

APPLICATION OF ATTRIBUTE BASED COSTING TECHNIQUE TO REDUCE COSTS

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Article	history:	Abstract:
Article Received: Accepted: Published:	history: 8 th May 2023 11 th June 2023 11 th July 2023	As a result of the rapid technological progress, the increased intensity of competition, and the global openness of markets, this led to the invasion of the local markets with large numbers of foreign products of better quality compared to local products, which exposed the Iraqi economic units to many pressures for various reasons, the most important of which is the high cost of their products and the low level of quality, which requires These units search for solutions that lead to providing a high-quality product that is able to compete with the foreign product in terms of price and quality, and then achieve satisfaction. Therefore, the research aims to apply cost technology based on specifications and explain its role in reducing product costs and applying it in one of the industrial economic units. In order to achieve the goal of the research, the researcher relied on the data of the economic unit, the
		research sample, as well as personal interviews and field visits to the economic unit. The researcher reached a set of conclusions, the most important of which are:
		The weakness of the costing system applied in the research sample factory and its shortcomings in accurately following up and counting the cost elements during the product life cycle.
Keywords: Attrib	ute Based Costing	costs reduction

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THE INTRODUCTION:

Intense competition is one of the most prominent features associated with the contemporary business environment compared to what it was established in the past eras, after the cultural and economic openness witnessed by the contemporary world, which brought about a change in the nature of competition for economic units. After its competition was limited to its neighboring economic units in the local environment, today it is looking for ways to compete in line with the nature of recent developments at the international (global) level.

Because traditional costing systems cannot keep pace with contemporary technical developments, they seem unable to provide the necessary information to determine costs properly. These systems are also unable to reduce product costs, in addition to their inability to improve production. Therefore, there was a need to adopt many contemporary technologies by the economic unit in pursuit of its objectives as it should be.

The specification-based costing technique (ABCII) is one of the contemporary techniques adopted by many contemporary economic units, as it is based on the idea that the product is nothing but a set of specifications and characteristics, and giving these specifications to the product requires a set of activities, and the implementation of these activities entails Costs occur, so the specification-based costing technique tries to link costs, operating information, technical and financial information on the one hand, and product specifications on the other hand.

The first topic: research methodology and previous studies

First: Research Methodology:

1 .Research Problem: Research Problem

The problem of the research was the high costs of products in the industrial economic units and the weak interest of the management of these units in the importance of contemporary costing techniques and their applications, including cost technology based on specifications, so the research problem can be formulated through the following questions:

a. Is it possible to measure the cost on the basis of specifications in the Iraqi industrial economic unit, the research sample?

B. Does the application of costing technology based on specifications in the economic unit of the research sample contribute to reducing costs?

2 .Research Importance: Research Importance

The importance of the research is evident as follows: a. The application of costing technology based on specifications can contribute to reducing product costs to meet the expectations and needs of customers, by providing appropriate information in a timely manner to



assist management in carrying out its functions, which makes it able to face the changes and challenges in the contemporary manufacturing environment.

b. Helping the industrial economic unit (the research sample) to reduce product costs, and make optimal use of available resources and energy through the application of cost technology based on specifications. 3 .Research Objectives

This research aims to:

a . Statement of the knowledge foundations of costing technology based on specifications.

b . Cost measurement at the level of specifications in the industrial economic unit of the research sample.

c . Clarify the role of using costing technology based on specifications to reduce product costs.

4 .Research hypothesis

The research is based on testing a basic hypothesis:

"The application of costing technology on the basis of specifications can help the management of the economic unit, the research sample, to provide appropriate information that contributes to reducing the cost of products and in line with the requirements of the contemporary business environment".

5 .Research boundaries

a. Spatial boundaries: The spatial boundaries of one of the Iraqi industrial economic units (Fayd Al-Qassim Company for Metallurgical Industries as a research community and Al-Qassim Factory for the production of refrigerants, which is located in the center of Najaf Governorate as a research sample)

b. Temporal limits: The temporal limits are represented by the data of the economic unit, the research sample for the year (2020).

