



Measuring and Analyzing Marketing Costs based on Activities and their role in Pricing Products and Improving Profitability (Applied Study in the Qadisiyah Dairy Factory)

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ABSTRACT

The research aims to measure and analyze marketing costs on the basis of activities to provide appropriate information for product pricing, diagnose, describe, and explain the nature of the link between marketing expenses and their contribution to increasing the profitability of the company's products in a way that is in line with the advancements and modifications that have accompanied the modern business environment. The research was applied at Al-Qadisiyah Dairy Factory because the factory had many marketing costs that were not accurately measured or analyzed, which negatively affected pricing decisions and, in turn, profitability. The research was applied in the factory for the period (2020-2022). The study reached several conclusions, the most significant of which was that measuring and analyzing marketing costs by activity can provide appropriate accounting information, enabling products to be priced and profitability to be improved in a way consistent with the demands of the modern business environment.

Keywords: *Marketing costs, Advertising, product pricing, profitability, Dairy Factory*

INTRODUCTION

Cost accounting is concerned with tracking, counting and analyzing all cost elements in order to provide the necessary accounting information for making pricing decisions and thus help in improving profitability indicators. All of the charges businesses incur to market and sell their goods, as well as build and promote their brands, are referred to as marketing costs. These expenses are tracked and analyzed to identify budgetary risks and forecast these costs, and thus assess risks in the marketing budget, because marketing spending is discretionary spending so it can significantly affect the profit of the company, despite the importance of the marketing function and its direct impact on production planning, this important function and the expenses it entailed did not receive attention, and in order to complete the trend towards industrial cost control, specialist research has lately emerged that addresses marketing expenses from a variety of perspectives with the goal of managing these costs and rationalizing management in the field of marketing decisions.

RESEARCH METHODOLOGY

This paragraph will discuss the research problem, its goals, significance, hypothesis, scientific methodology, and sample.

Research Problem

The problem of the research is the lack of interest of the Iraqi industrial companies in marketing costs in terms of measurement and analysis, and therefore the lack of appropriate information for these companies in order to assist in making decisions regarding product pricing and thus the negative impact on profitability. The research problem can be expressed through the following question: Measuring and analyzing marketing costs based on activities helps in pricing products and improving profitability?

Research Importance

The significance of tracking and assessing marketing expenditures is what makes the research so important on the basis of activities in order to help provide appropriate information for pricing products and improving profitability in a manner consistent with the changes and developments accompanying the contemporary business environment.

Research Objectives

In order to provide relevant information for product pricing, diagnose, define, and interpret the nature of the relationship between marketing costs, and show its role in enhancing the profitability of the company's products in a way that is consistent with the changes and developments that accompanied the modern business environment, the research will measure and analyze marketing costs based on activities.

Research Hypothesis

The research is based on a basic hypothesis as follows: (The measurement and analysis of marketing costs based on activities can help in pricing products and improving profitability in a way that complies with the demands of the modern corporate environment).

Research Approaches

The research relies on the descriptive and analytical approaches, so the descriptive approach was used to present and study the published contributions of researchers represented in books, periodicals, theses and university dissertations that are related to the subject of the research and test its hypothesis, as well as the application of the analytical method when examining the research sample's data.

Research Sample

One of the establishments of the Iraqi Ministry of Industry and Minerals is Al- Qadisiyah Dairy Factory that was selected as a sample for this study., for several reasons, the most important of which were: In the laboratory for the period (2020-2022).

LITERATURE REVIEW

During this paragraph, Prior research on the subject will be discussed, along with an indication of the current study's contribution and the degree to which it differs from earlier research.

The following can help to clarify earlier research on the subject of the current study:

- 1. Study (Al-Ani, 2005) entitled (Analysis and Control of Marketing Costs in the General Establishment for the Glass and Ceramic Industry in Iraq):** The study aimed to analyze and control the marketing costs in the Establishment by analyzing deviations and indicating the extent of their impact on the final net profit of the establishment. The study concluded that Analysis and control of marketing costs helps in increasing the company's net profits and improving its profitability.

