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THE ROLE OF ACTIVITY BASED COSTING SYSTEM IN COST CONTROL IN SAUDI MANUFACTURING FIRMS

Abstract: This study aimed at determining the role of activity-based costing system for cost control in Saudi manufacturing firms that produce "Raw Materials". The data was collected from 154 staff members with a job title of general managers, assistant managers, financial managers, and accountants working at Saudi manufacturing Firms that produce "Raw Materials" and listed in Saudi Stock Exchange and use ABC system at the end of July 2021 using a questionnaire that was developed and distributed to them. This study revealed that the ABC system; achieves production efficiency, increases the effectiveness of control over administrative and financial costs, and helps managers make cost and price decisions. The Researchers recommended that other Saudi manufacturing firms adopt the ABC system to reduce the cost of their products, greater production efficiency, and raise profitability.

Keywords: Activity-Based Costing system, Cost control, Saudi manufacturing firms, Saudi Stock Exchange.

1. Introduction

Due to the rapid development of the trade industry, corporate management is interested in obtaining high-accuracy information in making decisions related to planning, controlling, and performance evaluation (Hilton & Platt, 2019).

Cost control is an important in firms to reduce unwanted expenses, so any successful firm use cost lessening can sell its product at a lower rate than its competitors sell without reducing its quality and achieving profit maximisation (Akeem, 2017).

"Cost-control methods are only useful if they are based on an up-to-date and accurate accounting of the costs incurred by the company with greater insight into potential risk areas" (Aarthi & Sasikumar, 2015). Activity-based costing systems provide management with more accurate information about the cost of the product, help them adjust prices and evaluate performance, and modify the production method by identifying activities that add little value to the cost they incur. They can then eliminate or reduce these activities (Warren & Tayler, 2020). All Sudanese firms implementing activity-based costing systems agreed to reduce costs and improve productivity (Ahmed, 2019).

1.1 Research Problem

Many firms are struggling with controlling costs, which affects the company's performance (Ahmed, 2019), so this study will explore this issue in Saudi manufacturing firms that produce "Raw

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Materials" by answering the following questions:

- 1. Does the ABC system contribute to production efficiency?
- 2. Does the ABC system help managements for planning and decision-making processes?

1.2 Research Objective

This study aimed at determining the role of activity-based costing system for cost control in Saudi manufacturing firms that produce "Raw Materials", and it will focus on the following factors that are believed to be related to cost control:

- 1. ABC system contributes to production efficiency.
- 2. ABC system helps management with planning and decision-making processes.

1.3 Research importance

The Importance is reflected in its objective, which is to examine and investigate an important issue in the accounting process: It is the role of ABC system in cost control. To the researchers' knowledge, no experimental published research has addressed the role of ABC system in cost control in Saudi manufacturing firms that produce "Raw Materials".

2. Theoretical Framework and Literature Review

2.1 Activity-Based Costing (Abc) System Background and the main features of ABC.

2.1.1 Definition of (ABC) System

There are many different definitions of the ABC system in kinds of literatures.

"The Activity Based Costing (ABC) is costing method that is developed to furnish managers with cost knowledge for strategic and other findings that potentially affect capacity and therefore "fixed" as well as variable costs" (Garrison et al., 2018).

"The activity-based costing (ABC) system follows a special two-stage process to allocate overhead costs to products. The first stage identifies substantial activities in the production of the three products. It assigns overhead costs to each activity following the cost of the organisation's assets used by activity. The overhead costs assigned to each activity consist of an activity cost pool. After allocating overhead costs to activity cost collections in stage one, cost drivers suitable for each cost pool are recognised in stage two. Later the overhead costs are allocated from each activity cost pool to each product line in percentage to the amount of the cost driver ingested by the product line". (Hilton & Platt, 2019).

Activity-Based Costing (ABC) system is an accounting method that helps organisations and companies determine the cost associated with services and products based on the resources that activities use to provide services or produce products. (Grandlich, 2004).

