC system to determine the cost of production.

Sconed: Design And Application of ABC System in The Company Under Study:

The following steps are adopted to design and implement the system:

The first step: defining the activities as a result of the company's reliance on the structural organization according to the departments, all the functions performed by each department related to production were examined in order for the company to be divided into several activities, and in cooperation and discussion with officials in the accounts department and the production department, we reached a list of the company's activities, and as shown in the following table

Table 2: List of activities within the company

Sections	Activities	
Purchases	Preparing purchase orders.	Submitting orders to suppliers.
	Receiving materials from abroad.	
Stores	Quality check.	Store purchased materials.
	Production storage in progress.	Complete production storage.
maintenance	Preventive maintenance.	emergency maintenance.
production	Preparing and pumping raw materials	Mixing raw materials.
	Casting raw materials to convert them into products.	cutting products.
	Re-work for defective products.	

Note: Prepared by the researcher based on the information provided by the Accounts Department and the Production Department

The above table shows that the direct costs and some of the non-direct costs were recorded on the Super B sponge product, which appeared at the cost of 104.62$ per unit. After the cost of producing Super B sponge was calculated according to the cost accounting system currently applied in the company for the research, we will calculate the Production cost according to ABC system.

Third: Design And Implementation of The ABC System in The Company Under Study:

The following steps are adopted to design and implement the system

Step One: Define Activities:

As a result of the company's reliance on the structural organization according to departments, all the functions performed by each department related to production were examined, in order for the company to be divided into a number of activities, and in cooperation and discussion with officials in the accounts department and the production department, we reached an account of the company's activities, as shown in Next table.

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We note from the above table that (14) activities have been recorded in the company, which are similar to the activities carried out by the company in its production-related departments. Relying on the data provided by the officials in the Accounts and Production departments, the source of each piece of information within the company was confirmed, and a special button was set for each activity according to what corresponds to it, and the size of each button was recorded in order to calculate its unit cost, as shown in the following table:

The second step: Determining the cost drivers for each activity. In this step, the cost figures for each activity are listed. This step is important because it is related to future results. Relying on the data provided by the officials in the Accounts and Production departments, the source of each piece of information within the company was confirmed, and a special button was set for each activity according to what corresponds to it and the size of each button was recorded in order to calculate its unit cost, as shown in the following tables:

Table 3: List of cost buttons and the size of each cost button

sections	activities	Cost drivers		Number of cost drivers
Purchases	Purchase order counter.	Number of Purchase Requests:	The number of purchase requests.	110
	Submit requests to suppliers.	The number of purchase orders.		
	Receiving worms from abroad.			
Stores	Quality check: Bazin Al-Dawad Al-Dashtra.	Number of working hours (store security).		271
	Buzzin production and operation: Bazin full production.	The number of times received.		
maintenance	Preventive maintenance: Emergency maintenance.	Number of working hours (maintenance workers)		192(70)
production	Primary medication preparation and infusion: Primary drug mixing.	The number of operating hours of the custodians.		20
	Casting raw materials to convert them into products:Cutting the laces.	The number of operating hours of the custodians.		203
	Rework of propaganda products:Cutting the laces.	The number of operating hours of the custodians.		182

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		Number of rework hours.		81

Noted: Prepared by the researcher based on the information provided by the Accounts Department and the Production Department

From the above table, each activity's cost figures were recorded and consistent with it. The volume of each cost was recorded in consultation and cooperation with officials in the accounts and production departments. We also notice through the data of this table that there are many activities, so companies have common activity, such as the number of purchase orders, the number of working hours, the number of times of receipt, the number of hours of operation of the shoppers, and from here the third step is followed directly, which is represented in the mailing of the costs.