2. **A study (Muhammad, 2009) entitled (Problems of measuring marketing costs in the industrial sector - a case study of the Arabian Chicken Production and Manufacturing Company Ltd.):** The study aimed to measure and control marketing costs and demonstrate the impact of this measurement on raising the productive efficiency of marketing factors, which is positively reflected on the share market and profitability to achieve the objectives of the enterprise. One of the most important results of the study is the absence of a marketing cost system at the Arabian Chicken Production and Manufacturing Company Ltd., and the company's lack of interest in marketing costs and in raising cost awareness among employees.
3. **A study (Al-Obaidi, 2010) entitled (The importance of reducing marketing costs and controlling them for business organizations - an applied study in Zain Telecom Company):** The study aimed to seriously contribute to presenting a conceptual presentation that deals with the concept of cost in general and the concept of marketing costs in particular as an important part of The total cost of the final product, and an indication of its basic classifications and the main characteristics of these costs, in addition to identifying the interest of the studied company in the marketing activity of its products. The study concluded that reducing marketing costs affects the company's total costs, its sales volume, its level of profits, and its competitive position in the market.
4. **A study (Al-Obaidi et al., 2011) entitled (The Impact of Using Electronic Commerce in Reducing Marketing Costs - An Applied Study in Zain Telecom Company):** The purpose of the study was to show how employing electronic commerce can save marketing expenses and have an effect on sales and profitability for the business. The study came to the conclusion that e-commerce is one of the most significant ways to cut expenses in general and marketing expenses in particular. This is because e-commerce enables businesses to market their products electronically, which activates trade, boosts sales, speeds up product marketing, saves time and effort, and minimizes marketing expenses.
5. **A study (Ali, 2016) entitled (The Role of Marketing Costs in Maximizing Corporate Profits - A Field Study on Companies Listed in the Khartoum Stock Exchange):** The purpose of the study was to identify, characterize, and clarify the nature of the connection between the impact and the shift in marketing expenses on corporate profits and to indicate how to classify and analyze And load the elements of marketing costs on products, and learn about the importance of controlling the total

costs of companies in general, and, specifically, marketing expenses. The study came to the conclusion that measuring and analyzing marketing expenses can aid in giving relevant data that can be used to make decisions that maximize corporate earnings.

6. **A study (Hadi & Shaker, 2020) entitled (The Impact of Marketing Costs on the Profitability of Insurance Companies - Applied Research in the National Insurance Company):** The aim of the study is to study marketing costs with its various items, as well as defining profitability and its relationship to marketing costs in the portfolios of the National Insurance Company. The study concluded that the practical awareness in the application and use of marketing programs still suffers from a lack of interest within the company's priorities, and that the increased interest of officials in insurance companies in controlling marketing costs leads to the implementation of a correct marketing policy through which the insurance service is delivered to the largest possible social segment.

The Contribution of Current Research and Its Difference from Previous Studies

The following explains the present study's contribution and how it differs from earlier research:

1. 1. The issue of measuring and analyzing marketing expenses based on activities was the focus of the current study in order to help give relevant information for pricing decisions, hence increasing earnings and improving profitability.
2. Contribute to laying down a rationale for measuring and analyzing marketing costs based on activities in Iraqi industrial companies in general and the Qadisiyah Dairy Factory in particular, and benefiting from that in pricing products and improving profitability.

The Concept and Importance of Marketing Costs

Expenses associated with storing, advertising, promoting, transporting, and distributing the entire production, gathering its value, and conducting marketing research are all considered marketing costs. Therefore, it refers to the expenses associated with a series of actions, starting with the preparation of packaged goods for processing and concluding with the renewal of returned empty packages when they are ready for use again (Al-Bakri, 2012).

Costs associated with selling and disposing of products are included in marketing costs, which start when the products are finished and ready for sale. These costs are all directly related to

marketing the company's product until it reaches the customer, including storage costs, salesmen's salaries, advertising, and distribution costs (Sharma & Husain, 2015).

The marketing costs are the costs of direct selling activities, the costs of advertising and sales activation activities, the costs of transportation activities, the costs of storage activities, and the costs of credit and collection activities, that is, they are all costs that occur after the production process until the final delivery of the good or service to the customer (Thomas, 2016).

Most of the items of marketing costs are indirect, which leads to the difficulty of linking them to the cost of the product, and marketing costs are affected by multiple external factors such as stagnation in the market, competition, the emergence of new products, and government action through a variety of laws to restrict imports and exports or set pricing for specific goods (Komissarov et al., 2021).

The importance of the company's marketing costs can be explained as follows (Ali, 2016; Houston, 2017).

