Volume: 20, No: S7(2023), pp. 771-790 ISSN: 1741-8984 (Print) ISSN: 1741-8992 (Online) www.migrationletters.com

The Integration between Target Costing and Resource Consumption Accounting to Support the Competitive Stance of Iraqi Companies

Luma Mustafa Sadeq Albaker¹, Anis Bouabid²

Abstract

The research aims to identify the impact of integration between the method of target cost and the system of accounting for resource consumption in supporting the competitive stance of Iraqi companies. To achieve this goal, this research was divided into two parts, the theoretical part of the subject of research exploring previous efforts in this field. The field part tests the research hypotheses, through the study of the impact of integration between the method of target cost and the system of accounting for resource consumption in supporting the competitive stance of Iraqi companies through statistical analysis of the data that has been collect using a survey list. They are the research sample. The study reached the following results: the existence of an effect of integration between the target cost method and the resource consumption accounting system on supporting the competitive stance of Iraqi companies. It shows a significant impact of integration between the target cost method and the resource consumption accounting system on achieving greater accuracy in cost allocation. There was also a significant effect of integration between the target cost method and the resource consumption accounting system on achieving greater accuracy in resource planning and energy management with a significant impact on integration between the target cost method and the resource consumption accounting system to reduce costs.

Keywords: integration, Target cost, Resource Consumption, the Competitive Stance.

Introduction

In light of the modern and advanced industrial environment and in light of technological developments and in light of the intense competition between industrial companies at the local and global levels. It was necessary for industrial the companies and business organizations to provide a competitive advantage in their field of business, products and services, reaching the required level of competitiveness and achieving a competitive advantage. In light of the inability to change the prices of products in terms of raising their prices, it was necessary to focus on the cost and work to reduce it. Therefore, attention must be paid to the cost entries used, including the target cost (TC) which can be defined as a cost management tool aimed at reducing the cost of the product during the planning, development and design stage. This tool tries to reduce the cost at the design stage in order to increase the size of the savings that can be achieved at that stage than in the following stages, while maintaining the quality of the product and its functional capabilities and the degree of confidence on the part of customers (Fouda, 2007). This has given rise to many concepts that indicated that the direction of target cost management consists of squeezing the different stages of the product life cycle to include

¹ Commercial Institute, Faculty of Commerce, University of Sousse, lumamus95@gmail.com

² Commercial Institute, Faculty of Commerce, University of Sousse, anisbouabid@gmail.com

the total resources consumed and the overlap between the different aspects of design, sale and storage(Bhimani & Okano, 1995). Although the target cost management method can be applied, it suffers from practical difficulties in determining the resources consumed and accounting for energy, which ultimately led to the adoption of value engineering and cost tables. German cost accounting has introduced a new cost-checking method called Consumption Resource Accounting, which is a basic approach to management accounting that accurately applies accounting principles to provide information that can be used to maximize the value of the enterprise(Al-Gharuri, 2010).

The nature of the research problem:

Competition represents a challenge for all companies that want to survive and continue in the market, and its intensity has increased in many areas that made each company try to strengthen its competitive stance. At the same time, the company finds itself governed by certain resources under which it operates, and the company's management is working hard to provide the customer with a consolation commodity and meet his needs and at the same time achieve a benefit for the employees of the facility represented in the wages and bonuses obtained by the workers. Therefore, enterprises have been interested in developing cost accounting systems to ensure the production and provision of appropriate and accurate information that helps determine the cost of services more accurately, thus rationalizing the use of resources and thus reducing the cost(Najm et al., 2016).

Hence, the research problem can be formulated in the following main research question:

Does the integration between the target cost method and the resource consumption accounting system affect the support of the competitive stance of Iraqi businesses?

The researcher tried to answer the main research question by answering the following sub-research questions:

1. Does the integration between the target cost method and the resource consumption accounting system achieve greater accuracy in the allocation of costs for Iraqi business establishments?

2. Does the integration between the target cost method and the resource consumption accounting system achieve greater accuracy in resource planning and energy management of Iraqi business establishments?

3. Does the integration between the target cost method and the resource consumption accounting system achieve the goal of reducing the costs of Iraqi business establishments?

Research Objectives

The main objective of the research is to:

Study the impact of integration between the target cost method and the resource consumption accounting system on supporting the competitive stance of Iraqi companies.

This main objective can be achieved through the achievement of the following subobjectives:

1. Study the impact of integration between the target cost method and the resource consumption accounting system on achieving greater accuracy in cost allocation.

2. Study the impact of integration between the target cost method and the resource consumption accounting system on achieving greater accuracy in resource planning and energy management.

3. Study the impact of integration between the target cost method and the resource consumption accounting system on reducing costs.

The importance of research:

The importance of the research is its scientific and practical importance in the following:

1. The advanced methods of management accounting and cost management tools are still in continuous development, and this research addresses these methods by showing the role of integration between the target cost method and the resource consumption accounting system in order to support the competitive stance of companies.

2. The importance of this research comes from the academic point of view in studying the extent to which the resource consumption accounting approach can be used in enterprises in order to develop their cost accounting systems for the purposes of providing appropriate information that helps the managers of these establishments in rationalizing the use of available resources, rationalizing administrative decisions, and determining the prices of these products on objective bases.

3. Learn how to use the target cost as a modern strategy in cost management and reduction, and how the company adopts it with the aim of reducing cost and improving quality, while maintaining the required level of quality and enhancing its stance in the market.

Research Hypotheses:

In light of the nature of the research problem and its objective, the research hypotheses can be formulated as follows:

The main research hypothesis: There is no effect of integration between the target cost method and the resource consumption accounting system on supporting the competitive stance of Iraqi companies.

Under this main research hypothesis are the following sub-research hypotheses:

• The first sub-hypothesis: There is no significant effect of the integration between the target cost method and the resource consumption accounting system on achieving accuracy in cost allocation.

• Second sub-hypothesis: There is no significant effect of the integration between the target cost method and the resource accounting system on the achievement of resources on achieving accuracy in resource planning and energy management

• The third sub-hypothesis: There is no significant effect of the integration between the target cost method and the resource consumption accounting system on cost reduction.