2.1.2 Advantages and Disadvantages of ABC System

The ABC system represented as a solution for the limitation and disadvantages of the traditional costing system.

A. Advantages of ABC System

Soekardan (2016), Lievens et al. (2003) and Sohal and Chung (1998) provided a summary of ABC system advantages:

- 1. It provides high accurate product line costing, particularly where nonvolume related overhead is significant and manufactured by a vary product line.
- 2. It is flexible enough to analyse costs by cost objectives other than products such as processes, area of

managerial responsibility and customers.

- 3. It provides a reliable indication of the long-term variable product cost, which is important and relevant to management for decision-making at the strategic level.
- 4. It provides financial (period cost driver rates) and non-financial (period cost driver volumes) meaningful information to support improvement efforts.
- 5. It supports the identification and consequently a better understanding of cost behavior can improve cost estimation.
- 6. Improve a financial analyst's capacity to forecast cash flows and more accurately determine the various cost levels incurred by separating costs into activities pools and determining a cost driver for each pool.

B. Disadvantages of the ABC system

Bazrafshan and Karamshahi (2017), moreover, Sohal and Chung (1998) provided a summary of ABC system disadvantages:

- 1. Implementing ABC needs a large amount of work, and it takes a long time
- 2. Lack of suitable accounting staff resources to install an ABC system
- 3. Lack of computer resources special software tools are required to provide quality implementation
- 4. The cost of executing and running an ABC system is high compared with the benefits generated
- 5. Uncertainties in selecting appropriate cost drivers and the large amount of preliminary data collected.

2.1.3 Implementation of the ABC system

Implementing an ABC system results in an appropriate allocation of additional costs Accurate Costing, because this system is concerned with achieving a fair reduction of the scarce resources available in Activities as a primary or intermediate focus, and then additional costs are reallocated through cost drivers On products as the final cost axis (Adas & Al-Khalaf, 2019)

There are s even major steps to implement the ABC system including (Hilton & Platt, 2019), (Ahmed, 2019), and (Garrison et al., 2018):

First: Review the companys financial information

In this step, the accountant identifies the company s direct costs, overhead costs and capital costs, and they could be obtained all required financial information from the company's income statement and balance Sheet. The income statement primarily needed to estimate the operating cost, while the balance sheet mainly needed to calculate the capital charges.

Second: Establish objectives and requirements of the ABC system

In this step, the management must define the main objective of the costing system and determine the level of accuracy and reliability required in their costing system. The higher the level of accuracy, the higher the effort and cost of data collection.

Third: define main activities, activity cost pool and activity measure

In this step, the accountant identifies the major operations that create overhead expenses. The intended level of precision and dependability determines the number of activities designated as a medium for tracing overhead. This can be difficult and timeconsuming, and it involves a lot of judgment.

Fourth: Trace overheads to activities

Overhead costs are traced from activities to the cost objects. Systematically relate activities to the costs objects and determine the cost objects overhead consumption rate can use.

Fifth: Trace overhead to the cost objects

Overhead costs are traced from activities to the cost objects. Systematically relate activities to the cost objects and determine the overhead consumption rate used.

Sixth: Calculate product cost of each cost object

In this step, to obtain the product cost of the order, each cost object's direct and overhead costs are added together. When calculating the product cost of the order, it can make well-founded pricing decisions and judge profitability.

Seventh: Use ABC analysis for strategic decision-making and improvement

In this step, the decision-maker would challenge interpreting the data that the efficiency of business will be improved.

2.2 Cost control

Cost control's definition and its importance.

2.2.1 Definition of cost control

Cost control (cost management): is a management tool for monitoring, evaluating, and Improving business cost-efficiency and product lines by reducing costs, or at least restricting their rate of growth (Obara, 2014). Must be planned carefully when reducing a cost because not all cost reduction techniques yield the same benefits (Obara, 2003).