1. Comparing marketing costs with production costs, identifying unjustified spending resources in these costs, and working to reduce costs associated with activities that do not add value.
2. Identify the social, natural, technological, economic, and legal factors that affect these costs, and work to deal with them efficiently.
3. Determining storage and transportation capacities and & other tasks, as well as creating marketing strategies based on an analysis of marketing expenses to meet the company's goals.
4. Reducing marketing costs associated with activities that do not add value, while maintaining the provision of the best services to customers in a manner that achieves their satisfaction.
5. Provide management with detailed data on marketing costs in order to plan and implement the company's marketing function, as well as control its cost components.

Based on the aforementioned, it can be stated that marketing costs are expenses associated with the company's marketing activities incurred after the production process is complete. These expenses include advertising, promotion, storage, distribution, sale, transportation, studies, marketing research, and other marketing-related expenses.

Factors Influencing Marketing Costs and the Reasons For their Increase

There are several factors that affect marketing costs positively or negatively, and these factors can be explained through the following: (Maarouf, 2013; Kanata, 2019)

1. **Perishability of goods:** as perishable goods and products, especially when transported over long distances or stored for a long time, require special care.
2. **Seasonal production:** Certain commodities need to be transported and stored since they are produced during specific seasons, particularly agricultural products.
3. **Product homogeneity:** The greater the homogeneity of the products, the lower the costs of sorting and grading.
4. **Risk:** The more risk involved in product marketing, the higher the company's marketing expenses.
5. **Buying and selling:** where identifying the best markets for sale requires effort, as well as advertising and advertising of products, which leads to an increase in costs.
6. **Manufacturing operations:** The more manufacturing operations of commodities, the more this leads to an increase in costs.
7. **Brand:** Advertising expenses are decreased when consumers are aware of the product.
8. **Sales quantity:** The costs decrease as the commodity's sales volume increases.
9. **The type of dealers:** Large corporations or institutions that buy the commodities will pay less than individuals or shops.
10. **Price levels:** When prices are stable, the product's portion of marketing expenses is almost equal; however, when prices are low, the product's share of marketing costs rises, and vice versa.

There are many reasons that led projects to bear increasing marketing costs, and this increase in marketing costs led to increased interest in studying marketing costs, and subjecting its various elements to control, and they can be summarized as follows: (Ali, 2016; Kim & Daewoo, 2020)

1. **The distance between the customer and the company:** The greater the distance between the company and the customer, the more this results in higher marketing expenses due to higher shipping costs.
2. **Storage:** If the production is continuous and not based on customer requests, the issue then results in higher marketing expenses due to higher storage expenses.
3. **Competition:** The more intense the competition between companies, the more This will result in higher marketing expenses due to higher advertising and storage expenses.

4. **Changing tastes and behaviors of customers:** Changing tastes and behaviors of customers leads to an increase in sales and distribution problems as a result of the difficulty of knowing salesmen, and thus increasing marketing costs through increasing costs related to marketing research.

It is clear from the foregoing that there are a number of factors affecting marketing costs, namely perishable goods, seasonality of production, homogeneity of the product, risk, buying and selling, manufacturing operations, variety, quantity of sales, quality of dealers, price levels, and marketing costs increase due to the customer's distance from the company. And storage and competition and change the tastes and behaviors of customers.

Measurement and Analysis of Marketing Costs Based on Activities

Marketing cost analysis is the organization of marketing cost figures to provide appropriate information for decision-making. The results of cost analysis can be summarized as follows: (Rust et.al., 2014; Sonya, 2015; Blather & Leighton, 2020)

1. Distribution of expenditures on marketing activities and evaluation of marketing methods, marketing policies and procedures.
2. Determining the profitability of different products and different customers, and determining the relationship between cost and order volume for the company's products during a specified period.

In order to quantify and evaluate marketing expenses based on activities, it is necessary to define marketing activities with defining the cost items that each activity contains, and then these costs are distributed to products using appropriate cost vectors, as shown in the following: (Al-Zwaini, 2007; Al-Obaidi et al., 2011; Hawkins, 2019).

1. **Direct selling activities costs:** Direct selling activities are a set of activities through which products are sold to customers directly without the intervention of any mediator in this process. The following can help to clarify the costs associated with direct selling activities:
 - a. Salesmen's salaries.
 - b. Salesmen commission.
 - c. Salesmen's travel costs.
 - d. Other costs of sales management.