Study Methodology: This study relied on the use of the following two approaches:

1. Deductive method:

This is through a review of the most important studies that dealt with the subject of research in order to deduce the various theoretical aspects of research, especially the research hypotheses, to identify the impact of testing the impact of integration between the target cost method and the resource consumption accounting system on supporting the competitive stance of Iraqi companies

2. Inductive approach:

The researcher uses the inductive approach to build the field study by designing a survey list, which represents the research tool and distributing it to the study sample to test the effect of integration between the target cost method and the resource consumption accounting system on supporting the competitive stance of Iraqi companies registered in the stock exchange Research limits:

• Methodological limits: The study is limited to the method of targeted costs and accounting for resource consumption as one of the strategic accounting methods that help increase the competitiveness of enterprises

- Spatial limits: The study deals with the Iraqi industrial companies
- Time limits: The field study will be conducted in 2022

Previous studies that dealt with the subject of research

Introduction to the Section:

In the light of the theoretical framework, the researcher reviews some previous studies to benefit from them in the theoretical comstance of the study, and the studies were divided into two groups as follows:

The first group: studies that dealt with the target cost:

1. Kee (2010)studied the extent to which the target costs affect the associated decisions The study aimed to identify production.

Target cost is a cost management system designed to develop products with a level of profitability that is sufficient to justify their production. This study aims to identify whether production-related decisions made at target cost consistently add economic value to the company, as the traditional target cost model is compared to the model that includes cost of capital. Analysis of the two models reveals that the traditional target cost model systematically underestimates the marginal cost of invested funds and overestimates the marginal cost of cash-related production resources. Numerical example and graphical analysis show that a traditional target cost model can lead to the acceptance of products with negative net present value, while rejecting products with positive net present value. Mathematical analysis of a traditional target cost model suggests that it is a systemic property of the model.

The study found that targeted costs are an input to cost management that is designed to develop products with a level of profitability that justifies their production, and they also clearly affect production-related decisions.

2. Stefea et al. (2014) aimed to identify the aspects of obstacles in the application of the target cost system in the Egyptian environment and the effects resulting from these obstacles. This study described the obstacles in the Egyptian manufacturing companies and the study includes (21 Egyptian manufacturing companies).

The study found that there are many obstacles facing Egyptian manufacturing companies through the target cost system, whether internal companies or external companies, and the external dimensions are more influential than the internal dimensions, as the weakness of competition has an impact on the case of external dimensions.

3. Yousef (2017) showed the extent to which it is possible to achieve integration between the target cost method and the entrance to cost measurement based on specifications, and its impact on the cost of the product, and a survey list was designed that was directed to some industrial facilities in Libya in order to test the hypotheses of the study. One of the most important results of the study is that the target cost method is concerned with the design stage, as it is the main point from which cost reduction efforts are launched, as engineers must design the product in a way that can be produced within the target cost. The cost approach is based on specifications is also one of the tools to address shortcomings and criticisms directed at recognized cost systems through cost planning, in light of the specifications that are determined by analyzing the competing market, following the policy of market orientation, and focusing on producing what can be sold

rather than selling what has been produced. The integration between the target cost method and the cost approach based on specifications leads to the achievement of the desired goal, which is to rationalize and guide decisions. This is evidenced by market study, competitive environment analysis, planning and control, achieving customer satisfaction, and reducing the cost of the product.

4. Mansouri (2018) found out the requirements for the application of the target cost method in Sudanese paint factories and the extent of its contribution to cost management, as the problem of the study was that global competition in light of open markets pressured industrial facilities to adopt strategies that include modern production systems. Then the study tried to answer the questions of Is there a relationship between the application of the target cost and the early estimation of the unit cost. Also, there is a relationship between the application of the target cost and the target cost and the continuous reduction of the unit cost produced and what is the role of the target cost in Cost management. For the purpose of formulating the problem and the hypotheses of the study, the inductive and deductive approach was adopted. The study showed that the target cost method improves the quality of products while controlling the competitive price. The target cost method leads to a continuous reduction in the unit cost produced, and the study recommended the need to hold seminars and training courses on the method of target cost because of its benefits to achieve the objectives of the facilities of controlling the cost, maximizing profits and satisfying customers.

The second group: studies that dealt with resource consumption accounting:

1. Study (2006, Marquis) entitled:

Cost Accounting for the Service Industry a new Approach üldies

Marquis (2006) applied the entrance to accounting for resource consumption in service facilities, where the study indicated that this entrance is an update to the German cost management systems, and focused on the application of the entrance to accounting for resource consumption in service facilities and the study showed the following:

1. There is considerable controversy among cost accountants in defining the concept of costs that is used to make operational or strategic decisions), especially with the complexity of facilities, and the complexity of services.

2. With significant cost changes, the ABC activity costing system is usually not updated as a result of cost changes.

The study found that the problems of current systems can be overcome by applying the approach of resource consumption accounting as: it reflects the interdependence of resources in homogeneous complexes, accurately expresses the interrelationships between resources by highlighting the relationship of negation, effectively supports strategic decision-making.

The study focused on the importance of interrelationships between resources and each other and between resources and activities, as although they complicate the model, ignoring this information ultimately leads to inaccurate information.

2. Syed Aijaz Ahmed and Mehboob Moosa (2011) showed that the entrance to accounting for resource consumption is a comprehensive and integrated approach to cost management that helps to provide information and prepare it to improve decisions for educational facilities universities. It also helps to produce appropriate information to reduce costs, increase revenues, enhance the productive capacity of the facility in order to achieve more success in a highly competitive market, constitutes a cost model that begins by understanding the educational facility's strategy. The strategy is in a competitive stance, and the resource flows through the facility and their interaction with each other to perform the service, collected in an automation of processes, building financial and operational data relationships in an integrated format. Also, the cost drivers

and relationships between resources and cost measurement topics are automatically updated during work and focuses on energy management as a basis for cost management and allocation.

