# THE ROLE OF CONTEMPORARY COST ACCOUNTING SYSTEMS IN PLANNING, DECISION-MAKING AND CONTROLLING, IN SUDANESE SEA PORT CORPORATION

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# **ABSTRACT**

The study aimed to demonstrate the role played by Contemporary cost accounting systems in the operations, planning, control, and decision-making of the Seaports corporation. In addition to identifying the weaknesses and strengths when applying contemporary cost accounting systems, and to achieve the objectives of the study, it followed the historical method, the deductive method, the inductive method, and finally the descriptive analytical method. Among the findings of the study, contemporary cost accounting systems played an active role in their impact on pricing decisions by calculating the cost of diversification more accurately in the Sea Ports Corporation. The study recommended that it is necessary to work on accurate measurement of costs in accordance with contemporary accounting systems to help rationalize expenditures and optimize the use of resources in the Seaport corporation.

**Keywords:** Contemporary Cost Accounting Systems, Planning, Control, and Decision-making

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#### INTRODUCTION

Considering the developments that contemporary institutions have known in various economic, social and accounting fields, it was also necessary to seek to benefit from the continuous development in cost accounting, so it was necessary to apply contemporary cost accounting systems to provide detailed data for management in order to assist it in the planning, control and decision-making process ensure the continuity and development that all institutions seek, keeping pace with technical and technological progress in the various means of production, and trying to correct the classic systems used at all levels, especially with the large size of projects, the diversity of products and the increase in the intensity of competition.

#### STATEMENT OF THE STUDY PROBLEM

The problem of the study lies in the main question: What is the role of contemporary cost accounting systems in planning, control, and decision-making? and to cover the topic of the study, the main problem has been divided into the following sub-questions:

1/ What is the relationship between the application of contemporary cost accounting systems and good planning in the Ports Corporation?

2/ What is the relationship between the application of contemporary cost accounting systems and good control in the Ports Corporation?

3 / Is there a relationship between the application of contemporary cost accounting systems and making the right decision in the Sea Ports Corporation?

## SIGNIFICANCE OF THE STUDY

The importance of the study stems from the following:

The issue of contemporary cost accounting systems and its role in planning, control and decision-making is considered modern and worthy of research in this regard, to highlight its importance in the extent of the Authority's success. In addition to reviewing the various modern methods to try to find integration among them. The application of the Sea Ports Authority to the contemporary costing system contributes to defining the main parameters and clarifying the basic concepts of the costing system and alerting management to the importance of the

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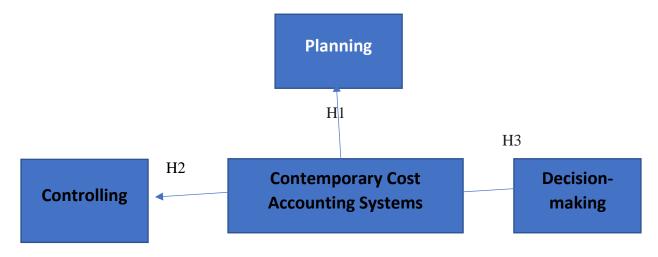
information provided by the contemporary costing system. This study is based on identifying the obstacles that prevent the application of the contemporary costing system and developing solutions and recommendations that help in its implementation.

## **OBJECTIVES OF THE STUDY**

- 1/ To recognize the modern methods of contemporary cost accounting and its role in planning, control, and decision-making.
- 2/ To identifying strengths and weaknesses when applying contemporary cost accounting systems.
- 3/ Study and know the policies used to implement contemporary cost systems.
- 4/ To shedding light on the benefits that will accrue to the authority by relying on contemporary systems for measuring costs

## HYPOTHESES OF THE STUDY

- 1/ There is a statistically significant relationship between the application of contemporary cost accounting systems and good planning in the Ports Corporation.
- 2/ There is a statistically significant relationship between the application of contemporary cost accounting systems and the good control of the corporation in the Seaports Authority.
- 3/ There is a statistically significant relationship between the application of contemporary cost accounting systems and sound decision-making in the Seaports Corporation. The following model is developed:



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# LITERATURE REVIEW

## Contemporary Systems of Cost Accounting:

#### Introduction:

The concept of the activity-based costing system (ABC): It is not a recent innovation, for more than fifty years ago (ABC) motivated all of this. The activity-based costing system arose from the principles of the activity-based costing system when he indicated that each An initial category or group of indirect costs must be related to each dimension of management problems related to planning and control, especially since some of the main dimensions of indirect costs that may change with the change in the number of product units, number of units, number of operations, factory capacity, number of The presented materials (Government, 2013 AD, p. 61).