2. **Costs of advertising activities and sales promotion:** Advertising activities and sales promotion aim at marketing the product and disseminating it among people, through which the company can achieve spread and increase sales. The following can help to clarify the expenses associated with these activities:
 - a. Advertising costs.
 - b. Salaries of workers in the sales activation department.
 - c. Sample costs.
 - d. Other costs of sales promotion management.
 - e. Exhibition rental.
3. **Costs of transportation activities:** Transport activities aim to transport products from the company to customers, taking into account the arrival of these products to customers at the time agreed upon between the company and the customer. The costs of these activities can be clarified through the following:
 - a. Rolling and packing costs.
 - b. Overseas transportation costs.
 - c. Delivery costs.
4. **Costs of warehousing activities:** Warehousing activities are the activities through which products ready for sale are preserved until they are delivered to customers. Storage may be inside the company or in its showrooms. The costs of these activities can be clarified through the following:
 - a. Storage and handling costs of finished production.
 - b. Salaries of workers on warehousing activities.
 - c. Warehouse rent.
 - d. Electricity fees.
5. **Costs of credit and collection activities:** Credit and collection activities are the activities carried out by the collection department in the company in order to collect the value of the products sold to customers. The costs of these activities can be explained through the following:
 - a. Collection costs.
 - b. Bad debt.

Based on the foregoing, it can be said that there are five marketing activities, which are direct selling activities, advertising and sales activation activities, transportation activities,

warehousing activities, and credit and collection activities. In order to help reduce them, then these costs are distributed to products using appropriate cost vectors.

The Role of Marketing Costs in Pricing Products and Improving Profitability

The ultimate consumer's price is used to calculate the product's part through marketing expenses, and the share of intermediaries is also calculated. Furthermore, the effectiveness of the marketing apparatus is reflected in marketing costs; high marketing expenditures may be a sign of low marketing efficiency, and vice versa. This is true for every marketing function or procedure independently (Al-Kaabi, 2003).

Depending on the kind of decision made, different costs can be helpful when making selections about things. The proper method for allocating marketing expenses to products may also be determined by the nature of the decision and the costs associated with making it. This is done in order to determine the appropriate costs for each decision pertaining to the company's products and to explain the role of methods of distributing marketing costs in making these decisions (Young & Suzuki, 2012).

Pricing decisions are among the crucial operational choices made by the business since it must decide on the selling prices of its goods in order to sustain its operations. To find the best selling price, it is necessary to understand the relationship between cost and selling price, which is related to market conditions and competition. In order to help determine the right selling price for both the economic unit and the customer, the selling price is determined by adding a certain margin on the cost (Manes & Anges, 2009:5).

Thus, the distribution of marketing costs to products will help in making pricing decisions as a result of the dependence of these decisions on cost, and pricing decisions differ greatly in their content and time dimension, and therefore there is no single method for calculating cost that is generally suitable for making pricing decisions, that is, management. Different measures of product cost can be used in a way that helps them in making different pricing decisions.

An Introductory Brief About Al-Qadisiyah Dairy Factory

Al-Qadisiyah Dairy Factory is a division of the General Company for Dairy Industry under the Iraqi Ministry of Industry and Minerals. The firm was founded in 1982 and specializes in producing high-quality dairy products that may satisfy consumer demands. Raw milk, which is a natural blend of water, fat, non-fat solids, or solids like proteins and lactose, is the primary

ingredient for factory products in terms of the nature of the production processes. The following explains the steps involved in producing industrial goods, such as grafted milk and sterilized milk:

1. Sorting and standardization stage: During this stage, chemical and bacteriological tests are performed on raw milk by the Quality Control Department, such as fat percentage test, acidity test, solids test, methylene test, and others.
2. The stage of manufacturing sterilized milk and grafted milk: During this stage, milk is received from the raw in the previous stage and sent to special tanks. The milk is then pumped into the homogenization device at a temperature of 50–60 degrees Celsius, cooled to a temperature of 35 degrees Celsius, sent to the milk tanks, and finally packaged after being sterilized for 15 seconds at 140 degrees Celsius inside a heat exchange device.