3. Al-Dalf (2013) aimed to show the extent to which the entrance to accounting for resource consumption can be used as one of the alternatives to the development of cost systems, and in response to modern environmental changes in helping to rationalize and manage the resources of service facilities, where a framework was proposed for the entrance to accounting for resource consumption that can be applicable in service facilities in general. The study reached many results, including as a result of the development in service facilities and the importance of those facilities, whether in humanitarian or economic terms, so it was necessary for service facilities in maintaining the competition and providing services at reasonable prices, to enhance the ability to manage resources and increase revenues as well as continuing to provide these services. Cost accounting systems are one of the main pillars to ensure the stability of the financial system of service establishments due to their role in providing management and decisionmakers with financial and non-financial information that enabled them to make strategic decisions. The success of service facilities is largely measured by the profits they achieve by rationalizing the use of resources and trying to exploit the available energy. The best possible utilization and reducing the costs of providing services, come only through the production of accurate scientific means to identify resources that do not add value. Thus, it work to avoid them in the event that these resources are visible, or try to exploit them in the performance of other services if these resources are obligated whenever possible, and this can be achieved through the entrance of resource consumption accounting.

4. Sahib (2019) evaluated the effectiveness of the current methods of preparing planning budgets and determine the role of the entrance to resource consumption accounting in rationalizing the preparation of planning budgets and the effectiveness of the resource consumption accounting system in preparing planning budgets. The study found out that planning budgets prepared in the traditional method suffer from many shortcomings that limit the usefulness of the budget for management. Also, the entrance to resource consumption accounting reduces the problems facing both traditional cost accounting systems, and an accounting system activity-based costs, in rationalizing resource management through the correct management of resources, trying to exploit idle energy, determining the costs of products provided by industrial facilities accurately. It provides useful information to help in the control process, provide information to assist in decision-making, and thus achieving a competitive advantage for industrial facilities, preparing the budget. The use of the resource consumption accounting system helps management in planning and determining the goals to be achieved, and making decisions that lead to achieving these goals, when preparing budget using a resource consumption accounting system can determine unused energy.

Conceptual framework of the target cost method and accounting for resource consumption

The first topic

Basic concepts of the target cost method

The concept of target cost began in Japan since 1973, where it was applied in more than 40 Japanese industrial companies. The result was to achieve multiple competitive advantages in the field of cost, prices and quality improvement, which led to the superiority of those companies and gaining new markets in many countries of the world. With the technological developments in the production systems and strategic management in recent times, most major companies in the developed world sought to apply the target cost method, especially after the successes achieved by Japanese

companies as a result of its application (Ghanimi, 2014, pp. 133-132), and with the success of the application of the target cost method in industrial companies. With the increase in the competition in the field of production and services and the tremendous development in information systems, especially since the beginning of the twenty-first century, interest to study the various aspects in industrial facilities began, where the target cost method is considered one of the modern entrances that have proven their efficiency in the field of cost reduction. This is to achieve strategic advantages internally and externally for both productive and service companies.

1. The concept of target costs and their characteristics:

There have been many writings in recent years about the target costs and their various administrative uses, and previous studies have mentioned a set of definitions about the nature and concept of target costs. Al-Kashef (2000)has seen that it is considered the process that aims to reach the financial results of the product at a certain time by reducing the cost and improving profitability. It is the difference between the expected sale price and the profitability of the planned facility, while it was known(Cooper & Slagmulder, 2002) as not a cost-measurement method but a complete cost-reduction program. it is not a simple method but an integrated strategic system for cost management in the stages of product development and design, as defined by Sheikh, (2005) as one of the entrances to management accounting cost management, which aims to reduce the product at the stage of designing and developing the product and providing various products of high quality that satisfy the needs of customers. The target cost entrance is a modern entrance from Cost management approaches include a set of features(Driscole Ganye, 2004):

1. The target cost is applied in the development and design stage as it differs from the traditional methods of cost management that are applied in the production stage.

2. Target cost is not a management method of cost control but rather a way to reduce costs.

3. Target cost procedures have many initial methods used because the objectives and the initial processes of the target cost include development and design techniques.

4. Collaboration between different departments is required to achieve the target cost.

5. The target cost is suitable for application in multiple industries or small products.

2. Stages of application of the target cost method:

The application of the target cost method goes through the following stages: (Darwish, 2019, p. 53).

First: Setting target prices:

The target prices of the product are those prices that achieve compatibility between all the following considerations:

1. In any case increase the competitors' prices, preferably lower than them.

2. Prices accepted by the consumer and through which the project can achieve a desired market share for the proposed product or expand the existing market share and gain new markets.

3. Prices that achieve the target profit, which represents the lowest profit margin accepted by management and cannot be waived.

This requires a marketing research department capable of studying market conditions and needs, collecting and analyzing data on competitors' prices, predicting expected changes in those prices, as well as predicting competitors' reactions to the expected prices that the entity wishes to determine its products.

Second: Estimating the costs of the product design stage:

At this stage, the exact characteristics and specifications of the required product and the required quality level are determined, or the product development is determined. Then these data are sent to the Product Planning and Design Department, which participates with the Research and Development Department, both the Cost Department and the Production Department, to study and analyze these data in terms of:

1. Determine the design requirements, partial product components and expected final form.

2. Identify the partial activities of the design and production stages, as well as performance units and cost drivers.

3. Estimating the cost for each stage, activity or performance unit in light of the available material and human capabilities and the applied production technology, in order to reach the total estimated cost from the point of view of the facility.

Third: Determining the target profit margin:

In Japanese companies, the total target profits are determined on the basis of mediumterm profit plans that reflect management strategies over a period of 3-5 years. Then the total target profits are analyzed into a target profit for each product separately, and the target profit is usually determined in light of a set of considerations, the most important of which are:

1. The size of the invested money, its internal and external sources, the size of loans and interest rates.

2. Prevailing rates of investment deposits in banks and available investment alternatives.

3. The prevailing rates of dividends on shares in competing companies.

4. The possibilities of sacrifice available to reduce rates of return without prejudice to the financing structure or the objectives of investors.

Fourth: Determining the permissible cost:

In light of the accurate determination of the target profits and competitive prices acceptable to customers, the permissible cost can be reached through the difference between the target prices and the target profits, considering that the permissible cost is the maximum cost that the management is ready to produce by achieving the target return and customer satisfaction. However, the permissible costs can be changed by changing one of its components, namely the target price or target profit, in the long term.

