

Use Strategic Cost Management to Rationalize Pricing Decisions

Dr. Ezzaddin Hasan Al-Hussaini¹, Dr. Mohammed Taaban Altimeme²

¹ accounting department Almustaqbal university college Iraq , Babil , AlHilla 51001

² Al imam Al sadiq university / accounting department , Baghdad 10001

Izemr89@mustaqbal-college.edu.iq

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Abstract:

The research aims at clarifying the concept of strategic cost management as it is a contemporary system that entered the field of scientific research and its importance in cost management As well as to identify the most important strategic cost management tools according to the classification of modern sources and the application of two tools to achieve the goal to achieve, this was to solve the problem suffered by Iraqi companies in general and contracting companies in particular the problem of rising costs of their products or services and the reason for the use of traditional systems in the calculation of costs These systems do not meet the requirements of the local or global market and the intense competition, which leads to a high price of the product or service and thus lose its market competition for its inefficiency in managing costs properly .

The study concluded that the need to pay attention to research oriented towards the integration of cost management methods to serve the objectives of the company and applied to the company or the like, and must seek to link strategic cost management tools with the company's strategic objectives to maximize the value of the company and enhance its competitiveness.

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1. INTRODUCTION

In recent decades, many companies have witnessed dramatic changes due to the intensity of competition, the development of manufacturing technology and the consequent technological innovations, as well as the short life cycle of products, which necessitated the search for and satisfaction of customers' desires. In order for companies to operate in this changing environment and to satisfy their customers, they must be competitive and will not be so unless they adopt modern management methods aimed at managing cost and creating value for customers (Zimmerman , 2010) .

As a result, researchers in the early 1980s began to draw attention to the problems facing the industrial environment such as increased inventory, consequent costs of

retention, security, cost of alternative opportunity and other costs, low product quality and consequent competitiveness, A challenge to traditional management accounting. The challenge of improving industrial performance is an appropriate variable for managerial accounting. The models and methods of traditional management accounting are designed for the stability and stability of the industrial environment. The elements of uncertainty and fixed costs are considered Foreign hope for those models (Edmonds , et. al. , 2011)

These assumptions proved to be unrealistic, as managers found themselves responsible for significantly interfering with production processes to improve quality, reduce delivery time, prepare and increase the flexibility of industrial processes, and therefore the role of management accounting

is no longer limited to providing information for decision making and administrative functions. To facilitate and develop and achieve management strategies, and to achieve the above divided into two parts, the first part of the theoretical and conceptual aspects of strategic cost management and the most important tools and their importance and objectives, focusing on two tools are the target cost and Cannula continuous improvement in order to achieve the desired objective by the company and researchers, while the second part represents the scientific aspect and the application of these instruments has been reduced to the current cost of targeted cost or less of them slightly (Noreen et. al., 2011) .

2. LITERATURE

The research will explore the philosophical and intellectual concepts of strategic cost management, its importance and objectives, and how it contributes to reducing costs through its multiple technologies.(Kinney& Raiborn, 2012)

We believe that the Decision-making that affects the long-term competitive position of the company must explicitly consider the strategic elements of the decision. The company's most important strategic elements are its growth and long-term sustainability. Thus, strategic decision-making is the choice between alternative strategies with a view to choosing a strategy or strategies, which provide the company with a reasonable guarantee of long-term growth and survival. The key to achieving this goal is to have a competitive advantage. Strategic cost management is the use of cost data to develop and identify superior strategies that will produce a sustainable competitive advantage.

We often hear entrepreneurs use the term cost management. Unfortunately, this term has no uniform definition. We use cost management to describe the approach and activities of managers to use resources to increase value for customers and achieve organizational goals. Cost management includes decisions such as whether to enter

new markets, implement new organizational processes, and change product designs. Information from accounting systems helps managers manage costs, but the information and accounting systems themselves are not cost management.(Horngren, et al. , 2012)

(Hansen, et al., 2009) believes that the cost management system provides information on three general objectives ; Cost of products and services, and other objectives of interest to management , planning & control , decision making.

Strategic cost management is divided into two parts: (Hansen, et al., 2009)

Cost accounting system: A cost management subsystem designed to determine the cost of products, services and other cost targets as defined by management. For external financial reporting, the cost accounting system should determine the costs of the products in order to estimate the inventory values of the three types and determine the cost of the goods sold. Furthermore, these functions must be consistent with the rules and agreements established by the SEC and the Financial Accounting Standards Board. These rules and conventions do not require that all costs allocated to individual products are causally linked to the consumption of productive resources by individual products. Thus, the use of financial accounting principles to determine product costs may lead to excessive over-disclosure of individual product costs.