Measuring the Marketing Costs in the Qadisiyah Dairy Factory

For the purpose of measuring the marketing costs in the Qadisiyah Dairy Factory, it is necessary to determine the marketing activities that the factory carries out during the period from 2020 to 2022, with the identification of the cost items that each activity contains, as there are five marketing activities in the factory, which are direct selling activities, advertising activities and activation Sales, transportation activities, warehousing activities, and credit and collection activities. The marketing activities carried out by the Qadisiyah Dairy Factory and the associated costs during the years of research can be clarified through the following:

First: Costs of direct selling activities: The costs of direct selling activities consist of salesmen's salaries, salesmen's commission, salesmen's travel costs, and other sales management costs. The costs of direct selling activities at the Qadisiyah Dairy Factory for the period (2020-2022) can be clarified through The following schedule:

Table 1: Costs of direct selling activities at the Qadisiyah Dairy Factory for the period (2020-2022)

No.	Details	2020	2021	2022
1	Salesmen's salaries	1235000	1400000	1437000
2	Salesmen commission	216000	311000	275000
3	Salesmen travel costs	200000	175000	312000
4	Other costs of managing sales	185000	204000	216000

	Total	1836000	2090000	2240000
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Source: prepared by the researchers based on the costs department in the laboratory.

It is noted from Table 1 that the costs of direct selling activities for the years 2020, 2021, 2022 amounted to (1,836,000), (2,090,000) and (2,240,000) dinars, respectively, which indicates the interest of the research sample laboratory in direct selling activities.

Second: Costs of advertising activities and sales activation: The costs of advertising activities and sales activation consist of advertising costs, salaries of workers in the sales promotion department, sample costs, other costs of sales promotion management, and showroom rent. These costs can be clarified in the Qadisiyah Dairy Factory for the period (2020-2022).) through the following schedule:

Table 2: Costs of advertising activities and sales promotion at the Qadisiyah Dairy Factory for the period (2020-2022)

No.	Details	2020	2021	2022
1	Advertising costs	217000	320000	355000
2	Employee salaries to stimulate sales	708000	800000	1106000
3	samples costs	120000	180000	160000
4	Other costs of promoting sales	80000	75000	90000
5	Exhibition rental	500000	500000	500000
	Total	1625000	1875000	2211000

Source: prepared by the researchers based on the costs department in the laboratory.

Table 2 demonstrates that the research sample's interest in advertising and sales promotion activities is demonstrated by the fact that the costs of these activities for the years 2020, 2021, and 2022 were 1,625,000, 1,875,000, and 2,211,000 dinars, respectively.

Third: Costs of transportation activities: The costs of transportation activities consist of wrapping and packing costs, transportation costs abroad, and delivery costs. The costs of transportation activities in the Qadisiyah Dairy Factory for the period (2020-2022) can be clarified through the following schedule:

Table 3: Costs of transportation activities at the Qadisiyah Dairy Factory for the period (2020-2022)

No.	Details	2020	2021	2022
1	Rolling and packing costs	185000	116000	166000
2	Overseas transportation costs	700000	453000	578000
3	Delivery costs	134000	167000	188000
	Total	1019000	736000	932000

Source: prepared by the researchers based on the costs department in the laboratory.

It is clear from Table 3 showed the transportation expenses for the years (2020, 2021, and 2022) were (1,019,000, 736,000, and 932,000) dinars, respectively. This shows how far away the consumers were from the research sample manufacturer, which resulted in higher transportation expenses. to promptly deliver goods to clients.

Fourth: Costs of storage activities: The costs of storage activities consist of the costs of storage and handling of complete production, salaries of workers in storage activities, warehouse rent, electricity fees, and the costs of storage activities in the Qadisiyah Dairy Factory for the period (2020-2022) can be clarified through the following schedule:

Table 4: Costs of storage activities in the Qadisiyah Dairy Factory for the period (2020-2022)

No.	Details	2020	2021	2022
1	Storage and handling costs for finished production	206000	289000	251000
2	Salaries of workers on warehousing activities	1670000	1815000	1945000
3	Warehouse rent	650000	650000	650000
4	Electricity fees	1280000	1310000	1350000
	Total	3806000	4064000	4196000

Source: prepared by the researchers based on the costs department in the laboratory.

It is noted in Table 4 that the costs of warehousing activities for the years 2020, 2021, and 2022 amounted to (3,806,000), (4,064,000) and (4,196,000) dinars, respectively, which indicates that the products were not sold directly to customers, which led to incurring storage costs. extra.