## Definition of ABC:

It is that system that is based on aggregating the indirect costs of each activity of the establishment into cost pools and then allocating these costs on the final product or service provided as cost vectors based on the causal relationship. benefited from them, and then allocating the costs of these activities according to the rate of benefit from these activities.) And there are those who defined it as ((that system that focuses on dividing the facility into several sub-activities and considering it the main cost site)) (Zainab, 2014 AD, p. 934).

## Target cost system:

The definitions of target cost have varied and varied from one researcher to another. The target cost is defined as the estimated cost of a unit produced over a long period of time, and it helps the company to achieve a target operating income for the unit when it is sold at a target price. It is also known as a "profit planning system." And cost management to reach the competitive price, by focusing on the initial stages of product manufacturing and development in the total product life cycle and by analyzing the activities in the value chain with the requirements of customers (Khadija, 2016 AD, p. 69) and another defines it as "product design and the processes used in productivity and In order to eventually be able to manufacture it at the costs that enable the company to obtain the required profit when selling it at the price established by the market (Qasim, 2013AD, p. 321).

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# JIT production system:

JIT technology is defined as (a comprehensive philosophy of stock management that focuses on policies, procedures and attitudes by managers that result in efficient production of high-quality goods while maintaining the lowest possible level of storage). (Moadh, Dr. S. p. 4). Also, JIT technology is defined as: that system that reduces production costs by eliminating as much as possible production and inventory delays, that is, it can eliminate waste in materials during the production process, starting from the design until it is delivered to the customer. (Qasim, 2014 AD, p. 371).

#### PLANNING CONCEPT

He defined planning as: "a pre-determining what will be done. It is a determination of the workflow in the future, which includes a coherent and coherent set of operations to achieve certain goals." (Mohammed, 1999, p. 8). Another says that the planning process covers a wide range of activities, starting with the initial sense that something must be done and ending with determining what must be done and the time in which this action is performed and who is responsible for it. Hence, planning is more than just a perception, judgment or logical thinking, that it includes all the basic elements and factors involved in making a decision about what to do and constitutes taking The decision is an important aspect of the planning process, and another sees that planning is defined as a choice among alternative paths to act for the future, for the project as a whole and for each of its sections. (Youssef, 2014, pg. 13).

## THE CONCEPT OF DECISION-MAKING

It is the core and core of the administrative process in any project and in general it is defined as the conscious and conscious choice based on verification and calculation in choosing the appropriate alternative from among the alternatives available in a particular situation, in other words, decision-making is not an automatic response and reaction The unconscious direct, but it is a conscious choice based on the measure and calculation in the details of the goal to be achieved and the means that should be used from the administrative and scientific point of view. (Star, 2017, p. 22).

The importance of the decision-making process:

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The importance of the decision is manifested in the fact that it is the core of the administrative process that directs the planning, regulation, and control processes and through which the problem or situation that may be very valuable can be studied, and the best way to move forward as alternatives to the processes can be selected.

## EMPIRICAL REVIEW

- Jamalat, (2019) The problem of the study was represented in the role of the application of center costs system in pricing services in the basin workshop and vessels in the Maritime Ports Authority. The most important results it has reached, the basin and utensils workshop at the Maritime Ports Authority is concerned with applying the methods of distributing the costs of centers and pricing their services to help in the cost management process.
- Rasheeda, (2017) focused on the use of Cost accounting system based on activities in achieving competitive advantage. The most important results I have reached, the activity-based cost accounting system provides accurate cost data that supports the decision-making process. It consumes resources.
- Saleh, (2016) to discuss the problem of the role of the activity-based costing system in improving cost measurement in health units. One of the most important findings it has reached is that the increasing level of interest of Sudanese health units in applying the Activity-Based Costing (ABC) system ensures the accuracy of measuring activities costs compared to the traditional cost measurement system.
- Khadija (2016) How to use modern cost accounting methods in determining the cost of health services and covering the shortcomings of traditional systems. The study concluded that modern cost accounting systems provide accurate information about costs with more credibility and pluralism of ideas, and this helps senior management in making administrative decisions.
- El Saadawi (2015) dealt with the analysis and obstacles of applying the activity-based cost accounting system and the steps and mechanisms for applying the time-oriented activity-based costing system (TD - ABC). Measuring the cost of the service provided to customers and thus achieving a competitive advantage for the facility