Fifth: Value Engineering Stage:

At this stage, studies and comparisons are made between the permissible cost and the estimated design costs in light of the characteristics and specifications of the product, which is sometimes called the verifiable ongoing cost, in order to try to reduce the estimated cost and approach it to the permissible cost level.

3. Difficulties of applying the target cost:

The target cost approach is a modern approach to cost management and therefore this approach

He faces a set of difficulties, as follows(Halas, 2012):

First: The lack of a general framework that defines the requirements and steps of implementation in the view of the focus of most of the research that dealt with this approach on analyzing the successful experiences of some Japanese companies, which led to private results.

Second: The lack of a clear conceptual framework and methodology for the application of modern methods to reduce costs within the framework of maintaining the level of quality and job performance in a way that leads to reaching the target cost.

Third: The difficulty of accurately determining the basic elements of the application of this approach, namely sales prices and profits, and then the target cost as a result of the lack of appropriate data bases, especially in the developing world.

Fourth: Lack of clarity on how to allocate the target reduction in the current or expected cost estimates of the facility's operations to be equal to the target cost.

Fifth: The difficulty of maintaining the target cost plan within the framework of rapid and increasing technological development and the entry of new competitors to the markets.

Sixth: The conflicting effects of dispensing with manpower as an inevitable result of the application of the target cost approach.

The second topic

Entrance to measuring resource consumption accounting In accounting thought

Accounting thought during the eighties of the last century faced many criticisms of traditional cost measurement approaches, which are no longer appropriate in light of the systems produced by practical practice resulting from major and successive developments in manufacturing systems and technical production methods such as flexible production systems and lean manufacturing systems. "Just in Time" systems of procurement and production had been criticized on focusing on the inaccurate allocation of indirect costs on cost targets, especially with the increase in the ratio of these costs to the total cost of the product or service(Al-Hawali, 2013). Cooper and Slagmulder (2002) have provided a new approach to the allocation of indirect costs, which is the approach to activity-based costing. It is based on the direct link between the resources used on the one hand and the activities that consume those resources on the other hand, and then linking between the costs of those activities and the final product. The cost entrance on the basis of activity deals with the resources to the extent available, and therefore the shortcomings of this entrance appeared when neglecting the measurement of unused energy and adding its costs to the final products in a way that made the cost increase from its reality with the cost of unused energy, and despite the theoretical superiority of the entrance to costs based on activity. However, many studies have confirmed that a large percentage of businesses have declined to adopt this system, due to the many problems that faced its application, through the annual survey of the most commonly used modern cost management tools in the United States, the cost approach was classified on the basis of below-average activity (Al-Hawali, 2013).

1. The concept of resource consumption accounting:

It can be said that there is no single stable concept regarding what is meant by resource consumption accounting, it has been defined as "a system that gives a future view of resource consumption at the level of requirements and resources of activities, in a way that achieves the desires of customers and the benefits of demand for services, with a focus on the need for effective use of resources in order to achieve effectiveness and efficiency in cost management" (Al-Saghir, 2011), and some believe that the RCA resource consumption accounting system It is almost consistent with the German accounting system based on flexible marginal cost, and that it is an entry point for improving the cost system based on activity ABC found in accounting practice, and that it provides us with an integrated and comprehensive approach to management accounting, and is based on three axes that include resources and interrelationships between resources, and how outputs consume resources(Al-Saghir, 2011), and the accounting of resource consumption can be illustrated in figure (1) taken from White (2009):

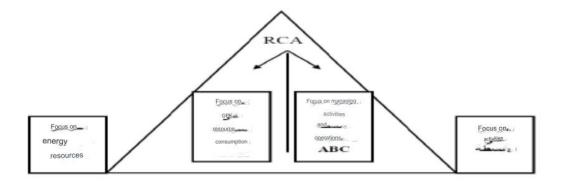


Figure (1) The concept of resource consumption accounting

Through the previous definitions, the researcher can deduce a definition of the entrance to accounting for resource consumption. It is defined as "one of the approaches to cost management, which is characterized by comprehensiveness and dynamism and depends on providing accurate and appropriate information about the company's activities towards the optimal and efficient use of its available resources and support the exploitation of idle energy.

2. Advantages of applying the method of accounting for resource consumption:

The application of the resource consumption accounting method achieves many advantages compared to traditional cost measurement systems, and the most important of these advantages are as follows(Simon & Benjamin, 2003):

1. Gives a clear view of the causal relationships between available resources and resource consumption

2. Accurately handles fluctuations in the volume of production of finished products without distortion to allocate the cost of the product. It provides a comprehensive overview of how energy is managed and resource costs, not just estimation to calculate it.

3. Accuracy in determining cost behavior (proportional - fixed) as in the case of determining resource pools.

4. Model complexities can be overcome by integrating with ERP systems, and RCA has the flexibility to modify and add any modifications to it.

5. It allows the production of information for many levels and dimensions (product - service - customers - outlets - distribution - profitability reports).

In the field of energy and resource forecasting, the method of accounting for resource consumption achieves many advantages. One is exploiting all competencies, capabilities and energies, and facilitating the process of forecasting resources in a way that enables companies to set their budgets based on the amount of resources expected to be demanded.

It is used in any industry or any company, regardless of the degree of complexity in its products and processes and with large numbers of individuals.

3. Difficulties of applying the method of accounting for resource consumption:

Despite the advantages of the resource consumption accounting method, there are some difficulties that stand in the way of its application in business establishments, including(Froeb et al., 2015):

- 1. High application costs.
- 2. It needs a lot of time for the required planning.

3. It needs to apply the "ERP" method in the project.

4. There are few examples of establishments that apply the method of accounting for resource consumption to date.

Although the method of accounting for resource consumption provides significant improvements in processes and cost data, especially in facilities with complex processes, it requires extensive training, modeling and application design, and specialized expertise, unlike what is known about cost systems in the United States.

Integration between the target cost method and the resource consumption accounting system To enhance the competitiveness of enterprises

Introduction:

In light of the modern and advanced industrial environment, technological developments and the intense competition between industrial companies at the local and global levels, it was necessary for industrial companies and business organizations to provide a competitive advantage in the field of their business, products and services to reach the required level of competitiveness and achieve a competitive advantage and in light of the inability to change the prices of products in terms of raising their prices. It was necessary to focus on Cost and work to reduce it and therefore it was necessary to pay attention to the cost entrances used, including the target cost and resource consumption accounting. Through a review of the two cost systems previously presented in the previous section, the researcher concludes that access to the appropriate costing system that meets the requirements of establishments can be achieved by creating a link and integration between the target cost method and the resource consumption system in order to support the competitive stance of companies.