Fifth: The costs of credit and collection activities: The costs of credit and collection activities consist of the costs of the collection department and bad debts. The costs of credit and

collection activities at the Qadisiyah Dairy Factory for the period (2020-2022) can be clarified through the following schedule:

Table 5: Costs of credit and collection activities at the Qadisiyah Dairy Factory for the period (2020-2022)

No.	Details	2020	2021	2022
1	Collection department costs	1178000	1182000	1188000
2	Bad debt	50000	610000	40000
	Total	1228000	1792000	1228000

Source: prepared by the researchers based on the costs department in the laboratory.

Table 5 shows that the costs of credit and collection activities for the years 2020, 2021, and 2022 were in the amount of (1,228,000), (1,792,000), (1,228,000) dinars, respectively, which indicates that the research sample factory sold part of its products on credit.

After determining the costs of each marketing activity, the marketing costs of the Qadisiyah Dairy Factory will be clarified for the period (2020-2022), as shown in the following schedule:

Table 6: Marketing costs in the Qadisiyah Dairy Factory for the period (2020-2022)

No.	Details	2020	2021	2022
1	Direct selling activities costs	1836000	2090000	2240000
2	Advertising and sales promotion activities costs	1625000	1875000	2211000
3	Transportation activities	1019000	736000	932000
4	Warehousing activities costs	3806000	4064000	4196000
5	Credit and collection activities costs	1228000	1792000	1228000
	Total	9514000	10557000	10807000

Source: prepared by the researchers based on the costs department in the laboratory.

It is noted in Table 6 that the marketing costs for the years 2020, 2021, and 2022 were in the amount of (9514000), (10557000), and (10807000) dinars, respectively, which indicates the interest of the laboratory, the research sample, in marketing activities and working to deliver products to customers on time. specified without delay.

Analysis Of Marketing Costs Based on Activities in the Qadisiyah Dairy Factory

In order to analyze marketing costs on the basis of activities in the Qadisiyah Dairy Factory, two steps can be followed, namely, calculating the rates of charging marketing costs on the basis of activities, and calculating marketing costs for each product. These two steps can be explained as follows:

First: Calculating the rates of charging marketing costs based on activities: For the purpose of calculating the rates of loading marketing costs on the basis of activities, it is necessary to determine the cost vector for each marketing activity, as the cost vector for direct selling activity is the number of units sold, and the cost vector for advertising and sales activation activity is the number of units Sold, the cost vector of the transportation activity is the number of times of transportation, the cost vector of the warehousing activity is the area, and the cost vector of the credit and collection activity is the number of times of collection. The loading rate is calculated by dividing the marketing activity costs by the total cost vector of the factory products. Marketing cost loading rates can be calculated based on the activities in the Qadisiyah Dairy Factory for the period (2020-2022) through the following schedule:

Table 7: Calculation of marketing cost allocated rates based on activities in the Qadisiyah Dairy Factory for the period (2020-2022)

Year	Activity	Cost driver	Costs (1)	Total cost driver (2)	rate 1÷2=(3)
2020	Direct selling activity	Number of units sold	1836000	120000	15.3
	Advertising activity and sales promotion	Number of units sold	1625000	120000	13.54166667
	Transportation activity	Transfer times	1019000	200	5095
	Storage activity	Space	3806000	1200	3171.666667
	Credit and collection activity	The number of collection times	1228000	45	27288.88889
	Total	-	9514000	-	-
2021	Direct selling activity	Number of units sold	2090000	140000	14.92857143
	Advertising activity and sales promotion	Number of units sold	1875000	140000	13.39285714
	Transportation activity	Transfer times	736000	220	3345.454545
	Storage activity	Space	4064000	1200	3386.666667
	Credit and collection activity	The number of collection times	1792000	50	35840
	Total	-	10557000	-	-
2022	Direct selling activity	Number of units sold	2240000	160000	14

	Advertising activity and sales promotion	Number of units sold	2211000	160000	13.81875
	Transportation activity	Transfer times	932000	300	3106.666667
	Storage activity	Space	4196000	1200	3496.666667
	Credit and collection activity	The number of collection times	1228000	60	20466.66667
	Total	-	10807000	-	-

Source: prepared by the researchers.

Table 7 shows a discrepancy in the rates of charging marketing costs due to differences in marketing costs and cost drivers across the research years. For example, it is noted that the number of units produced during the years 2020, 2021, 2022 was (120000), (140000), (160000) liters in a row, and so on for the other directives, and this is what led to the difference in the cost directives during the years of research.