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# **METHODOLOGY**

The questionnaires were subjected to ethical and biosafety checks for academic integrity and plausibility resulting in all cases being usable.

## Population & Sample size and techniques:

The population of the study consist of 53 employees located within the seaport corporation which located in port Sudan eastern Sudan, where questionnaires were distributed to them and (50) questionnaires were answered, thus the number of questionnaires subject to analysis was (50) questionnaires, with a percentage of (94.34%).

# Sources of data:

Primary sources of data gathering were employed during the study, consequently, a well-structured questionnaire was used to gather responses from various respondents from seaport corporation the questionnaire was administered by researchers themselves where subjected to reliability and validity test with aid of statistical package for social sciences (SPSS).

## Method of data analysis:

Only SPSS, Chi- Square and Alpha Cronbach were used to test and examine the role played by Contemporary Cost Accounting Systems in planning, controlling and decision – making in Sudanese seaport corporation, and hypothesis testing.

## Data analysis and hypothesis testing:

**Table1: Descriptive statistic:** 

S/N	Variable	Frequency	Percentages
1	Qualifications:		
	Bachelor	23	66
	Master's	7	20
	PhD	0	0
	Other	5	14
2	Specialization:		
	Accounting	29	83

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	Business Administration	2	6
	Economic	4	11
3	Experiences:		
	Less than 5 years	4	0
	Between 5 and 10 years	11	69
	More than 10 years	20	31

Authors computation 2022

It was found that the scientific qualification (bachelor's degree) is the highest among the study sample members and represented (62%) of the total percentage of the study sample, followed by the master's qualification by (28%). Trust and credibility. It is also clear that the specialization (Accounting) is the highest among the study sample members, and represented (88%) of the total percentage of the study sample, followed by (Economics) with a percentage of (8%), and (Business Administration) with a percentage of (4%), and therefore this result shows the extent to which the study sample is aware of the content and dimensions of the questionnaire statements and answers them with understanding and knowledge. We also note that years of experience exceeding (10) years are the highest among the answers of the study sample members, reaching (52%), followed by the percentage (40). %). And whose experience ranges from 5 to 10, from which we conclude that most of the study sample have enough experience to understand and answer the topic under study.

 Table 2: Reliability statistic test for variable (Alpha Cronbach's coefficient method)

Variables	Statements	Constancy	Reliability
$H_1$	8	0.693	0.832
$H_2$	8	0.192	0.438
H <sub>3</sub>	7	0.680	0.825
Total	23	0.499	0.706

Authors computation 2022

#### Hypothesis testing:

Table 1: H1. There is a statistically significant relationship between the application of contemporary cost accounting systems and good planning in the Seaport Corporation:

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S/N	Statement	Standard	Weighted	CHI-	D of	Order
		Deviation	Average	Square	F	
		(SD)	(WA)	Value		
1	Modern costing systems provide	0.60911	4.4200	22.360	2	6
	accurate information about costs					
2	Traditional cost systems are unable to	0.89008	4.0600	19.600	3	7
	deal with the challenges of cost					
	measurement and distribution					
	considering the development of					
	information technology.					
3	The authority has the elements that help	0.93040	4.2653	44.980	4	1
	implement the modern costing system					
4	The application of the cost system based	0.72445	4.3333	30.500	3	4
	on production on time leads to the					
	integrity of the distribution of costs and					
	good planning					
5	Target costing system helps reduce costs	0.79057	4.1429	24.878	3	5
6	The application of costing system based	076931	4.3061	31.082	3	3
	on on-time production improves					
	management's ability to plan					
7	The activity-based costing system helps	1.07076	3.4200	15.400	4	8
	to dispense with the establishment's					
	division of service centers					
8	The integration between the activity-	0.97750	4.0600	43.800	4	2
	based budgeting system and the activity					
	costing system achieves benefits and					
	advantages that serve the corporation.					