The third step: creating cost aggregators and the cost of each activity. In this step, the different activities related to the share of the joint activity are reported in an activity center by creating a correlation matrix between the activities and their cost centers. The consumption of these activities is reported from the revenues, and the following table shows

Table 4: Correlation Matrix between Activities and Cost Companies

	Cost drivers				
activities	The number of purchase orders	working hours	The number of times received	The number of operating hours of the custodians	Number of rework hours
Preparation of purchase orders	*				
The orders are forwarded to the suppliers	*				
Receiving worms from abroad	*				
Quality check		*			
Bazin Al-Dawad Al-Dashtra			*		
Buzzin production and operation			*		
Bazin full production			*		
Preventive maintenance		*			
emergency maintenance		*			
Primary medication preparation and infusion				*	
Primary drug mixing				*	
Primary casting				*	
Cutting the laces				*	

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Re-work of propaganda products					*

Note: Prepared by the researcher based on tables (2 to 3) and information provided by the company

When reading the correlation matrix between activities and their buttons, we notice that the driver is the number of purchase orders for your button for three activities. The driver is the number of working hours for your button for three activities, as well as the driver is the number of times your button receives three activities. The driver is the number of shopkeepers operating hours for your button for four activities, while your button is the number Rework hours are like yours for one activity only.

And with the number of the number of the connection to the activities and their accessories, we present a determination of the consumption of the equipment (centers) of the activities in the import cities related to production, which amounted to 791,435.32$ for the year 2021, and this is how much the table shows

Table 5: Establishment of cost figures with a list of activities' consumption of resources

cost aggregators	activities	Cost drivers	Costs ($)
Diastry Center	Preparing purchase orders, submitting requests to suppliers, receiving supplies from abroad	The number of purchase requests;	62,805.41
Maintenance center	Quality inspection, preventive maintenance, emergency maintenance	Number of working hours	1,66,371.73
storage center	A good amount of purchased goods, a good amount of production, equal to full production	Number of times received	2,50,068.28
production center	Preparing and pumping primers Mixing primers Pouring primers Cutting donors	Number of hours running objects;	2,70,931.92
	Rework of propaganda products	Number of rework hours	41257.99
	the total		7,91,435.32

Note: Prepared by the researcher based on tables (2 to 4) and information provided by the company

After listing the cost of activities, activity centres, and a number of cost figures for each activity, we want to determine the cost of one unit of engines, which is done according to the following equation:

$$\textit{The cost of one unit of cost drivers} = \textit{the total cost of the number of cost drivers} \div \textit{the activity or center of activities.}$$

This is what the following table shows:

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Table 6: The cost per unit of the cost figures

Activities and activity centers	Maintenance center	storage center	production center	Rework of propaganda products
cost ($)	1,66,371.73	2,50,068.28	2,70,931.92	41,257.99
Number of engines	533	542	405	81
Engine cost ($)	312.14	461.38	668.97	509.36

Note: Prepared by the researcher based on tables from (2) to (5) and the information provided in the company.

The accuracy of these calculations depends on the accuracy of the information obtained from the company, and that any deficiency or error in it affects the results reached.

After that, calculate the number of cost figures allocated to each product, based on the data provided by the company and the data from the program used in cost processing. The following table shows the number of cost figures allocated to each product:

Table 7: Number of cost labels allocated to each product

Cost drivers												
Sponge types	Super B	normal	middle	for stazz	super	For cheese	Ghost B	ghost	presidential	Royal	Should	Hey Quality
The number of purchase orders	14	9	3	9	8	3	2	38	13	6	2	3
working hours	69	48	11	48	37	16	5	187	69	27	5	11
The number of times received	64	50	34	46	40	25	19	141	53	34	11	25
The number of operating hours of the custodians	53	50	8	36	27	12	5	134	47	18	6	9
Number of rework hours	12	11	2	10	6	2	1	24	8	2	1	2

Note: Prepared by the researcher based on tables (3) to (6).

The above table shows the necessary size of the cost buttons for each product. The number of these drivers has been distributed in the same approximate proportions that correspond to the needs of each product in the company. After listing the unit cost for each activity, and the necessary size of the cost buttons for each product, costs are calculated. The industrial process is the beginning of each product, as shown in the next and last stage.