Second: Calculating the marketing costs for each product: After the marketing costs loading rates were calculated on the basis of the activities in the previous step, in this step marketing costs will be calculated for each product by multiplying the marketing costs loading rate for each activity by the cost vector for each product, and it can be calculated Marketing costs for each product in the Qadisiyah Dairy Factory for the period (2020-2022) through the following schedule:

Table 8: Calculating the marketing costs for each product in the Qadisiyah Dairy Factory for the period (2020-2022)

Year	Activity	Rate	Cost driver		Cost (Rate * Cost driver)		Total cost
			UHT milk	Grafted milk	UHT milk	Grafted milk	
2020	Direct selling activity	15.3	72000	48000	1101600	734400	1836000
	Advertising activity and sales promotion	13.54166667	72000	48000	975000	650000	1625000
	Transportation activity	5095	150	50	764250	254750	1019000
	Storage activity	3171.666667	600	600	1903000	1903000	3806000
	Credit and collection activity	27288.88889	30	15	818667	409333	1228000
	Total	-	-	-	5562517	3951483	9514000
2021	Direct selling activity	14.92857143	84000	56000	1254000	836000	2090000
	Advertising activity and sales promotion	13.39285714	84000	56000	1125000	750000	1875000

	Transportation activity	3345.454545	132	88	441600	294400	736000
	Storage activity	3386.666667	600	600	2032000	2032000	4064000
	Credit and collection activity	35840	25	25	896000	896000	1792000
	Total	-	-	-	5748600	4808400	10557000
2022	Direct selling activity	14	112000	48000	1568000	672000	2240000
	Advertising activity and sales promotion	13.81875	112000	48000	1547700	663300	2211000
	Transportation activity	3106.666667	200	100	621333	310667	932000
	Storage activity	3496.666667	600	600	2098000	2098000	4196000
	Credit and collection activity	20466.666667	30	30	614000	614000	1228000
	Total	-	-	-	6449033	4357967	10807000

Source: prepared by the researchers.

It is clear from Table 8 that the share of the sterilized milk product from the marketing costs during the years 2020, 2021, and 2022 was in the amount of (5562517), (5748600), (6449033) dinars, respectively, either the share of the grafted milk product from the marketing costs during these years It was in the amount of (3951483), (4808400) and (4357967) dinars, respectively. Therefore, measuring and analyzing marketing costs by activity has helped Al-Qadisiyah Dairy Factory distribute marketing costs more fairly across products.

Pricing the Products of Al-Qadisiyah Dairy Factory and Determining the Profitability of Each Product

After the marketing costs have been distributed to the products of the research sample factory, the Qadisiyah Dairy Factory products will be priced for the period (2020-2022) as shown in the following schedule:

Table 9: Pricing the products of the Qadisiyah Dairy Factory for the period (2020-2022)

Details	2020		2021		2022	
	UHT milk	Grafted milk	UHT milk	Grafted milk	UHT milk	Grafted milk
direct materials	18212500	12432010	21440530	14008600	28548425	1211600
direct wages	12965530	8648920	15120416	10080055	20160213	8643315
FOH	6785098	5665112	4231907	4200128	5314907	4266004
Administrative costs	3612255	2105416	3800437	3060776	3977010	3112098
Marketing costs	5562517	3951483	5748600	4808400	6449033	4357967

Total cost	47137900	32802941	50341890	36157959	64449588	21590984
÷ number of units produced (liter)	72000	48000	84000	56000	112000	48000
= cost per unit (liter)	654.7	683.4	599.3	645.7	575.4	449.8
× (1 + 10% target profit)	1.10	1.10	1.10	1.10	1.10	1.10
Selling price per unit (liter)	720	752	659	710	633	495

Source: prepared by the researchers.

Table 9 shows that the total cost of sterilized milk products for the years 2020, 2021, and 2022 was (47,137,900), (50,341,890) and (64,449,588) dinars, respectively. Either the total cost of grafted milk products for these years was (32,802,941), (36,157,959) and (21,590,984) dinars, respectively. Thus, the unit cost of sterilized milk produced for the years 2020, 2021, 2022 was (654.7), (599.3), (575.4) dinars, respectively. Either the cost of the unit produced from milk fed to these The years were (683.4), (645.7), and (449.8) dinars, respectively. The factory management wants to obtain a profit margin of 10% of the cost of the product, and thus the selling price of the unit produced from sterilized milk for the years 2020, 2021, 2022 was an amount of (720), (659), (633) dinars, respectively, either the selling price of the unit The produced milk for these years was (752), (710), and (495) dinars, respectively.