Source: Authors computation 2022

The researchers note that the standard deviation of the statements of the first hypothesis ranges between (0.60911 and (1.07076), and this indicates the homogeneity of the answers of the study sample members, and given the probabilistic value of the statements, it is greater than the level

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of significance (0.05), and the researcher also notes that the averages of the statements range between (3.4200) and (4.4200), which is greater than the level of significance (0.05), which confirms that there is no difference between the average answers by type for each phrase, and through the above table the following is noted: -

The value of the chi-square to indicate the differences between the members of the research sample on the first phrase is (22.360) with a degree of freedom (2), and the lowest value of the significance level is (0.000), which is less than the level of significance of the null hypothesis (0.05), and therefore accepts the alternative hypothesis and rejects the null hypothesis that there is A statistically significant relationship between the answers of the research sample in favor of those agreeing to the first statement, which states (that modern systems for calculating costs provide accurate information about costs).

2/ The value of the chi-square of computing to indicate the differences between the members of the research sample on the second phrase (19,600) with a degree of freedom (3), and the lowest value of the significance level (0.000), which is less than the zero significance level and therefore rejects the null hypothesis and accepts the alternative silver with the existence of a statistically significant relationship Among the members of the research sample in favor of those agreeing to the second statement which states: (The authority has the elements that help implement the modern costing system).

3/ The value of the chi-square to indicate the differences between the members of the research sample on the third phrase (44.980) with a degree of freedom (4), and the lowest value of the significance level (0.000), which is less than the zero significance level and therefore rejects the null hypothesis and accepts the alternative hypothesis with the existence of a statistically significant relationship between individuals The research sample is in favor of those who agree to the third statement that states (the authority has the ingredients that help implement the modern costing system).

4/ The value of the chi-square to indicate the differences between the members of the research sample on the fourth statement reached (30,500) with a degree of freedom (3), and the lowest value of the significance level (0.000), which is less than the zero significance level, and therefore rejects the null hypothesis and accepts the alternative hypothesis that there is a statistically significant relationship between The members of the research sample in favor of

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those agreeing to the fourth statement, which states (the application of the cost system on the basis of production on time leads to the safety of cost distribution and good planning).

5/ The value of the chi-square to indicate the differences between the members of the research sample on the fifth phrase (24.878) with a degree of freedom (3), and the lowest value of the significance level (0.000), which is less than the zero significance level, and therefore rejects the null hypothesis and accepts the alternative hypothesis that there is a statistically significant relationship between The members of the research sample in favor of those agreeing to the fifth statement, which states (the target costing system helps in reducing costs).

6/ he value of the chi-square to indicate the differences between the members of the research sample on the sixth phrase (31.082) with a degree of freedom (3), and the lowest value of the significance level (0.000), which is less than the zero significance level, and therefore rejects the null hypothesis and accepts the alternative hypothesis in the presence of a relationship that has statistical significance between individuals The research sample is in favor of those who agree to the sixth statement, which states (the application of the cost system on the basis of production on time improves the management's ability to plan).

7/ The value of the chi-square to indicate the differences between the members of the research sample on the seventh phrase (15,400) with a degree of freedom (4), and the lowest value of the significance level (0.000), which is less than the zero significance level, and therefore rejects the null hypothesis and accepts the alternative hypothesis in the presence of a relationship that has statistical significance between individuals The research sample is in favor of those who agree to the sixth statement, which states (the activity-based costing system helps to dispense with the establishment's division of service centers).

8/ The value of the chi-square to indicate the differences between the members of the research sample on the eighth phrase (43,800) with a degree of freedom (4), and the lowest value of the significance level (0.000), which is less than the zero significance level and therefore rejects the null hypothesis and accepts the alternative hypothesis with the existence of a statistically significant relationship between individuals The research sample is in favor of those who agree to the sixth statement that states (the integration between the activity-based budget system and the activity cost system achieves benefits and advantages that serve the Corporation).

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The researcher concludes that the hypothesis of the study, which states: (there is a statistically significant relationship between the application of modern cost accounting systems and good planning in the Ports Corporation), has been proven.