Step Five: Allocate indirect costs to the products as:

Industrial indirect costs allocated = the number of costs per engine unit. Cost drivers

In this step, indirect industrial costs are allocated to the company's products according to the ABC system as follows

$$Allocated\ indirect\ industrial\ costs\ =\ number\ of\ engines\ x\ per\ unit\ of\ engine\ cost$$

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According to the ABC system, the following table represents the allocation of indirect industrial costs to the company's products.

Table 8: The percentage of industrial costs in direct production of the company's products according to the ABC system

Sponge types	Purchase Center 570.96$	Maintenance Center 312.14$	storage center 460.38$	Production Center 668.97$	Rework for fake products 509.36$
Super B	7,993.42	21,537.80	29,528.36	35,455.29	6,112.29
normal	5,138.62	14,982.82	23,069.03	33,448.39	5,602.94
Medium	1,712.87	3,433.56	15,686.94	5,351.74	1,018.72
for stazz	5,138.62	14,982.82	21,223.51	24,082.84	5,093.58
super	4,567.67	11,549.26	18,455.22	18,062.13	3,056.15
For cheese first	1,712.87	4,994.27	11,534.51	8,027.61	1,018.72
Ghost B	1,141.92	1,560.71	8,766.23	3,344.84	509.36
ghost	21,696.41	58,370.57	65,054.66	89,641.67	12,224.59
presidential	7,422.46	21,537.80	24,453.17	31,441.48	4,074.86
Royal	3,425.75	8,427.84	15,686.94	12,041.42	1,018.72
Should	1,141.92	1,560.71	5,075.19	4,013.81	509.36
Hey Quality	1,712.87	3,433.56	11,534.51	6,020.71	1,018.72
Total indirect costs	**62,805.41**	**1,66,371.73**	**2,50,068.28**	**2,70,931.92**	**41,257.99**

Note: Prepared by the researcher based on the tables 6 & 7

After listing the industrial costs for all dentures, we can calculate the production costs of Super B sponge

According to the ABC system, the following table shows the production costs of Super B sponge

Table 9: Super B sponge production costs according to ABC system

Super B sponge		
Statement	Total costs ($)	cost per unit ($)
The cost of the direct (primary) drugs used	19,37,027.51	93.65
The cost of direct industrial wages	9,856.00	0.48
For the most direct industrial costs	19,46,883.51	94.13
Industrial costs, without the ad hoc directives	1,00,627.16	4.87
Total industrial costs of production	20,47,510.67	98.99

Note: Prepared by the researcher based on the previous tables

We note from the above table that the product "Super B Sponge" bears a unit cost of 98.99$, and we also note that the cost of used raw materials amounted to 1,937,027.51$ as a result of transferring

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some non-direct industrial costs, such as transportation and customs expenses for raw materials, to direct costs.

In addition to separating the cost of direct industrial wages amounting to 9,856.00$ from the total direct industrial costs of the company amounting to 1,514,901.97$.

The table shows the difference in the costs of producing Super B sponge according to the costing system applied in the company and the ABC system.

Table 10: comparison between the costs of producing Super B sponge according to the costing system applied in the company and the ABC system

Statement	The costing system currently applied in the company ($)	System (ABC) ($)	deviation	skew %
	1	2	(1-2) =3	
cost per unit	104.62	98.99	5.63	5

The previous table shows that the plasticizing unit of Super B sponge was incurring additional costs estimated at 5%. Applying the ABC system showed us that the plasticizing unit of Super B sponge bore only 98.99$. This gentleness indicates that the company had additional costs per barrel of Dentures that were not directly or indirectly related to it, such as administrative and general expenses, and marketing expenses. The industrial costs were distributed indirectly based on the actual production volume, which led to a barrel of denture with a volume greater than the industrial costs. There is no directness, and therefore the results cannot be relied upon to make rational administrative decisions that benefit the ninetieth process, since they are not based on a sound basis. It seemed that the applied research aimed at attempting to design a model for the ABC system and its application to identify its role in reducing costs, and accordingly we will try by listing the activities of the departments related to production, through which we can reduce costs, and based on that, we have divided the costs of activities into the following:

– **Value adding activities**: These are the activities considered necessary and essential to describe the production process, such as purchasing raw materials.