2. Operational control system: The second cost management subsystem is designed to provide accurate and timely feedback on the performance of managers and others in planning and monitoring their activities. Operational oversight relates to the activities to be carried out and the assessment of their performance. It focuses on identifying opportunities for improvement and helping to find ways to improve them. A good operational control system provides information that helps managers to participate in a continuous improvement program for all aspects of their business.

The Management Accountant develops and improves cost management information and communicates it to the CFO, managers and staff to be studied for competitiveness and success. This information is provided to each of the following functions: (Blocher, et al., 2010)

- 1) strategic management: Cost management information is needed to make sound strategic decisions on product selection, manufacturing methods, marketing techniques, distribution channels, customer profitability assessment and other long-term issues.
- 2) Planning and decision making Information on cost management is needed to support recurrent decisions regarding equipment replacement, cash flow management, raw material procurement, production scheduling, and pricing.
- 3) Management and operational control: Information on cost management is needed to provide a fair and effective basis for identifying inefficient processes and rewarding and motivating the most effective managers.
- 4) Financial reporting Preparation of financial statements: Cost management information is required to provide accurate accounting for inventory and other assets, in compliance with reporting requirements, for financial reporting and use in the other three administrative functions.

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linked to the consumption of productive resources by individual products. Thus, the use of FAS to determine product costs may result in over-disclosure of individual product costs.

- Operational control system: This is the second cost management subsystem designed to provide timely and accurate feedback on the performance of managers and others regarding the planning and monitoring of their activities. Operational control relates to the activities to be undertaken and the assessment of their performance. It focuses on identifying opportunities for improvement and helping find ways to improve them. A good operational control system provides information to help managers participate in a continuous improvement program for all aspects of their business.

3. STRATEGIC COST MANAGEMENT TOOLS

Cost management from a strategic perspective is an integrated approach that includes a number of tools and methods that work in harmony and complementarity in order to support the competitive advantage of the company and achieve sound cost management. The focus will be on target cost technology and continuous improvement (Blocher, et al., 2010):

- 1) **Target costing:** In the 1960s, Japanese engineers developed an approach called target costing to help them consider manufacturing costs early in design decisions. Target cost helps engineers design new products that meet customers' expectations and can be manufactured at a desired cost. Target costs are an important management accounting method for reducing costs during the product lifecycle design phase, which can explicitly help manage total lifecycle costs. (Atkinson et al., 2012)

The target cost includes six principles: (Hilton, 2011)

- A. Price leads cost: Determines the target cost by determining the price at which the

product can be sold in the market after subtracting the target profit.

- B. Customer Focus: In order to be successful in implementing the target cost, management must listen to customers so that they know what products they want? What are the important features of the product? If they can afford to pay for it, the management should strive to get customer feedback and the products must be tailored to meet their demands.
- C. Focus on product design: Design engineering is an essential component of target costs, so engineers must design a product from the ground up so that it can be produced at its target cost. This design activity includes the identification of raw materials and components for use as well as wages, machinery, and other elements of the production process.
- D. Multi-functional teams: Manufacturing a product at a target cost or below requires the participation of people from many different functions in the organization: market research, sales, design engineering, procurement, production engineering, production scheduling, material handling and cost management. Individuals from all these diverse areas of expertise can make key contributions to the target costing process. Moreover, "a multifunctional team is not a group of specialists who contribute their expertise and then leave; it is responsible for the entire product."
- e. Life Cycle Costs: When determining the target cost of a product, analysts should be careful to incorporate all the life cycle costs of the product. These costs include product planning, initial design, detailed design, testing, production, distribution and customer service. Traditional cost-accounting systems tend to focus only on the production stage and have not paid sufficient attention to other life-cycle costs of the product.
- F. Value chain orientation: Sometimes the expected cost of a new product is higher than the target cost, and then efforts are

made to eliminate non-value added costs in order to reduce the expected cost.

2) Continuous Improvement Kaizen is a system that provides data associated with the support of agile production systems. Customers in terms of quality, functionality and prices in order to compete. (Atkinson, et al., 2012: 273) , Continuous Improvement (kaizen) is a technique taken from Japanese management practices. This means making improvements with small recurring sums rather than making big changes over longer periods. The purpose of the Kaizen cost calculation is to reduce variable costs below the cost level in the base period. It is based on the view that nothing is absolutely complete so there will always be some ways to make small improvements. Within the Organization's culture, all staff are encouraged to identify and implement small improvements that reduce costs. (Weetman, 2010)

4. IMPLEMENTATION

Al-Farouk General Contracting Company is a public company for the purposes of the Public Companies Law No. (22) for the year 1997. The company is a self-financed and state-owned production unit, which enjoys moral personality and financial and administrative independence. It operates on an economic basis and is linked to the Ministry of Reconstruction and its main headquarters in Baghdad.