Table 2: H2: There is a statistically significant relationship between the application of modern cost accounting systems and the good control of the Authority in the Sea Ports Corporation:

S/N	Statement	Standard	Weighted	CHI-	D of	Order
		Deviation	Average	Square	F	
		(SD)	(WA)	Value		
1	The methods used to calculate costs,	1.05540	3.2200	6.160	3	8
	reduce costs, do not lead to an objective					
	measurement					
2	The ability of an activity-based costing	0.76559	4.1600	29.520	3	3
	system to provide more accurate					
	information on service costs and					
	control over them.					
3	Activity-based costing helps link costs	0.93496	4.2041	40.286	4	4
	to activities					
4	Implementation of the production	0.88111	3.1224	23.245	3	4
	system on time contributes to reducing					
	and controlling indirect industrial					
	costs.					
5	The activity-based costing system	0.88641	4.100	21.520	3	6
	helps to better allocate industrial					
	indirect costs					
6	The Authority's interest in research and	0.81598	4.2041	22.918	3	5
	development costs leads to accuracy in					
	calculating the cost of products					
7	Lack of interest in the outputs of	0.87225	4.1200	18.800	3	7
	modern systems leads to the lack of an					

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	objective mechanism for distributing					
	the available resources.					
8	The application of the activity costing	0.09053	6.2400	54.640	5	1
	system helps the authority to identify					
	the amount of costs incurred for each					
	activity.					

Source: Authors computation 2022

The researchers note that the standard deviation of the statements of the second hypothesis ranges between (0.09053) and (1.05540), and this indicates the homogeneity of the answers of the study sample members, and given the probabilistic value of the statements, it is greater than the level of significance (0.05), and the researcher notes that the averages of the statements range between (3.2200) and (4.2400), which is greater than the level of significance (0.05), which confirms that there is no difference between the average answers by type for each phrase, and from the above table the researcher notes the following: -

1/ The value of the chi-square to indicate the differences between the members of the research sample on the first phrase was (6,160) with a degree of freedom (3), and the lowest value of the significance level is (0.104), which is greater than the level of significance of the null hypothesis (0.05), and therefore rejects the alternative hypothesis and accepts the null hypothesis as There is no statistically significant relationship in favor of those agreeing to the first statement, which states that (the methods used to calculate the costs of cost reduction do not lead to an objective measurement).

2/ The value of the chi-square to indicate the differences between the members of the research sample on the second phrase (29.520) with a degree of freedom (3), and the lowest value of the significance level is (0.000), which is less than the level of significance of the null hypothesis (0.05), and therefore rejects the null hypothesis and accepts the alternative hypothesis, which is There is a statistically significant relationship in favor of those agreeing to the second statement, which states (the ability of the activity-based costing system to provide more accurate information on service costs and control over them).

3/ The value of the chi-square to indicate the differences between the members of the research sample on the third phrase (40.286) with a degree of freedom (4), and the lowest value of the significance level is (0.000), which is less than the level of significance of the null hypothesis

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(0.05), and therefore rejects the null hypothesis and accepts the alternative hypothesis, which is There is a statistically significant relationship in favor of those who agree to the third statement, which states (the activity-based costing system helps link costs to activities).

4/ The value of the chi-square to indicate the differences between the members of the research sample on the fourth statement reached (23.245) with a degree of freedom (3), and the lowest value of the significance level is (0.001), which is less than the level of significance of the null hypothesis (0.05), and therefore rejects the null hypothesis and accepts the alternative hypothesis, which is There is a statistically significant relationship in favor of those who agree to the fourth statement, which states (the application of the production system on time contributes to reducing and controlling indirect industrial costs)

5/ The value of the chi-square to indicate the differences between the members of the research sample on the fifth phrase (21.520) with a degree of freedom (3), and the lowest value of the significance level is (0.000), which is less than the zero significance level (0.5), and therefore rejects the null hypothesis and accepts the alternative hypothesis, which is there A statistically significant relationship in favor of those agreeing to the fifth statement, which states (the activity-based costing system helps to better allocate industrial indirect costs).