1. Integration between the target cost method and the resource consumption accounting system to support the competitive stance of enterprises:

Pierce (2002)argues that the target cost management method reflects the Japanese culture in light of the target cost. Yet, it suffers from many applied difficulties in relation to identifying the consumed resources and accounting for energy. From here it is possible to integrate the target cost method and resource consumption accounting, as the process of resource consumption is the focal point that must be focused on through energy analysis, consumption, planning, and control by focusing on the resources of the facility rather than the activities performed(Mackie, 2006). After identifying the main activities that consume resources, through the TC target cost method, the appropriate compensation for each of these activities is determined in light of what the customer expects and desires, competitors' prices and strategic goals, and depending on the value engineering mechanisms VE, work is done to reduce the cost of activities by determining the share of each activity of resources using RCA mechanisms(Al-Saghir, 2011).

Based on the above, the integration between the methods of target cost and resource consumption accounting helps to accurately determine the amount of idle energy and associated costs, divide energy into a production capacity. It is desirable to be used, and provide us with added value achieved for customers and we must strive towards the maximum possible use of it, and non-productive energy available for temporary use, which are non-productive elements due to settings, equipment, scheduled reloads, or stoppages, and idle energy shown by resource use analysis(Syed Ajaz Ahmed & Mehboob Moosa, 2011).

First: Motives for integration between the target cost method and the resource consumption accounting system

There are many motives for the integration between the target cost method and the resource consumption accounting system that can be explained as follows:

1. The target cost helps to correlate between the internal factors represented in the good use of the facility of the available capabilities and resources, which are reflected in the cost, and the required profit margin that reflects the company's strategy in determining the selling price based on the desires of customers and competition conditions. In addition, there is a cooperation with suppliers in designing product components to ensure supply at prices that suit the requirements of the facility (Abdul Majeed, 2019, p. 85). However, the recognition of idle resources under the application of the resource consumption accounting method makes the process of adjusting the cost model simple and easy compared to the target cost method, through the simplicity of resource cost analysis procedures. The analysis of cost flows from resource pools to cost pools is an important function in the development and modification of the cost model (Muhammad, 2019).

2. During this integration, it can be said that both resource consumption accounting and target cost seeks to achieve value for the customer and the facility. The target cost focuses on creating value for the customer through value engineering, while resource consumption accounting supports the target cost by providing information that helps the optimal utilization of resources and energy, which leads to accurate measurement and determination of the cost of production. This in turn leads to effective cost control that meets customer desires and market considerations and thus achieves the competitive advantage of enterprises(Muhammad, 2019).

3. Through the method of accounting for resource consumption, the cost can be calculated by collecting and counting the resources owned by the facility and calculating its total capacity on a quantitative basis. Also, the resources are divided into homogeneous complexes as primary and secondary and then determine the basic productive activities that directly carry out the production process, and secondary non-productive activities that provide services and support for productive activities, but it is necessary to first determine the target cost, This indicates the need for integration between the methods of target cost and resource consumption accounting.

Second: The requirements that must be met to achieve the desired benefits Integration between the target cost method and the resource consumption accounting system:

There is a set of requirements that must be met to achieve the desired benefits Integration between the target cost method and the resource consumption accounting system as follows:

1. Analysis of the internal and external competitive environment: Identifying the sources of competitive advantage and diagnosing the strengths that indicate the possibility of being one of those sources that represent competitive advantages, requires a strategic analysis of the internal and external environment of the economic unit. It also identifies the weaknesses that may threaten the abandonment of that advantage, and the picture of the analysis is completed by standing at the available environmental opportunities, one of which may represent an opportunity for economic unity.

2. Determine the target price and target profit to reach the target cost:

The target cost is the maximum cost that can be incurred on the product. However, the economic unit can achieve the required profit margin from the product under a certain target price. The target cost is calculated by subtracting the required profit margin from the market-based target price (Sulanjaku & Shingjergji, 2015:48).

3. Inventory of all resources of the economic unit and determine the resource pools:

It is all that the economic unit needs to produce goods or provide services, practice the activity and add value to the customer. It requires to determine resource pools by

collecting a group of homogeneous resources within one complex, and this complex represents an element of resources by assembling a group of homogeneous resources within one complex. This complex represents an element of resource such as individuals, machines and various services. The construction of resource pools is the cornerstone of resource consumption accounting to overcome the problem of heterogeneity. The cost of activities within the cost pools, as the resource pools are distinguished by the fact that each resource pool includes costs for only one element and not an aggregation of a group of different elements, after which the unit cost rate is calculated from the resource pool(Al-Gharuri, 2010).

4. Assembling all operational processes in the form of activities and building activity complexes:

A critical study of the activities for all major processes and functions and assist in the cost-consuming economic unit using the specified guidelines allocates costs to cost objectives through these activities and then identify the activity pools. (Bhatt, 2014: 6)

5. Allocating the costs of resource pools to the activity centers:

The costs of resource pools are allocated to activities according to the extent to which these activities consume from the outputs of these pools, taking into account that any activity that does not consume a resource should not be charged with any share of the costs of this complex. The allocation is as much as the benefit, after what has been determined by each activity center from the outputs of the resource complex quantitatively by the causes of the resources. It is charged with the costs of the energy consumed by these resources using the average cost unit cost of the energy unit from the resource complex, i.e. Each activity is charged to the amount of energy consumed by these resources using the average cost unit of energy from the resource pool, i.e. each activity is charged only to the amount of resource pools it consumed, through the amount of the activity center consumed from the outputs of the resource pool multiplied by the average unit cost of energy from the resource pool multiplied by the average unit cost of energy from the resource pool multiplied by the average unit cost of energy from the resource pool multiplied by the average unit cost of energy from the resource pool multiplied by the average unit cost of energy from the resource pool multiplied by the average unit cost of energy from the resource pool (Al-Gharuri, 2010).