Second: previous studies

The study (Mahmoud, 2018) titled "Integration between the target cost method TC and the cost measurement approach based on specifications ABCII with the aim of reducing costs" demonstrated the extent to which integration can be achieved between the target cost method and the cost measurement approach based on specifications.

As for (Al-Defai, 2019), his study titled "Integration between Quality Costs and the Cost Entrance on the Basis of Specifications and Its Role in Achieving Competitive Advantage" concluded that in light of the rapid developments in the contemporary business environment (economic, manufacturing, and technological) that represent challenges Facing departments of economic units necessitate adopting modern approaches to manage strategic costs, including cost based on specifications based on customer orientation as the factor influencing the competitive market. As for Azeez et al, 2020), his tagged study focused "The role of integration between enterprise resource planning and attribute based costing for supporting economic cost management in tourism companies"

Highlighting the role of costing technology based on specifications in providing appropriate information to the management of the men's clothing factory in Najaf, in order to analyze the profitability of customers and how to maintain them.

Therefore, this research came to complement what the previous researchers concluded by applying cost technology based on specifications to reduce costs.

The second topic: Knowledge foundations of Attribute Based Costing technology

First: the concept of cost technology based on ABCII specifications

The specifications are "a set of characteristics and features that the product contains that represent value to the customer and push him to buy the product without other alternatives to competing products" (Drury, 2020: 590), and the specifications have been classified into the following: (MacMillan & McGrath, 1996: 62-66)

1 .Basic specifications: which represent the minimum requirements for the specification of the product offered in the market, which the customer is expected to see in all competitors' offers, as well as expected by the target sector.

2 .Distinctive specifications: These are the specifications that distinguish the product offered by the economic unit from the products of competitors.

3 .Motivational specifications: As these specifications are considered the most important, not only at the level of distinguishing the product offered by the economic unit from the products of competitors, but rather serve as an incentive towards the purchase decision, as it is the one that motivates the customer to acquire a product and not others.

In light of this, the economic unit has become focused on the concept of product value and considers it a source of profitability, and this concept focuses on entering competition in the market on the basis of satisfying the customer with products that have a higher value and better than competitors, and this value depends on the customer's perspective and vision of the product specifications (Ingles, 2005 :56).

Therefore, the Attributes Based Costing technique (ABCII) is one of the proposed techniques for measuring product costs, and it is an attempt to reach the most accurate identification and measurement of product costs in a way that provides information that contributes to the rationalization of decision-making. This technique is called cost-based Specifications



(ABCII) because it depends on product specifications and takes them as a basis for determining and measuring costs (Azeez et. al, 2020:491)

Cost-by-specification is defined as an extension of ABC, using a comprehensive cost-benefit analysis to detail customer requirements, in terms of product performance attributes such as reliability, longevity, speed, and responsiveness" (Almaskor et.al, 2020:2).

Second: The importance of costing technology based on specifications:

The importance of the specification-based costing technique is as follows: (ALmashkor et. al,.2020:494 (), Habib, 2021:31).

1 .Helps study and plan costs from a strategic perspective.

2 .This technology is compatible with the modern concept of marketing, which is market orientation, as the main factor for the success of the economic unit is its determination of the needs and desires of customers and working to satisfy them effectively and efficiently outperforming competitors.

3 .Costing technology based on specifications is one of the main pillars for developing a cost information system and improving the quality of its outputs.

4 .It helps to reduce the cost of the product by making use of untapped energies.

5 .With regard to development and product improvement projects, analyzing the product into its specifications and determining the levels of each specification contributes to knowing which of the specifications and which levels of verification can be developed.

6 .ABCII technology contributes to realizing opportunities that lead to improved product development and increased customer value.

7 .When analyzing the product according to its specifications, it shows the negative specifications (unwanted ones that reduce the overall benefit of the product to the customer and his feeling of complete dissatisfaction with it.)