6/ The value of the chi-square to indicate the differences between the members of the research sample on the sixth phrase (22.918) with a degree of freedom (3), and the lowest value of the significance level is (0.000), which is less than the zero significance level (0.05), and therefore rejects the null hypothesis and accepts the alternative hypothesis, which is A statistically significant relationship in favor of those agreeing to the sixth statement, which states (the authority's interest in research and development costs leads to accuracy in calculating the cost of products).

7/ The value of the chi-square was to indicate the differences between the members of the research sample on the seventh statement (18,800) with a degree of freedom (3), and the lowest value of the significance level is (0.000), which is less than the zero significance level (0.05), and therefore rejects the null hypothesis and accepts the alternative hypothesis while there is A statistically significant relationship in favor of those who agree to the sixth statement, which states (the lack of interest in the outputs of modern systems leads to the lack of an objective mechanism for distributing the available resources).

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8/ The value of the chi-square to indicate the differences between the members of the research sample on the eighth phrase (54,640) with a degree of freedom (5), and the lowest value of the significance level is (0.000), which is less than the zero significance level (0.05), and therefore rejects the null hypothesis and accepts the alternative hypothesis while there are A statistically significant relationship in favor of those agreeing to the sixth statement, which states (the application of the activity costs system helps the authority to identify the amount of costs incurred for each activity).

The researchers concludes that the hypothesis of the study, which states (there is a statistically significant relationship between the application of modern cost accounting systems and good control in the authority, in the Maritime Ports Authority) has been proven.

Table 3: H3: There is a statistically significant relationship between the application of modern cost accounting systems and decision-making in the Seaports Corporation.

S/N	Statement	Standard	Weighted	CHI-	D of	Order
		Deviation	Average	Square	F	
		(SD)	(WA)	Value		
1	The activity costing system effectively	0.95030	4.1837	37.633	4	3
	influences pricing decisions by					
	calculating the cost of diversity more					
	accurately.					
2	The lack of accounting systems in the	1.06586	4.2245	43.347	4	1
	authority and its development is one of					
	the obstacles to the application of					
	modern systems.					
3	Cost accounting is one of the important	0.96186	4.3061	30.102	3	4
	tools on which decisions are made					
	within the SR Corporation.					
4	The corporation's reliance on activity-	0.92214	3.9388	11.490	3	7
	based cost accounting systems helped					
	make a good decision.					

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5	Accurate cost measurement helps	0.76376	4.2857	26.184	3	5
	rationalize expenditures and optimize					
	the use of resources.					
6	Providing a well-qualified human cadre	0.57735	4.7143	42.286	2	2
	helps in the decision-making process.					
7	Most decision makers are aware of the	1.07979	3.7959	18.653	4	6
	role and importance of modern systems.					

Source: Authors computation 2022

The standard deviation of the statements of the third hypothesis ranges between (0.57735) and (1.07979), and this indicates the homogeneity of the answers of the study sample members, and given the probabilistic value of the statements, it is greater than the level of significance (0.05), and the researchers also note that the averages of the statements range between (3.7959) and (4.7143), which is greater than the level of significance (0.05), which confirms that there is no difference between the averages of the answers when the type is good for each statement. The researchers also noted that:

- 1- The value of the chi-square to indicate the differences between the study sample members on the first statement reached (37.633) with a degree of freedom (4), and the lowest value of the significance level is (0.000), which is less than the zero significance level (0.05), and therefore accepts the alternative hypothesis and rejects the null hypothesis that there is A statistically significant relationship in favor of those agreeing to the first statement that states (the activity costing system effectively affects pricing decisions by calculating the cost of diversity more accurately).
- 2- The value of the chi-square to indicate the differences between the study sample members on the second phrase (43.347) with a degree of freedom (4), and the lowest value of the significance level (0.002), which is less than the level of significance of the null hypothesis (0.05), and therefore rejects the null hypothesis and accepts the alternative hypothesis that there is A statistically significant relationship in favor of those who agree to the second statement that states (the lack of accounting systems in the authority and its development is one of the obstacles to the application of modern systems).
- 3- The value of the chi-square to indicate the differences between the study sample members on the third phrase reached (30.102) with a degree of freedom (3), and the lowest value of the

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significance level is (0.000), which is less than the level of significance of the null hypothesis (0.05), and therefore rejects the null hypothesis and accepts the alternative hypothesis that there is A statistically significant relationship in favor of those agreeing to the third statement, which states (Cost accounting is one of the important tools on which decisions are made within the corporation).