6. Determine the cost of final cost targets:

The final cost such as products, services, customers, etc. is determined on the basis of actual resource consumption, as well as idle energy costs that are not charged on products(Syed Ajaz Ahmed & Mehboob Moosa, 2011). This is by using resource cost vectors that distribute resource cost pools directly to final cost targets or using activity cost managers that distribute activity cost pools to final cost targets, and that cost allocation to other resource pools or final cost targets depends on the causal relationship(Al-Natour, 2013).

7. Compare the target cost with the current cost calculated according to the resource consumption accounting (RCA) to determine the cost gap:

It is to calculate the difference between the maximum permissible cost and the current cost for the purpose of achieving or accomplishing the target cost, that the current cost does not include only manufacturing costs. Yet, the costs of the total product life cycle, which is an estimate of the cost of the product based on cost factors. Also, the total gap is analyzed according to the life cycle of the product and the value chain, that the life cycle of the product is to determine the costs of the product starting from the stage of research and development and until the after-sales customer service. In addition, the value chain of any economic unit requires the participation of several parties, including suppliers, customers, merchants and those responsible for the exchange of products (Ansari et al, 1996).

8. Using value engineering to achieve the target cost when the current cost is greater than the target cost when determining the cost gap:

Value engineering is a systematic evaluation of all aspects of the value chain with the aim of reducing cost and achieving the level of quality that satisfies customers. Additionally, the value engineering includes making improvements in product designs and making changes in material specifications and modifications in process methods, and to implement value engineering. So, managers must distinguish between activities and costs that add value over activities and costs that do not add value.

Field Study

Introduction: -

In the previous Sections, the researcher dealt with a detailed explanation of the definitions, concepts and variables of the study. It also provided a detailed theoretical study of the role and relationships of the different variables of the study with each other and how the variables of the independent study can relate, integrate and affect the dependent variable, by listing the results of independent studies and research, where the entrance to resource consumption accounting is considered as the next generation. It is for cost management systems because it combines the advantages of cost management systems based on German thought and the activity-based cost system, with the aim of Providing more accurate financial and operational information at the level of resources that decision makers need in determining strategies for the facility. The target cost input represents an important tool to support strategic cost management, as it enables the organization to achieve three dimensions at the same time as quality, cost, and appropriate time with cost control before they occur while achieving value for the customer and focusing on his needs, and the target cost improves the cost performance of the organization in the long term and access to competitive cost in light of the Market and competitors' prices, and make long-term profits. This Section provides the design of field study procedures to examine the existence of correlations and impact relationships between the independent variables of this study, and also measure these relationships statistically, in order to reach the results of the field study and identify the importance of cost information and management accounting tools for the Iraqi business environment. In the field study, the data is collected in preparation for use and analysis of the field reality, with the aim of measuring the impact of integration between the RCA resource consumption accounting system and the TC target cost method and its role in supporting the competitive advantage of enterprises. In the field study, a study population is selected and then a representative sample of this community, then the opinions of a sample of practitioners such as managers and cost accountants in the Iraqi business environment are collected, and these data are analyzed statistically and the results are interpreted.

1. Objective of the field study

The field study aims to measure the correlation and impact relationships of the integration of the RCA system and the TC method and support the competitive advantage. Here, the data is collected from the selected sample and then a set of statistical tests are conducted in order to reach field results, realistic, and the field study aims to test the practices of managers and accountants in the Iraqi business environment, and to what extent they are assisted / hindered by the integration of the RCA system and the TC method in the objectives of supporting competitive advantage.

2. Variables and hypotheses of the study

This study includes one independent main variable, which is the integration of the RCA system with the TC method, which includes two subvariables, which can be shown as follows:

• Resource consumption accounting system: The method of accounting for resource consumption achieves many advantages, the most important of which is the possibility of exploiting all competencies, capabilities and energies and facilitating the process of forecasting resources in a way that enables companies to set their budgets based on the number of resources expected to be demanded. It also provides the necessary information for all administrative levels, at the strategic level it helps to make decisions to enter / exit the market, and at the tactical level it helps in achieving purchasing and production decisions, and helps in managing energy, people and equipment from an economy perspective.

• Target cost method: The target cost method is considered one of the modern entrances that have proven their efficiency in the field of cost reduction and achieving internal and external strategic advantages for production and service companies alike. It is measured through a set of phrases that explain the importance of this variable and its role in integration.

And one main dependent variable is a competitive advantage support, and it includes a set of sub-variables as follows:

• Accuracy of cost allocation: The impact of integration on the accuracy of cost allocation is measured through a set of statements designed in the survey list for the purpose of taking the opinions of practitioners and specialists.

• Resource Planning and Cost Management: The impact of integration on improving energy measurement and management and resource planning is measured through a set of statements designed in the survey list for the purpose of taking the opinions of practitioners and specialists.

• Cost reduction: The impact of integration on cost reduction is measured through a set of phrases designed in the survey list for the purpose of taking the opinions of practitioners, users and specialists.

Thus, the research model for the relationship between the variables can be formulated as follows:

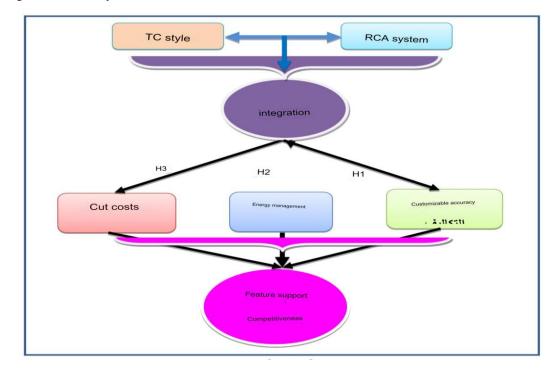


Figure (5-1) Study variables

The hypotheses can also be formulated as follows:

The main hypothesis: There is no statistically significant impact of the integration of the RCA system and the TC method on supporting the competitive stance of Iraqi business enterprises and is divided into the following sub-hypotheses:

The first nihilistic sub-hypothesis: There is no statistically significant effect of the integration of the RCA system and the TC method on improving the accuracy of cost allocation to Iraqi business establishments.