2.2.2 Importance of the cost control

Cost control is one of the highly significant types of control in the business. It deals with an important aspect of the institution's activity: It is the cost of activity with all its elements. Also, it reflects the organisation's financial position and affects its sales and revenues because costs function as prices (Yassin, 2009). Cost control helps eliminate unprofitable products, achieves greater protection, strengthens the relationship between cost control and sales volume, profitability, and market share, and helps managers in decision-making (Mutya, 2018).

2.3 Literature Review

Skaik (2006) study aimed to examine the relationship between the adoption of the ABC system by factories located in the Gaza Strip and the decision-making. Forty-three questionnaires were distributed, with an 86% response rate. The study findings: most important decisions in factories located in the Gaza Strip are taken for product quality, product cost, and cost of adding or deleting Product Lines; consequently, the costing system is a vital component for the decisionmakers in helping rationales decision making. The results indicate that factories located in Gaza Strip are not implementing the ABC system, which negatively affects the decision-making process. The Researcher recommended that should use the ABC system in Gaza Strip factories to strengthen decision-making.

Daldoom (2007) aimed to explore using the ABC system to reduce costs in QAPCO Sudan Ltd. firm. The Researcher based on an analytical procedure and direct interviews with employees who responsible for costs activities to explore the currently cost method and what will happen if the company use the ABC system. The study findings: cost method currently used lack to measure costs more accurate, but when using ABC system, it will provide more detailed information about costs and remove or reduce costs of the activities that do not add value, in addition, help management is planning, controlling, and make the decision. The Researcher recommended that the management of QAPCO Sudan Ltd. Should firm adopt the ABC system for reducing costs.

Yasmine et al. (2018) aimed to explore the role of the activity-based cost (ABC) system in reducing the firm's costs as a modern cost management system. Biscuit Factory "MEJOR" was a case study. The main of

conclusions are ABC system seeks to improvement achieve continuous of operations and activities, ABC system provides accurate and detailed an information to management for cost control and making decisions, and ABC system achieves a less cost, and maximising profitability. Researchers recommended applying the ABC system to achieve production efficiency and provide a product with the lowest possible cost compared to its competitors.

Al Hanini (2018) aimed to demonstrate the (ABC) system's role in cost reduction and profitability maximising in industrial enterprises listed on the Amman Stock Exchange. It also makes an attempt to apply the (ABC) system to the extent of Possibility in companies that do not apply it. A questionnaire was created and circulated to the survey sample of 59 respondents who worked in manufacturing companies: managers, financial managers, accountants and internal auditors. The main conclusions are: The (ABC) system reduces costs by focusing on value-added activities and excluding no added value activities. It also reduces costs because its system reduces time and effort by using different cost drivers for each activity. The application of the (ABC) system leads to improve performance of staff, production efficiency and decision-making related to pricing, which consequently leads to maximisation profits. The Researcher recommended that all industrial companies listed on Amman Stock Exchange adopt the (ABC) system to lower costs and maximise profits. The industrial companies that do not adopt the (ABC) system should provide the appropriate climate and the necessary means to implement it, Like aproper restructuring of the company and training of a specialised team concerned with planning and determining the activities and cost drivers to allocate manufacturing overhead.

Ahmed (2019) aimed to identify the impact of the ABC system on costs control by applying it to some Sudan governmental institutions from respondents' point of view and to know the extent of the respondents' tendency to control costs in Sudan government institutions. The study is based on the descriptive-analytical method. A questionnaire was designed and distributed to the survey sample of 109 respondents who worked in Sudan governmental institutions. The main study findings: use of the ABC system helps achieve cost control in Sudan governmental institutions; in addition, the participation of different administrative levels in applying the ABC system helps determine costs fairly and accurately. The recommended that Researcher Sudan institutions define government administrative and financial responsibilities to make decisions, follow the ABC system.