– **Non-value-adding activities**: The activities whose existence is considered essential to the production process, that is, they do not add any value to the final product, or the elimination or reduction of these activities does not affect the value of the final product, including:

The activity of storing raw materials, in-process dentures, or finished dentures: We discovered that the company retains large amounts of inventory, whether raw materials, operating products, or finished products, and that the company charges its products with all of the aforementioned storage costs, increasing their cost. According to Table 5), the storage activity for the company's work costs amounted to 250,068.28$. As a result, cancelling or reducing the activity of storing raw materials and products will result in a cost reduction, so we advise the company to reduce storage costs by resorting to the use of the production system just in time (JIT).

Maintenance activity: The company's maintenance department is concerned with the bunker and the holidays and stoppages that are exposed to these machines and production equipment, and the company loads its products with these drums, as it is assumed that those drums are not completely barreled on the dung, and they are barreled on the departments that benefit from maintenance.

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According to Table 5), the maintenance activity of the company's work costs amounted to (66722.81 + 46216.97), which is equivalent to 112,939.78 $, so we recommend that the company train the working personnel to operate the machines and take care of them on a daily basis, in addition to paying attention to the proper methods of lubrication and lubrication. This is done to reduce machine breakdowns and extend machine life, thereby lowering maintenance costs.

Re-work activity of the defective units: This activity involved the re-manufacturing of damaged units during the manufacturing process, and it was discovered that the damage rate is equivalent to 20% of the production rate of 100% based on the information provided by the company. We can see from Table 5) that the activity of re-working the sub-units of the company's work costs $41,257.99, and it is an activity that has no value for customers, so it must be excluded; however, the company may not be able to eliminate it completely, so it was reduced from $41,257.99 to $41,257.99. It is efficiently collected and extracted by employing the Kaizen method (continuous improvement) to eliminate as much damage and loss in operations as possible, so as not to reduce the operation's duration, cost, and quality.

Based on the foregoing, we conclude that many non-value-added activities exist, but this does not imply that they should be eliminated entirely. They could, instead, be reduced in size and eliminated more efficiently.

Based on Table 5), which shows the costs of each storage activity, maintenance activity, and re-work activity, $ for the defective units was deducted by an amount of 424.266.25$ for storage costs, maintenance costs, and 112,939.78$ for re-work costs. This means that the percentage of increase in loading is 51%, and by recalculating the total costs after subtracting the amount of the increase, the reduction will be 387,169.27$, and based on the previous steps, we have attempted to reduce the costs of the company to conduct the research by dividing its activities based on their added value, taking into account that the costs of storage, maintenance, and re-work for the original units and capacity are 404,266.25 $, including non-labor costs.

CONCLUSIONS AND RECOMMENDATIONS:

Conclusions:

The researchers reached a number of conclusions, as follows:

1. One of the most important reasons for the failure of the economic units in Iraq in general and the Kurdistan Region in particular is the failure to adopt strategies for increase, and it is sufficient to prepare short-term plans that may or may not be achieved.
2. The application of the ABC system in the economic unit leads to helping it avoid the various shortcomings in its applied system for calculating costs.
3. The company did not conduct the research in applying the strategy of cost leadership using the ABC system, nor did it have awareness of the mechanism of applying this strategy in achieving the strategic goals, in addition to the lack of cadres and qualified employees who enabled them to implement it.
4. Failure of the company's management and officials to realize the advantages and benefits of applying the ABC system as an innovative costing system, as it was one of the few industrial costs that were not handled fairly, which leads to a reduction in costs and support for competitive advantage and continuity.

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5. By informing the researchers about the nature of the production process in the company's factory, she noticed that the manufacturing department relies heavily on imported raw materials from abroad, while if it had relied on local raw materials, this would have contributed to a significant reduction in production costs.