The aim of the company is to contribute to supporting the national economy by carrying out the construction work according to the technical plans and planning decisions to achieve the highest level of the work model and adopt the principle of economic calculation and efficiency of investing public funds and its activities in achieving the objectives of the state and raising the level of national economic performance.

The company performs the following tasks:

1. Implement construction work of various types inside and outside Iraq as a contractor.
2. Contracting for the implementation of construction projects for the state and other sectors inside and outside Iraq.
3. Investment of quarries, production and sale of construction materials required by its works.
4. Preparing technical elements and establishing training centers and securing their requirements.
5. Establish plants and secure the necessary machinery, equipment and materials.
6. Owning movable property, machinery and means of transportation and registering them in the name of the company in the competent departments and selling them or renting them and conducting legal acts in accordance with the law.

4.1 Determine the target cost

When we apply the target cost we take steps in which we determine the target price and the target profit margin. We deduce the target cost and between the target and current cost. We derive the cost gap, which is reduced by the target cost and continuous improvement techniques as follows:

- 1) Target price / Based on information collected from competitors, the target price of the product is shown to the customer and reflects the company's strategy and the strategies of its competitors as well as the volume of demand for the product.
- 2) Determine the target profit / determine the target profit of the product based on the long-term profit plan based on the strategy of the company, where the target profit margin based on the level of similar products or the actual profit of previous products and competition affects the determination of profit target.
- 3) Determine the target cost / The difference between the target selling price and the target profit equals the allowable cost (target cost).

Target Cost = Target Selling Price - Target Profit

4) Cost gap / The difference between the current cost and the target cost achieved in the previous paragraph.

4.2 Determine your current cost

Through the tables below we will determine the cost of the product pillars, which is one of the products of the company and consists of elements of various costs and we will describe them as follows:

- Price per meter of longitudinal pillars (35 * 35)

1- Concrete :

Table (1)

Concrete raw materials

Cost element	Amount
Cement	10666.6 ID / m
sand	1666.6 ID / m
Gravel	2146 ID / m
Additives	1562.5 ID / m
Paying Mixing + Transfer	1250 ID / m
Total	17250 ID / m

2- Reinforcing Steel:.

Table (2)

Reinforcing Steel raw materials

Cost element	need
Reinforcing steel diameter 20 mm for a 12-meter substrate	8 x 12 x 2.5 = 240 kg
Electrodes	8 x 1 x 20 = 2.5 kg
Atari rebar	$0.617 \times 1.2 \times 120 = 88.8$ kg
Reinforcing hooks 16 mm	$3 \times 1.617 \times 2 = 9.7$ kg
Total	358.5 kg / substrate 12 meters

3- Wages of work: -

Table (2)

Wage elements

Cost element	need
Wages of mourning	4750 IQD / m
Casting fees	2500 IQD / m

Total	7250 IQD / m
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4- Accessories: -

- Ranks = 1250 IQD / m
- Spirates = 500 IQD / m

Current cost = 17250 (concrete) + 37250 (reinforcing steel) + 7250 (wages) + 6250 additional costs = 68000 IQD / m

- Add 10% of the profits of the factory
- Add 20% profits (ratios indicated in the Board of Directors)

- 68000 × 1.3 = 88400 Iraqi dinars / m

• After studying the market and the prices of competitors in the market, the prices per meter per linear pillar is 65000 IQD / m.

□ Then we can determine the profit margin through the adoption of the prices of competitors above and these prices are a target price because these prices are lower than the price of the company's product so the competitor price will depend as a target price on the company to reach it to enable it to compete in the current competition and increase its market share . After obtaining competitors' prices it is determined as the target price.

Target profit margin = target selling price x profit margin ratio

$65000 \times 10\% = 6500$ Iraqi dinars / m

• 10% was chosen as a profit margin because it is the company's rate. Note that the company adopts a higher profit rate, but according to the decision of the board of directors, the target profit was reduced to 10% to enable the company to compete and reduce production costs and thus the selling price.

The target cost can now be applied through the availability of the above data according to the following formula:

Target cost = target selling price - target profit margin

Target cost = 65000 - 6500 = **58500** Iraqi dinars / m

The current cost of the company is **68000** Iraqi dinars / mt

We then determine the gap between the target cost and the current cost by

subtracting the current cost from the target cost:

Current Cost - Target Cost = The difference between the two costs

$68000 - 58500 = 9500$ Iraqi dinars / m

Therefore, the current costs must be reduced by the difference above to reach the target cost.