Effiong and Akpan (2019) study aimed to evaluate the degree of influence of the ABC system on manufacturing productivity. The study was established on a descriptive method, and the data was collected through a questionnaire. The study findings: The traditional cost accounting method allocates overhead costs based on one driver, is inaccurate and misleading since it frequently assigns an excessive amount of cost to a product. ABC system contributes to the easy measurement of costs. Furthermore, it separates an added value from non-added value activities, so increasing the efficiency of production processes.

Omar and Hassan (2020) aimed to analyse of ABC system and its role in decision making in cement companies of the Iraq's Kurdistan Region. The study was based on a survey sample of 120 respondents of Bazian Cement Company. The main conclusions are: There is a positive relationship between the ABC system of cost, performance, quality management, and decision-making. Furthermore, the ABC system plays a crucial role in the decision-making process of firms, especially that of Bazian Cement Company.

3. Study Design and Methodology

3.1 Research Design

The research method is exploratory and descriptive, making use of questionnaires. To acquire the study's objectives, The questionnaires were created in order to provide answers to the research questions.

3.2 Research Hypotheses

H1: There is a positive association between the implementation of the ABC system and production efficiency.

H2: There is a positive association between implementing the ABC system and management planning and decision-making processes.

3.3 Population, Unit of Analysis and Sampling

This research was performed to explore the role of the ABC system in cost control in Saudi manufacturing firms that produce "Raw Materials" and are listed in Saudi Exchange (42 firms). The study was able to identify firms that have applied the (ABC) system through telephone contact with the Accounting Departments for all Saudi manufacturing firms that produce "Raw Materials" and are listed in Saudi Exchange. At the same time, the population of the research consists of the staff members (General Managers, Assistant Managers, Financial Managers and Accountants) working in Saudi manufacturing firms that produce "Raw Materials" and listed in Saudi Exchange at the end of July 2021 (154 staff). The sample covered the whole population.

3.4 Data Collection Methods

The data collection is needed for this research through two sources: secondary and primary sources.

3.4.1 Secondary Sources

Secondary sources' represented the related information found in books, periodicals, theses, articles, and some related and valuable websites. After a thorough consideration of the related literature, the theoretical framework was developed.

3.4.2 Primary data Sources

A questionnaire was constructed using a Five Point-Interval Scale (Likert Scale) which was proper for measuring opinions as follows:

1 = Strongly Disagree. 2 = Disagree. 3 = neutral. 4 = Agree. 5 = Strongly Agree. If the mean value was between (1 -less than 2.5), it indicates no agreement, while if the mean value was between (2.5 -less than 3.5), it indicates the commitment of neutrality, and if the mean values Between (3.5 to 5.0) it indicates to the agreement.

The questionnaire consists of two major parts as follows:

First part: Included some questions about demographic characteristics of respondents (Age, Education, Gender, Profession, and Practical Experience) to describe the study's natural sample.

Second part: It consisted of two dimensions as follows:

- **The First Dimension:** *Items* related to the implementation of the (ABC) system and production efficiency.
- **The Second Dimension:** *Planning and decision-making processes related to implementing the (ABC) system and management.*

3.4.3 Data Analysis Techniques

After collected data through the previously defined instrument, there were coded using the MS-Excel and the Statistical Package for Social Sciences (SPSS) to be analysed statistically.

The study used the following statistical tools such as:

- **Frequency & percentages:** To describe the samples demographic variables.
- **Means:** To detect trends in the individuals' replies to questions from the subjects and the dimensions of study.
- **On sample T-Test:** To put the study's hypotheses to the test.
- **Cronbach's Coefficient Alpha:** is computed in terms of average correlations among the items measuring the concept. The accepted value of Cronbach's alpha is 0.7; however, values above 0.6 are also accepted (van Griethuijsen et al., 2015; Taber, 2018).