Second nihilistic sub-hypothesis: There is no statistically significant effect of the integration of the RCA system and the TC method on improving energy management for Iraqi businesses.

Third nihilistic sub-hypothesis: There is no statistically significant effect of the integration of the RCA system and the TC method on reducing costs for Iraqi businesses.

Coding of study variables: This study includes a main independent variable derived from two subvariables, and it also includes a main dependent variable that is measured through three subvariables, and the variables can be coded as follows:

No.	Variable	Variable name	Variable symbol	How to measure it	
1		RCA system	X1	10 survey statements	
2	independent	TC style	X2	10 survey statements	
3	independent	Integration between them	XX	11 survey statements	
No.		Customization accuracy	Y1	Survey statements 3	
5		Energy management	Y2	Survey statements 3	
6	Subordinate	Reduce	¥3	E investigative statements	
v		Support competitive position	Y	11Survey statements	

3. Study population and sample: The study population is represented in a group. It is one of the industrial establishments listed on the Iraq Stock Exchange. The industrial establishments represent great importance to the Iraqi economy, as the industrial area contributes a large percentage of the GDP, and the industrial fields in which companies operate within the State of Iraq vary. Also, the study population has been identified from the industrial companies because they are more sophisticated and applicable to modern management accounting methods and systems, and a random sample representative of these companies will be selected, according to the data accessibility standard. The sample of the study is a random sample selected by random and according to the accessibility standard among the companies of the industrial sector. It includes the opinions of a group of financial accountants, cost accountants and financial managers in the selected companies, with the aim of taking the opinions of the selected sample in the importance of each tool or method separately as well as the role and impact of integration between them to support the competitive stance of the facility and the survey forms were delivered to the target study sample of 250 single and the researcher recovered from them 213 forms, meaning that the response rate The percentage is 85.2%, and the researcher did not recover 37 forms, meaning that the percentage of non-recovered forms is 14.8, then the researcher analyzed, sorted and reviewed these forms and found the existence of invalid forms of 19 forms, due to the incompleteness of the answers and their percentage is 89. Thus the sound forms that can be analyzed in the countries are 194 forms with a percentage safety rate of 91.1%.

The survey lists were distributed to the sample items according to the job title, as follows:

120 forms were distributed to financial accountants, of which the researcher recovered 107, with a response rate of 89.1%, and after sorting the forms. It was found that the correct forms were 69 forms with a safety rate of 89.7%.

While 80 forms were distributed to cost accountants, the researcher recovered 69, with a response rate of 86.2%, and after sorting the forms, it was found that the sound forms had reached 64 forms, with a safety rate of 92.7%.

50 forms were also distributed to financial managers, the researcher recovered 37 with a response rate of 74%, and after sorting the forms, it was found that the proper forms had reached 34 forms at a rate of 91.8%, and these results can be clarified as in Table (5-2).

No	variable	Number of items	Cronbach's alpha	Guttman	Lambda
1	RCA expressions	10	78,4 %	89,8%	88,1%
2	TC expressions	10	85,3%	88,7%	85,7%
3	Specialization precision phrases	3	87%	86,2%	64,7%
4	Energy management phrases	3	91%	82,2%	62,7%
5	Cost reduction phrases	5	74,4%	72,7%	59,5%

The results of the reliability test showed that the degree of truthfulness for the RCA system statements on the Cronbach's alpha scale was 78.4%, while on the Guttman scale it reached 1%, and on the TC style statement, the degree of truthfulness on the Cronbach's alpha scale reached 85.3%, while on the Guttman scale it reached 1%. Lambda. As for the results of the reliability test for the cost allocation accuracy statements, the Cronbach's alpha score reached 87%, while the Guttman scale reached 86.2%, and the Lambda scale. The reliability degree for the energy management statements also reached 91%, while the Guttman scale reached 822%, and the Lambda scale reached 62%. While the results of the validity and reliability test for the cost reduction statements, the Cronbach's alpha score reached 74.4%, while the Guttman scale reached 72.7% and the Lambda scale, and this means the possibility of relying on the data and completing statistical analysis

procedures; For the validity and reliability of the survey list statements.

Interpretation of the results of hypothesis tests:

The results of hypothesis tests can be interpreted to clarify the results of the statistical analysis of the field study as follows:

The first sub-hypothesis: The results of the correlation test showed a correlation between the integration of the RCA system and the TC method and the accuracy of cost allocation with a correlation rate of 0.70 at a significance level less than 5, and the impact relationship between these two variables reached a rate of 0.49 at a significance level less than 5%, and with the availability of correlation and impact relationships and the presence of a statistically acceptable significant level, the first sub-hypothesis can be accepted.

The second sub-hypothesis: The results of the correlation test showed a correlation between the integration of the RCA system and the TC method and energy management with a correlation rate of 0.616 at a significance level less than 5%. The impact relationship between these two variables 0.397 at a significance level less than 5%, and with the availability of correlation and effect relationships and the presence of a statistically acceptable significant level, it can be accepted

The second sub-hypothesis. The third sub-hypothesis: The results of the correlation test showed a correlation between the integration of the RCA system and the TC method and cost reduction with a correlation rate of 0.335 at a significance level less than 5%. Also, the impact relationship between these two variables reached a rate of 0.112 at a significance level less than 5%, and with the availability of correlation and effect relationships and the presence of a statistically acceptable significant level, the third sub-hypothesis can be accepted.

The main hypothesis: The increase in the correlation rate of the relationship between the RCA system and the TC method and the integration between them and the support of the competitive stance from a correlation rate of 0.70 at a significance level of less than 5%, until it became 0.754. It then reached the introduction of the variable expressing integration to 0.924, which means that there is a greater correlation between integration and support for the competitive stance, while the impact relationship between these two variables reached a rate of 0.49 at a significance level of less than 5%, then by introducing the second which increased to 0.568, and with the introduction of the variable expressing integration. The relationship increased to 40.854 and with the availability of correlation and impact relationships and their improvement in integration from the use of individual tools and the presence of a statistically acceptable level of significance, the main hypothesis can be accepted.