The researcher believes that the (ABC II) technique helps the administration in rationalizing its decisions, which reflect the completion rates for each specification and the costs incurred therefrom. This is done by defining the requirements in the product, which would meet the customer's needs and fulfill his desires.

Third: Steps to apply costing technology based on specifications:

The application of costing technology based on specifications is based on a set of steps that regulate how to apply it effectively, which are as follows: (Zychta, 2010: 5) (Zibin, 2020: 96) (Al-Sayed, 2019: 26).

1 .Determining the needs and desires of customers: This step represents the starting stage in applying costing technology based on specifications for its role in determining the main specifications when designing products.

2 .Determining the basic specifications of the product: This step is important, as the customers who benefit from the product and their desires should be known, due to the different tastes of customers.

3. Determine the activities and processes necessary to implement the set specifications: In this step, the activities are counted in order to identify the inputs and outputs of each process, study the different performance measures related to the operations, and the extent to which each process adds value, which allows the possibility of differentiating between the activities that add value and those that do not add value and get rid of them as Not necessary.

4. Determining the costs of the activities necessary to implement the standard: After determining the activities necessary to implement the product specifications, the resources used to achieve each of the product specifications are determined, and the necessary measures are taken to determine the costs of each level of achievement for each specification (Al-Saghir, 2010: 82.).

5 .Determine the unit cost of the product: Each level of achievement for each product specification is considered an independent product. Accordingly, the cost of the product for a specific level of achievement is the sum of the cost of activities that add value to a specific level of achievement and the cost of necessary activities that do not add value, which make up the product specifications. Thus, the total cost of the product is the cost of each of the product specifications. The third topic: the application of costing technology based on specifications in the Al-Qasim factory

The first step: identifying the needs and desires of customers:

It means achieving the product's ability to respond to the expectations and desires of customers on an ongoing basis, and the completion of this step requires knowledge of the beneficiaries of the product and their desires, the speed and efficiency of communication with them, and the expectation of possible changes in the values of specifications from the point of view of customers.

The second step: Determine the basic specifications of the product:

The main specifications of the product, which represent the main motive for the acquisition of the product, are determined according to the point of view of the economic unit in determining those specifications



on the basis of which the product was designed and manufactured. After studying the product, the researcher concluded that the main specifications of the product are (size, performance, safety, shape (aesthetic), suitable for use.(

Step Three: Determine the parts of the product associated with each specification:

The researcher was able, with the help of engineering expertise and market research reports available in the laboratory (the research sample), and through field cohabitation in the laboratory, the research sample, to determine the parts of the 2.5-foot refrigerated product and the associated specifications, as in the following table:

Table (1) Refrigerated product parts 2.5 feet and associated specifications							
sequencing	Details	size	Performan ce	Safety	shape(aest (hetic	appropriate to use	
1.	The base	\checkmark					
2.	ceiling	\checkmark					
3.	muzzle	\checkmark					
4.	the doors	%60	%40				
5.	motor			%30		%70	
6.	Water Pump		\checkmark				
7.	selvage					\checkmark	
8.	Water foundations		\checkmark				
9.	Electrical foundations			\checkmark			
10.	Sarps	%45	%55				
11.	Poly M + Poly S		\checkmark				
12.	Shift Busha		\checkmark				
13.	block		\checkmark				
14.	a lock			\checkmark			
15.	Shift sarps		\checkmark				
16.	tunic nail			\checkmark			
17.	Bush bricks		\checkmark				
18.	raft					\checkmark	
19.	Label the water out				\checkmark		
20.	trademark				\checkmark		

Source: Prepared by the researcher according to the reports of the Research and Development Department and the interview with the specialized engineers

The mark (\checkmark) in table (1) means the responsibility of the part for achieving a specific specification. If we take, for example, the part of the motor, we find that this part is responsible for achieving the specification of suitability for use (speed and efficiency), and this constitutes (70%) of the components of the part, while the remaining part is responsible for Achieving safety standards, and this applies to the rest of the product.