After determining the selling price of one unit of the factory's products, the profitability of the Qadisiyah Dairy Factory products will be calculated for the period (2020-2022) as shown in the following schedule:

Table 10: The profitability of the Qadisiyah Dairy Factory products for the period (2020-2022)

Details	2020		2021		2022	
	UHT milk	Grafted milk	UHT milk	Grafted milk	UHT milk	Grafted milk
Number of units sold (liters)	72000	48000	84000	56000	112000	48000
× selling price per unit (liter)	720	752	659	710	633	495
= sales revenue	51840000	36096000	55356000	39760000	70896000	23760000

Subtract: Total costs	47137900	32802941	50341890	36157959	64449588	21590984
Net income	4702100	3293059	5014110	3602041	6446412	2169016
% Net income to sales revenue (profitability)	9.07%	9.12%	9.06%	9.06%	9.09%	9.13%

Source: prepared by the researchers.

It is noted in Table 10 that the net profit for the sterilized milk product for the years 2020, 2021, and 2022 was in the amount of (4,702,100), (5,014,110), (6,446,412) dinars, respectively. Either the net profit for the grafted milk product for these years was in the amount of (3,293,059), (3,602,041) and (2,169,016) dinars, respectively. Thus, the ratio of net profit to sales revenue for sterilized milk products for the years 2020, 2021, 2022 was (9.07%), (9.06%), (9.09%) dinars, respectively, either as a percentage The net profit to the sales revenue of the fed milk product for these years was (9.12%), (9.06%), (9.13%) dinars, respectively.

Based on the aforementioned, it can be concluded that measuring and evaluating marketing expenses by activity can provide relevant accounting data to price products and increase profitability in line with the demands of the modern business environment. As a result, the research hypothesis has been validated.

CONCLUSIONS

Through the theoretical and applied study, the following conclusions have been reached:

1. Marketing costs are all costs pertaining to the costs of advertising, promotion, storage, distribution, sale, transportation, marketing studies and research, and other marketing-related expenses that the business incurs after the production process is over.
2. There are a group of factors affecting marketing costs, which are the perishability of commodities, seasonality of production, price levels, etc., and marketing costs increase due to the customer's distance from the company, storage, competition, and changing tastes and behaviors of customers.
3. There are five marketing activities, which are direct selling activities, advertising and sales activation activities, transportation activities, warehousing activities, and credit and collection activities. When analyzing marketing costs, it is necessary to determine the costs involved in each activity and identify the activities that incurred high costs in order to help reduce them .

4. The company's interest in measuring and analyzing marketing costs based on activity results in fulfilling the demands and specifications of clients and reaching the highest levels of their satisfaction, and thus helping to increase sales, increase profits, and improve profitability indicators.
5. Distributing marketing costs to products will aid in pricing decisions due to the fact that these decisions are dependent on cost; that is, the management can use various product cost metrics in a way that aids in pricing decisions.
6. Measuring and evaluating marketing expenses based on activities can assist in providing relevant accounting data that can be used to price products and increase profitability in a way that complies with the demands of the modern company environment.

RECOMMENDATIONS

The following is a list of the most crucial suggestions based on the research's findings:

1. Paying attention to marketing costs and analyzing them on the basis of activities in order to reduce the costs of the company's inventory, salaries and wages of workers in the warehouses, and reduce insurance expenses on warehouses, stationery, equipment, and devices used in the warehouses.
2. Benefit from measuring and analyzing marketing costs based on activities in reducing costs associated with activities that do not add value to both the company and the customer, taking into account the provision of the service that the customer wishes to obtain.
3. The administration acquaints all employees and workers in the company with the concept of marketing costs, their components, characteristics and advantages of using them through the establishment of programs and training courses related to the subject.
4. The requirement to periodically assess the efficacy of advertising by contrasting the outcomes attained from the use of marketing expenditures in product advertising with the sums used for this purpose.
5. Seeking to follow a pricing strategy based on market research in which both customers and competitors are studied, in a manner that achieves the company's objectives in an effective and efficient manner.

6. The State Dairy Industry Company in particular, as well as Iraqi industrial enterprises in general, used the researcher's approach to measure and analyze marketing expenses based on activities in order to price products and hence improve profitability.

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