Findings and recommendations

1. Results

The research aimed to study the impact of integration between the target cost method and the resource consumption accounting system on supporting the competitive stance of Kuwaiti companies, and the researcher tried to achieve this goal by dividing the research into two parts: The first section is concerned with the theoretical aspect and consists of four Sections, while the second section of the research is the field aspect, which was addressed in the fifth Section of the research, and the results of the field study can be presented as follows:

First: The results of the field study reached the following

1. Acceptance of the main alternative hypothesis of the research "There is an effect of integration between the target cost method

And the system of accounting for the consumption of resources to support the competitive stance of Iraqi companies.

2. Accept the first alternative sub-hypothesis, which states that there is a significant impact of the integration between the target cost method and the resource consumption accounting system on achieving greater accuracy in cost allocation.

3. Acceptance of the second alternative sub-hypothesis there is a significant effect of integration between the target cost method and the resource consumption accounting system to achieve greater accuracy in

Resource planning and energy management.

4. Acceptance of the third alternative sub-hypothesis, which states that there is a significant impact of the integration of the target cost method and the resource consumption accounting system on cost reduction.

2. Recommendations:

1. The researcher recommends the need to work to convince the departments of industrial companies and decision-makers of the feasibility of applying the resource consumption accounting approach and its impact on improving the mechanism of using available resources, while training workers in these establishments on the basic concepts of applying this entrance.

2. The need to apply the approach to resource consumption accounting, as it prepares the next generation of cost management. It represents a real contribution and an additional step towards improving the outputs of the cost system, by achieving greater accuracy in cost allocation, ability to produce operational, tactical, and strategic information to help management in making decisions in the short and long term. This contributes to increasing productivity and reducing the cost of the product, and thus increasing the profits of the enterprise, and supporting its competitive stance.

3. The necessity of applying resource consumption accounting is not only for accurate cost measurement. It also provides the necessary information for planning and budgeting, as well as helping to achieve the various concepts of control, such as: preventive control, post-control, and simultaneous control, by providing accurate and fair measures of performance, and loading deviations between the resources already used, and all available resources in the facility, allowing the determination of the real size to be responsible, make appropriate corrective decisions and actions.

4. The need to conduct a study on the difficulties and problems that prevent the application of the approach of accounting for resource consumption in industrial companies.

5. The need to conduct more research to reach proposed models for integration between modern accounting methods on the one hand, and modern management methods on the other, to take advantage of the advantages of each.

References

- Ahmed, S. A., & Moosa, M. (2011). Application of resource consumption accounting (RCA) in an educational institute. Pakistan business review, 12(4), 755-775.
- Ahmed, S. A., & Moosa, M. (2011). Application Of Resource Consumption Accounting in Educational Institute.
- Al-Dalf, M. O. (2013). Developing cost systems in service establishments in Using resource consumption accounting with the aim of rationalizing resource management an applied study [Unpublished, Tanta University]. Faculty of Commerce.
- Al-Gharuri, A. M. S. A. (2010). Accounting for Resource Consumption,", Faculty of Commerce. Egyptian Journal of Business Studies,, 34.
- Al-Hawali, K. H. S. (2013). The role of the resource consumption accounting approach in strengthening "Energy Utilization in Yemeni Cement Industry Facilities. Scientific Journal of Scientific Studies Current and environmental issues, 4.
- Al-Kashef, M. Y. (2000). the theoretical foundation and requirements for the practical application of fixed cost Purpose as an input to administrative management, Accounting and Auditing Department, Faculty of Commerce, Ain Shams University, first issue. Accounting Al-Fikr Journal.

- Al-Natour, J. R. A. Q. (2013). The effect of applying the consumption accounting model "Cost management in Jordanian industrial companies: An applied study. Al-Fak, 17(3).
- Al-Saghir, M. A.-S. M. (2011). A proposed framework for integration with the input of stress Standardization (ABCII) and Resource Consumption Accounting (RCA) for the purposes of supporting the facility's competitiveness. Journal of Contemporary Business Research, 2(2).
- Bhimani, A., & Okano, H. (1995). Targeting excellence: target cost management at Toyota in the UK. Management Accounting: Magazine for Chartered Management Accountants, 73(6), 42-45.
- Cooper, R., & Slagmulder, R. (2002). Target costing for new-product development: product-level target costing.
- Driscole Ganye, K. (2004). Target Costing in Swedish Firms–Fiction, fad or fact?"An Empirical study of some Swedish firms". rapport nr.: Masters Thesis(2004).
- Froeb, L. M., McCann, B. T., Ward, M. R., & Shor, M. (2015). Managerial Economics 4th Edition (4 ed.). Cengage Learning.
- Halas, S. A. S. (2012). The extent of application of the target cost approach in... Palestinian industrial companies operating in the Gaza Strip "Field Study". Journal of the Islamic University for Economic and Administrative Studies, 20(2).
- Kee, R. (2010). The sufficiency of target costing for evaluating production-related decisions. International Journal of Production Economics, 126(2), 204-211.
- Mackie, B. (2006). Merging GPK and ABC on the Road to RCA: Toronto's hospital for sick children has successfully implemented the first part of a new accounting system that provides relevant information for its operations managers to use on the job. Strategic Finance, 33-40.
- Muhammad, K. M. H. T. (2019). An analytical study of the possibility of Integration between the methods of target cost and rationalization of material consumption accounting Quality Costs, , College of Commerce in the Name Aliyah, Suez Canal University. Scientific Journal of Commercial and Environmental Studies, 10(4).
- Najm, A. H., Ahmed, M., & Shehato, S. (2016). The relationship between authentic leadership and both the centrality of work and leisure time by application to employees of the General Administration of Water Resources and Irrigation in East Dakahlia. Egyptian Journal of Commercial Studies, 40(2).
- Pierce, B. (2002). Target Cost Management. Accountancy Ireland, 34(2), 30-32.
- Simon, T., & Benjamin, L. (2003). A planning and control model based on RCA principles. Journal of cost management, 17(4), 20-27.
- Stefea, P., Abbas, K. M., & Wagdi, O. (2014). Aspects of Obstacles for Applying Target Costing: A Survey of Manufacturing Firms in Egypt. Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development, 14(1).
- Yousef, M. M. (2017). Efficiency and Effectiveness of Cost Deviation Analysis Rules. Qatar University.