Step Four: Determine the cost based on specifications:

The total cost of each of the specifications will be determined on the basis of the causes of change Table (2) shows the costs associated with the volume of production to standardize the volume

Table (2) costs associated with the volume of production for the volume standard



Part	raw materials	measruing unit	Spent Quantity (1)	The price of the unit of measurement (2)	Amount in dinars (1)×(2)		
Ground base + ceiling	pallet (0.8)	meter	1×3.95=3.95	12882	50.883		
doors	pallet (0.8)	meter	1.89= 0.63×3 = %60×1.89 1.134	12882	14.608		
Sarps	piece		1	=%45×17.648 7941.6	7.9416		
Total	73.4326						

Source: The researcher based on the company's records

From table (2), we note that the total cost associated with the volume of production for the size standard for the year 2020 is 73432.6 dinars, and the highest cost for the sleeve part was 24733 dinars, and the lowest cost for the serps part was 7941.6 dinars, which represents 45% of the cost of the serps, as the remainder of its cost is within the costs associated with the performance standard For the refrigerated product, which is shown in Table (3) as follows:

Table (3) Costs associated with the volume of production for the performance specification

Part	raw materials	measruing unit	Spent Quantity (1)	The price of the unit of measurement (2)	Amount in dinars (1)×(2)
doors	0.63	meter	1.89 = 3×0.63 0.756=%40×1.89	12882	9738.7
Water Pump		piece	1	3000×1	3000
		Water	foundations		
water split		piece	5	50	250
water hose		meter	4	500	2000
water wheel		piece	2	750	1500
Total			3750		
Sarps		piece	1	=%55×17.648 9.7064	9706.4
Poly M + Poly S		piece	2	875	1750
Shift Busha		piece	2	475	950
block		piece	2	425	850
Shift sarps		piece	1	1400	1400
Bush bricks		piece	2	500	1000
Total		·			15656.4
Gross					32145.1

Source: The researcher based on the company's records.

It is clear from Table (3) that the total cost associated with the volume of production for the performance description for the year 2020 is 32145 dinars, and that the highest cost within this specification is in the Sarps group, amounting to 15656.4 dinars, and the lowest cost is the water installations, which amounted to 3750 dinars. As for Table (4), it shows the costs associated with the safety specification of the refrigerated product.

Table (4) costs associated with the production volume of the safety specification



Part	raw materials	measruing unit	Spent Quantity (1)	The price of the unit of measurement (2)	Amount in dinars (1)×(2)			
motor	Electric motor	piece	1	12000=%30×40000	12000			
	Electric foundations							
Interrupter		piece	1	1000	1000			
wire line		piece	1	1000	1000			
Total			2000					
a lock		piece	1	500	500			
tunic nail		number	10	10	100			
Gross					14600			

Source: The researcher based on the company's records

It is clear from Table (4) that the total cost associated with the volume of production for the safety standard for the year 2020 is 14,600 dinars, and that the highest cost within this specification is in the electric motor, amounting to 12,000 dinars, which represents 30% of its cost, while the remaining 70% of its cost is within the standard suitable for use. As for table (5), it shows the costs associated with the specification of the shape (aesthetic) of the refrigerated product. Table (5) shows the costs associated with the specification of the (aesthetic) shape.

Table (5) costs associated with the volume of production for the (aesthetic) shape specification

Part	raw materials	measruing unit	Spent Quantity (1)	The price of the unit of measurement (2)	Amount in dinars (1)×(2)
Label the water out		piece	1	100×1	100
trade mark		piece	1	50×1	50
Total					150

Source: The researcher based on the company's records.