Recommendations:

Based on the presentation and discussion of the conclusions, several recommendations can be made as follows:

1- The need for economic units in Iraq to adopt an increase strategy and not follow short-term plans.

2- The need to pay attention to applying the ABC system in economic units that offer companies prices to reduce costs and increase productivity.

3- Industrial companies should follow a cost leadership strategy using the ABC system in order to achieve more effectiveness and greater productivity.

4- The necessity of developing workers in companies, the benefits and advantages of applying the ABC system through training courses and workshops within industrial companies.

5- Encouraging factories and companies not to rely on raw materials from outside the country by encouraging and supporting internal raw materials from.

REFERENCES:

1. Abdi, E. & Jeddi, A. R. & Renani, N. G. & Azarpajuh, A. & Ghasemi, I., (2016), "Relationship Among 5M in the Value Chain of Nanotechnology and Cost Leadership Review (INJODEMAR), Vol.14, No.1, pp. 151-163.
2. Al-Badr, Ismail Muhammad Salih, (2017), "The effect of applying the cost calculator based on activities in enhancing the profitability of Jordanian food industries companies - a case study on Anabtawi Sweets Company," Master's thesis, Faculty of Business, Middle East University, Jordan.
3. Al-Gharib, Alghan Farouk, (2021), "The role of strategic management in Persin, the competitiveness of its application to the banking sector in the Sultanate of Oman," Scientific Journal of Commercial and Environmental Studies, (1): 659-722.
4. Amena, S., Zinal, W.S.J. and Baqi, B. (2020) *The use of Lean thinking towards improving the effectiveness of the ...* Available at: https://ww.ijicc.net/images/vol_13/Iss_11/131184_Amen_2020_E_R.pdf.
5. Baqi, B., Zinal, W.S.J.Z. and Amen, S. (2020) *Efficacy financial disclosure in promotion Accounting Learning - an ...* Available at: http://161.35.1.212:7001/cgi-bin/koha/opac-detail.pl?biblionumber=2708.
6. Bashnen, Ziryab Abdullah Al-Awad, (2020), "Integration between the application of the standard costing system and the activity-based costing system and its impact on profitability, an applied study on a sample of industrial companies in Sudan," PhD thesis, Graduate School, Shendi University, Sudan.
7. Bouchalita, Badr El-Din and Laqat, Hani, (2020), "The effect of applying the costing system based on activities in increasing the profitability of the economic institution, a case study of

ISSN 2576-5973 (online), Published by "Global Research Network LLC"
under Volume: 6 Issue: 10 in Oct-2023 https://www.globalresearchnetwork.us/index.php/AJEBM

the African Glass Company," Master's thesis, Faculty of Economic, Commercial and Technical Sciences, University of Muhammad al-Siddiq bin Lay Jijel, Algeria.