- 4- The value of the chi-square to indicate the differences between the study sample members on the fourth statement (11.490) with a degree of freedom (3), and the lowest value of the significance level (0.009) which is less than the level of significance of the null hypothesis (0.05), and therefore accepts the alternative hypothesis and rejects the null hypothesis as There is a statistically significant relationship in favor of those who agree to the fourth statement, which states (the authority's reliance on cost-accounting systems based on activities helped in making a good decision).
- 5- The value of the chi-square to indicate the differences between the members of the research sample on the fifth phrase (26.184) with a degree of freedom (3), and the lowest value of the significance level (0.000), which is less than the level of significance of the null hypothesis (0.05), and therefore rejects the null hypothesis and accepts the alternative hypothesis that there is a relationship It has statistical significance in favor of those who agree to the fifth statement, which states (accurate measurement of costs helps in rationalizing expenditures and optimizing the use of resources).
- 6- The value of the chi-square to indicate the differences between the study sample members on the sixth phrase (42.286) with a degree of freedom (2), and the lowest value of the significance level (0.000), which is less than the level of significance of the null hypothesis (0.05), and therefore rejects the null hypothesis and accepts the alternative hypothesis that there is a relationship Statistically significant in favor of those agreeing to the sixth statement, which states (providing a well-qualified human cadre helps in the decision-making process).
- 7- The value of the chi-square was to indicate the differences between the study sample members on the sixth statement (18.653) with a degree of freedom (4), and the lowest value of the significance level (0.001) which is less than the level of significance of the null hypothesis (0.05), and therefore rejects the null hypothesis and accepts the alternative hypothesis that there is A statistically significant relationship in favor of those agreeing to the sixth statement, which

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states (there is awareness among the majority of decision-makers of the role and importance of modern systems).

The researchers conclude that the hypothesis of the study, which states that (there is a statistically significant relationship between the application of modern cost accounting systems and sound decision-making in the Sea Ports Authority) has been proven.

# CONCLUSION, FINDINGS, AND RECOMMENDATIONS

## Conclusion:

Considering the developments that contemporary institutions have known in various economic, social and accounting fields, it was also necessary to seek to benefit from the continuous development in cost accounting, so it was necessary to apply contemporary cost accounting systems to provide detailed data for management in order to assist it in the process of planning, control and decision-making. To ensure the continuity and development that all institutions seek, keep pace with technical and technological progress in the various means of production, and try to correct the classic systems used at all levels, especially with the large size of projects, the diversity of products and the increase in the intensity of competition.

#### Findings:

- 1/ Activity costing system effectively affects pricing decisions by calculating the cost of diversification more accurately in the Sea ports corporation.
- 2/ The traditional cost systems are unable to deal with the challenges of cost measurement and distribution considering the development of information technology in the Ports corporation.
- 3./ The Sea Ports Authority has the elements that helped implement the modern costing system.
- 4/ The application of the cost system based on production on time led to the safety of cost distribution and good planning in the Sea ports corporation.
- 5 / The integration between the activity-based budget system and the activity cost system has achieved benefits and advantages that helped in serving the Sea Ports corporation.
- 6/ The application of the Activity Costing System at the Sea Ports Authority helped to identify the amount of costs incurred for each activity.
- 7 / The interest of the Sea Ports Authority in the costs of research and development led to the accuracy in calculating the cost of products.

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#### **Recommendations**

- 1/ The necessity of working on accurate measurement of costs to help rationalize expenditures and optimize the use of resources in the Sea Ports corporation.
- 2/ Accounting systems must be available in the authority and developed to contribute to the application of modern systems.
- 3 / The necessity of using cost-reduction methods to lead to an objective measurement in the Sea Ports corporation.
- 4/ Attention should be paid to the outputs of modern systems to lead to an objective mechanism for distributing available resources.
- 5 / The necessity of paying attention to the activity-based costing system to help it divide the service centers in the Sea Ports corporation.
- 6/ The need for continuous training in a good way to help in the decision-making process in the Sea Ports corporation.

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