The current cost is reduced to the target cost using value engineering, which is one of the cost target tools to reduce costs. When using this technique; we reduce the high cost of the cost elements, such as reducing the cost of cement, sand and gravel within the concrete element. This reduction is done using one or both of the following proposals:

- 1) Hiring a suitable supplier to process the three materials (cement, sand, gravel) in order to reduce the cost of these elements.
- 2) processing large quantities of these materials in order to reduce the cost per ton of them.

Upon consultation with the account manager of the company, it was concluded that this technique can reduce costs by 40% of the difference between the current and target costs. The new cost is as follows:

From the previous calculation, the difference between the current cost and the target is 9500 Iraqi dinars

Therefore, the reduction using value engineering is $9500 \text{ IQD} \times 40\% = 3800 \text{ IQD}$

The remaining difference is reduced by continuous improvement of **5,700 IQD**

The management believes that the use of continuous improvement technology achieves a cost reduction of 60% of the difference between the current cost and the target cost, which is explained in the calculations above, but this view was based on a proposal to achieve this reduction as follows:

"The addition of a machine and equipment within the current production line (improvement and modification) will increase the production capacity of the

plant for the purpose of producing hollow tube substrates which are characterized by their durability and strength to withstand weights higher than the normal substrate, where the normal substrate up to a capacity of carrying (40 tons) The substrate The hollow pipe has a carrying capacity of (60 tons) to (70 tons) and since the modern substrates are hollow, the materials used to produce these substrates are less than the normal substrate and have higher lengths up to (18 meters) and the ordinary substrate reaches (12 meters). In addition this machine to the production line will be using a Modern mechanization for the purpose of cutting iron and pouring concrete and the mechanism of production of these pillars will lead to the absence of air spaces in the substrate due to the rotation of the concrete in the machine, which leads to great pressure force on the walls of the substrate and thus will result in the production of substrates with higher strength and ability to withstand heavy weights and not to break these Pillars when they are knocked and fixed to the ground. "

5. CONCLUSION

Lack of information needed to implement the strategic cost management approach as an integrated approach by the management of the company and lack of sufficient knowledge of the staff to implement this approach, there is little weakness in coordination between the management of the company and employees, and there is no clear application of strategic cost tools in the company sample application, as well as cost management To determine the cost of products or services as well as planning and control in addition to making decisions, as well as the high selling price of the company's products compared to market prices and competitors.

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REFERENCES

- [1] Atkinson A. , Kaplan R. , Matsumura E. , Young M. , "MANAGEMENT ACCOUNTING Information for Decision-Making and Strategy Execution " 6E , Pearson Education, Inc. USA, 2012 . P : 356.
- [2] Blocher . E. , Stout . D. , Cokins . G. " cost management a strategic emphasis " 5e . The McGraw-Hill Companies, Inc , USA , 2010 . P : 4 .
- [3] Edmonds, TH. , Tsay, B. , Olds, Ph. , " FUNDAMENTAL MANAGERIAL ACCOUNTING CONCEPTS " 6E , The McGraw-Hill Companies, Inc., USA, 2011 . P:56 .
- [4] Hansen, D. , Mowen, M. , Guan, L. "cost management : accounting and control" 6e , south-western , cengage learning , Canada , 2009 . P : 5 .
- [5] Hilton , R. , "MANAGERIAL ACCOUNTING: CREATING VALUE IN A DYNAMIC BUSINESS ENVIRONMENT " , 9E , The McGraw-Hill Companies, Inc. , USA, 2011 . P: 659.
- [6] Horngren , ch. , Datar , S. , Rajan, M. " cost accounting a managerial emphasis " , 14E , Prentice Hall , USA, 2012 . P :4 .
- [7] Kinney , M. , Raiborn, C. " cost accounting : foundations and evaluations " 8E , South-Western, Cengage Learning , Mason , USA, 2012 . P:5 .
- [8] Maher M. , Stickney C. , Weil R. "Managerial Accounting: An Introduction to Concepts, Methods, and Uses" , 10E , Thomson South-Western , USA , 2008 .
- [9] Noreen E. , Brewer P. , Garrison R., "MANAGERIAL ACCOUNTING FOR MANAGERS" 2E , The McGraw-Hill Companies inc. , USA, 2011 . P:23 .
- [10] Weetman , P. "management accounting" , 2E , Pearson Education Limited , England, 2010 . P: 490.
- [11] Zimmerman , J. "accounting for decision making and control" 7E , Published by McGraw-Hill, a business unit of The McGraw-Hill Companies, Inc., USA , 2010 . P:112