8. Boujnah, Jigga and Barbara, Noura, (2018), "Using a cost-computing system based on ABC activities in service institutions, the case of the Timi Hotel Services Corporation in Adrar", - Master's thesis, Faculty of Economic and Commercial Sciences, University of Ahmed Deraya, Adrar, Algeria.
9. Bvumbi, Mulalo Naome, (2017), "An Analysis of the Implementation of Activity Based Costing at the Water Trading Entity", Master Dissertation, Department of Management Accounting,College of Accounting Sciences.
10. Chepchirchir, A. B. & Omillo, F. & Munyua, J., (2018), "Effect of Cost Leadership Strategy on Organizational Performance of Logistics Firms at Jomo Kenyatta International Airport, Kenya", European Journal of Management and Marketing Studies, Vol. 3, No. 3, pp. 76-86.
11. de Almeida, I. N. & de Assis Figueredo, L. J. & Soares, V. M. & Vater, M. C. & Alves, S. & da Silva Carvalho, W. & Kritski, A. L. & de Miranda, S. S., (2017), "Evaluation of the Mean Cost and Activity Based Cost in the Diagnosis of Pulmonary Tuberculosis in the Laboratory Routine of a High-Complexity Hospital in Brazil", Original Research, Vol. 8,No. 249, pp. 1-7.
12. Hamad, Mawaddah Awad Tow, (2018), "The Role of Responsibility Accountability as a Mediator in the Relationship between the Value Engineering Method and the Competitive Cost Leadership Strategy: A Field Study on Some Sudanese Industrial Companies," Master's thesis, College of Graduate Studies, Sudan University of Science and Technology, Sudan.
13. Hariharan, C. A. K. & Balakrishnan, C. A. R., (2020), "Strategic Cost Management & Performance Evaluation (SCMPE): CA Final- Old & New Syllabus", 15th Edition, Wolters Kluwer, India.
14. Horngren, Ch. T. & Datar, S. M. & Rajan, M. V., (2021), "Cost Accounting: A Managerial Emphasis", 17th Edition, Pearson Education, London, The United Kingdom.
15. Jaf, Rizgar Abdullah and Ahmed, Safaa Nawzad and Omar, Banar Ibrahim, (2020), "The Impact of Strategic Analysis of Operational Income in Ibzad (Administrative Decisions, a Case Study in the Kawa Carpentry Factory in Lazafza, Erbil, for the Manufacturing of Wooden Counters for Kitchens," Iraqi Journal of Administrative Sciences, College of Administration and Economics, University of Karbala, Iraq - 67 (128) 147.
16. Kadouri, Houda Salsan, (2017), "The Possibility of Applying the ABC Activity-Based Costing System: A Parallel Study of the Elements and Causes - The Case of Economic Institutions in the State of Sidi Bel Abbes", Ph.D. .Thesis
17. Kodeid, Suleiman Kumi Koko, (2016), "Target cost and its role in the cost leadership strategy, a field study on a sample of industrial companies in the state of Khartoum," Master's thesis, College of Graduate Studies, Sudan University of Science and Technology, Sudan..
18. Mohamed, M. B. & Ndinya, A. & Ogada, M., (2019), "Influence of Cost Leadership Strategy on Performance of Medium- Scale Miners in Taita Taveta County, Kenya", International Journal of Development and Management Review 14 (1), 151-163.

ISSN 2576-5973 (online), Published by "Global Research Network LLC"
under Volume: 6 Issue: 10 in Oct-2023 https://www.globalresearchnetwork.us/index.php/AJEBM

19. Quesado, P. & Silva, R., (2021), "Activity-Based Costing (ABC) and its Implication for Open Innovation", Journal of Open Innovation: Technology, Market, and Complexity, Vol. 7,No. 1, pp. 1-20.
20. Quesado, Patrícia & Silva, Rui. (2021). Activity-Based Costing (ABC) and Its Implication for Open Innovation. Journal of Open Innovation: Technology, Market, and Complexity. 7. 41. 10.3390/joitmc7010041.
21. Samah, Osama and Belhoul, Adel, (2018), "The role of application of the activity-based cost calculator as a tool for monitoring weighting in the economic institution, a case study of the "Philpa" institution for the production of yarns - Al-Dalouneh, Batna", Master's thesis, Faculty of Economics - Commercial and Weighting Sciences, Muhammad University Siddik Benli - Jijel, Algeria.
22. Valipour, H. & Birjandi, H. & Honarbakhsh, S., (2012), "The Effects of Cost Leadership Strategy and Product Differentiation Strategy on the Performance of Firms", Journal of Asian Business Strategy, Vol. 2, No. 1, pp. 14-23.
23. Zinal, W.S.J. (2023) *Predicting the financial failure of commercial banks using the Kida model and Sherrod model. (an analytical study in a number of Iraqi commercial)(banks)*, *World Economics and Finance Bulletin*. Available at: https://www.scholarexpress.net/index.php/wefb/article/view/2476.

ISSN 2576-5973 (online), Published by "Global Research Network LLC"
under Volume: 6 Issue: 10 in Oct-2023 https://www.globalresearchnetwork.us/index.php/AJEBM