Table (6) the costs associated with the production volume of a standard suitable for use

Part	raw materials	measruing unit	Spent Quantity (1)	The price of the unit of measurement (2)	Amount in dinars (1)×(2)
motor	Electric motor	piece	1	28000=%70×40000	28000
selvage		piece	3	1000	3000
raft		piece	1	3000	3000
Total					34000

Source: The researcher based on the company's records

It is clear from Table (6) that the total cost associated with the volume of production for a specification suitable for use for the year 2020 is 34,000 dinars, and that the highest cost within this specification is in the electric motor, amounting to 28,000 dinars.

Table (7) Summary of costs for each specification related to the production volume

Specification	costs associated with size of production
size	73432.6
Performance	32145.1
Safety	14600



shape(aesthetic)	150
appropriate to use	34000
Gross	154327.7

Source: the researcher's calculation based on the results of Tables(1, 2, 3, 4, 5, 6)

It is clear from Table (7) that the total cost associated with the volume of production for the year 2020 is 154,328 dinars, and that the highest cost is for the size specification, as it amounted to 73,433 dinars, while the lowest cost for the aesthetic form was 150 dinars.

2. Activity-related costs: As mentioned above, these costs consist of two parts: labor costs and indirect industrial costs (except for extinction). For the activities of each product specification:

Table (8) Time required for volume specification activities

Part	necessary activities	Responsible department(1)	Activity time/min (2)	Number of workers(3)	total time/min 2×3=4
	Square and vertical pallet cutting	shredder	10	7	70
for	base retorting	tempering	10	1	10
cooler	Press the parts of the base	Assembly	5	2	10
	Quality control check	Shipment and examination	2	1	2
Total					92
	roof retorting	tempering	7	1	7
	Pressing the parts of the roof	Assembly	7	1	7
	Quality control check	Shipment and examination	2	1	2
Total					16
	Flexion of sleeves	tempering			
	Install sleeves with the base and the roof	Assembly	15	2	30
	Quality control check	Shipment and examination	2	1	2
Total					32
	Bend the doors	tempering	10=%60×18		10.8
	Doors perforating	tempering	.8	1	
	penerating				
	Door installation	Assembly	3	1	3
	Door	Assembly Shipment and examination	3 2	1	2



Sarpe	Sarps installation	Assembly	7.=%45×16 2	1	7.2
Sarps Quality control check	Shipment and examination	2	1	2	
Total		9.2			
Gross		165			

Source: Prepared by the researcher

	Table ((9)) Time rec	uired f	for	performance activities	

Part	necessary activities	Responsible department(1)	Activity time/min (2)	Number of workers(3)	total time/min 2×3=4
doors	As indicated in the size specification	shredder	7.2 =%40×18	1	7.2
	Installing the Water Pump basket	Assembly	5	1	5
Water Pump	Installing the Water Pump	Assembly	9	1	9
	Quality control check	Shipment and examination	2	1	2
	Poly M + Poly S	Assembly			8.8
Sarps	Shift Busha Connect	Assembly	8.8	=%55×16	
Extensions	block connect	Assembly			
	Shift sarps	Assembly			
	Quality control check	Shipment and examination	2	1	2
Gross					34

Source: Prepared by the researcher

Table (10) Time required for security activities

Part	necessary activities	Responsible department(1)	Activity time/min (2)	Number of workers(3)	total time/min 2×3=4
	Stamp the motor base			1	4.5
motor Connect the motor		Assembly			
	Quality control check	Shipment and examination	2	1	2
ElectElectri cal	Connect circuit breaker	Assembly	3	1	3



installation s	Wire connection to the motor	Assembly	3	1	3
	Quality control Shipment a check examination		2	1	2
Sarps	Connect the lock	Assembly	1	1	1
Extensions	tunic nail	Assembly	1	1	1
Gross					16.5

Source: Prepared by the researcher

Table (11) The time required for the activities of the form (aesthetic)

Part	necessary activities	Responsible department(1)	Activity time/min (2)	Number of workers(3)	total time/min 2×3=4
Label the water out	Assembly	Assembly	1	1	1
Refrigerate d mark	Assembly	Assembly	1	1	1
Gross					2

Source: Prepared by the researcher

Table (12) Time required for activities (appropriate for use)

Part	necessary activities	Responsible department(1)	Activity time/min (2)	Number of workers(3)	total time/min 2×3=4	
selvage	Assembly	Assembly	2	1	2	
raft	Assembly	Assembly	2	1	2	
motor			10.5 =%70×15			
Gross					14.5	

Source: Prepared by the researcher

Table (13) the total time required to complete each specification

specification	Total time/minute	wage rate per minute	Work cost for each specification in dinars
size	165	50	8250
Performance	34	50	1700
Safety	16.5	50	825
format	2	50	100
relevance to use	14.5	50	725
	232	50	11600

Source: Prepared by the researcher

The share of one refrigerant from extinction = Annual depreciation cost borne by the refrigerated product / (Annual number of Refrigerated)

= 14707500/5616

168



= 2618 dinar overhead costs except for depreciation= 16933-2618 = 14315 dinar Table (14) overhead costs (except for depreciation) for each specification

specification	Relative importance	overhead costs except for depreciation	overhead costs to specification except for depreciation
size	14315	%48	6871.2
Performance	14315	%21	3006.15
Safety	14315	%8	1145.2
format	14315	%3	429.45
relevance to use	14315	%20	2863
Total		%100	14315

Source: Prepared by the researcher

Table (15) Activity-related costs for each specification for the year 2020

specification	labor costs	overhead costs except for depreciation	Activity cost per specification
size	8250	6871.2	15121.2
Performance	1700	3006.15	4706.15
Safety	825	1145.2	1970.2
format	100	429.45	529.45
relevance to use	725	2863	3588
Total	11600	14315	25915

Source: Researcher's calculation based on Tables 13 and 14.

Table (16) energy-related costs for each standard for the year 2020

specification	depreciation costs	Relative importance	energy related costs
size	2618	2618 %48	
Performance	ormance 2618 %21		549.78
Safety	2618	%8	209.44
format	2618	%3	78.54
relevance to use 2618		%20	523.6
Total		%100	2618

Source: Researcher's calculation based on Table (14)

Costs related to the decision: These include administrative and marketing costs for the year 2020, amounting to (9313) dinars

Table (17) Decision-related costs for each specification for the year 2020

specification	Marketing and administrative costs	Relative importance	Costs related to the decision
size	9313	%48	4470.24
Performance	9313	%21	1955.73



Safety	9313	%8	745.04
format	9313	%3	279.39
relevance to use	9313	%20	1862.6
Total		%100	9313

Source: Researcher based on Table (14)

Table (18) Attribute Based Costing for a 2.5-volume refrigerated product for the year 2020

specification	Costs related to production volume	Activity related costs	energy related costs	Costs related to the decision	The total cost of the specification
size	73432.6	15121.2	1256.64	4470.24	94280.68
Performance	32145	4706.15	549.78	1955.73	39356.66
Safety	14600	1970.2	209.44	745.04	17524.68
format	150	529.45	78.54	279.39	1037.38
relevance to use	34000	3588	523.6	1862.6	39974.2
Total	154327.6	25915	2618	9313	192173.6

Source: Researcher's calculation based on tables (7, 15, 16, 17)

When comparing the cost of the refrigerated product according to the traditional system (195,573) dinars and Attribute Based Costing calculated by the researcher for the same refrigerated product as an actual cost (192,173) dinars fixed in Table (18), we find that there has been a reduction in the cost by an amount of (3400) dinars The fourth topic: conclusions and recommendations

FIRST: CONCLUSIONS

1 .The optimal criterion for the success of the economic unit and for maintaining its position and continuity in the strongly competitive market is to meet customers' requests for products with the specifications they desire and enjoy high quality and lowest possible costs.

2 .The specification-based costing technique (ABC II), which emphasized specifications, emerged as one of the most important methods and methods of costing.

3 .The specification-based costing technique is an effective technique that is concerned with the quality of the characteristics and characteristics of the product or service in order to meet the requirements and expectations of customers in a manner that guarantees cost reduction as much as possible.

4 .The application of costing technology based on specifications contributed to the reduction of the total product specifications, and the total reduction in specification costs was (2%), as the costs were 195,573 dinars, and after application, they became 191,741 dinars.

5 .The cost technology based on the specifications improved the product specifications and in accordance with the requirements and needs of the customer, which led to improving the quality of the product in addition to reducing the price of the refrigerated product to 203613 dinars instead of 209263, and compared to the price of the refrigerated competition amounting to 222757 dinars, making it more competitive than the previous one, and this is what he seeks The aim of the research and its hypothesis. **SECOND: RECOMMENDATIONS**

1 .The need for the economic unit, the research sample, to pay attention to the study of the market, search for new marketing outlets, and continuous communication with customers, in order to know the specifications that they require and that achieve the desired value from the customer's point of view, in order to improve the quality of its products compared to foreign products, which leads to its survival and continuity in the world of intense competition.

2 .Focusing on the customer to determine the specifications that the customer desires and what each specification is of importance to the customer - to monitor its costs in order to avoid any waste or extravagance in cost

3 .The researcher recommends the company's management to apply (ABCII) technology to the rest of its products, including products (heater, curler and ducts) due to its role in improving product specifications and quality.

4 .The need for the economic unit to show the research sample all the research and studies that deal with the applications of contemporary technologies,



including (ABCII) technology, in order to benefit from it in improving and developing its products.

5. The need for the economic unit to carry out training and development courses for workers in the accounts and costs departments to introduce contemporary accounting and administrative techniques to gain sufficient skills and increase workers' awareness of their importance through cooperation with specialized academics in universities to hold these courses.

REFERENCES

- 1. Ahmed, Ali Megahed (2019). "A proposed framework for the integration of RCA resource consumption accounting system and costing system based on ABCII specifications to support customer profitability management." Faculty of Commerce, Kafr El-Sheikh University, Volume 2, Issue 7.
- 2. Al-Jadri, Dhurgham Ahmed Abdel-Reda (2016) "An approach to measuring Attribute Based Costing in order to reduce costs," an unpublished master's thesis, College of Administration and Economics, University of Baghdad.
- 3. 3.ALmashkor et. al," (2020)"The Importance of Using Attribute-Based Costing in Facility Management" May-JuneISSN: 0193-4120 Page No. 491 – 498
- 4. Azeez,et.,al" (2020)"The role of integration between enterprise resource planning and attribute based costing for supporting economic cost management in tourism companies" African Journal of Hospitality, Tourism and Leisure, Volume 9 (2) ISSN: 2223-814X
 5. Drury, C. (2020). "Management And

Cost Accounting", 11th ed., Thomson Learning , London.

- 6.Habib, Riyad Karim (2021) "Using cost technology based on specifications in providing appropriate information in analyzing customer profitability", unpublished master's thesis, University of Kufa, College of Administration and Economics, Baghdad.
- 7.Inglis R.(2005). "Market Orientation and Accounting Information AProduct Level Study". Unpublished Thesis, University of Stirling. Lawson.
- 8.MacMillan I. & McGrath R., "Discover Your Product's Hidden Potential", Harvard Business Review, May-June, 1996.

- 9.Mahmoud, Ruqaya Mahmoud Eshail (2018), "Using the entrance to cost measurement based on specifications, an applied study," Faculty of Commerce -Mansoura University, Volume 9, Number 1.
- 9. Mohammed. El-Sayed Mohamed, (2011) "A suggested framework for the integration between the ABCII specification cost approach and the RCA resource consumption accounting for the purposes of supporting the competitiveness of the enterprise", Contemporary Business Research Journal, Volume 25, Issue 1, Egypt, 2011.
- 10. Zibin, Haider Atta. 2020 "Using cost based on specifications and publishing the quality function in order to improve the value of products, an applied study in the General Company for Leather Industries", Kut University College Journal, Volume 1, Number 2.