3.4.4 Validity of Data: The Internal Consistency and Reliability

The validity of the data was obtained through the questionnaire's internal consistency, and it was tested by assessing the Internal Consistency Reliability using *Cronbach s Coefficient Alpha*. In general, the acceptance of stability degrees was 60% and more (Griethuijsen et al., 2015; Taber, 2018). Table 1 below shows Cronbach's Coefficient Alpha for each dimension.

Table 1. Cronbach s Coefficient Alpha for

 this study's questionnaire

| ms study's questionnane | | | | | | |
|-------------------------|---------------------|--------------------|--|--|--|--|
| Reliability Statistics | | | | | | |
| Items | Cronbach's Alpha | Number of Items | | | | |
| First Dimension | 0.804 | 6 | | | | |
| Second Dimension | 0.727 | 6 | | | | |

First Dimension: It included items relating to the implementation of the (ABC) system and production efficiency: The Table above showed that the internal consistency coefficient for first dimension was equal to (80.4%) which indicated that the consistency was very strong.

Second Dimension: It included items relating to the implementation of the (ABC) system and management in planning and decision-making processes: The Table above showed the internal consistency coefficient for the second dimension was equal to (72.7%) which indicated: consistency was good.

3.4.5 Respondents' Characteristic

Table 2 indicates the respondents' age was between 21 to less than 30 years old with the rate of 42.21%, and 25.32% of the respondents' age were between 30 to less than 40 years. Furthermore, 14.94% for whose were aged between 40 to less than 50 years, while 10.39% of respondents aged between 50 to less than 60 years, and the fewer rates were in "less than 21 years" and" 60 years or more" with rate 4.55% and 2.59% respectively. This might be expected to the long period for promotion to the financial manager and chief accountant position.

In addition, Table 2 indicates 53.25% of respondents have a bachelor's degree; this indicates most of the respondents has good information about the (ABC) system and may affect the answers' quality, while 18.18% of respondents have higher education by holding a master's degree, and (28.57%) distributed between other degrees.

Furthermore, most respondents were males, with a rate of 83.12% of the total sample. This might be due to the character of these professions.

| Characteristic | Category | Frequency | Percentage | Cumulative | |
|----------------|-----------------------------|-----------|------------|------------|--|
| | | | | of | |
| | | | | percentage | |
| Age | Less than 21 years | 7 | 4.55% | 4.55% | |
| | 21-less than 30 years | 65 | 42.21% | 46.76% | |
| | 30-less than 40 years | 39 | 25.32% | 72.08% | |
| | 40-less than 50 years | 23 | 14.94% | 87.02% | |
| | 50-less than 60 years | 16 | 10.39% | 97.41% | |
| | 60 years or more | 4 | 2.59% | 100.00 | |
| | | | | % | |
| Education | High School | 0 | 0.00% | 0.00% | |
| | Diploma (community college) | 15 | 9.74% | 9.74% | |
| | Bachelor's degree | 82 | 53.25% | 62.99% | |
| | High Diploma | 24 | 15.58% | 78.57% | |
| | Master's degree | 28 | 18.18% | 96.75% | |
| | PhD Degree | 5 | 3.25% | 100.00 | |
| | | | | % | |
| Gender | Male | 128 | 83.12% | 83.12% | |
| | Female | 26 | 16.88% | 100.00 | |
| | | | | % | |
| Position | General Manager | 8 | 5.19% | 5.19% | |
| | Assistant Manager | 14 | 9.09% | 14.28% | |
| | Financial Manager | 23 | 14.94% | 29.22% | |
| | Accountant | 103 | 66.88% | 96.10% | |
| | Other | 6 | 3.90% | 100.00 | |
| | | | | % | |
| Practical | less than six years | 19 | 12.34% | 12.34% | |
| Experience | 6-less than ten years | 48 | 31.17% | 43.51% | |
| | 10-less than 15 years | 46 | 29.87% | 73.38% | |
| | 15-less than 20 years | 23 | 14.94% | 88.32% | |
| | 20-less than 25 years | 9 | 5.84% | 94.16% | |
| | More than 25 years | 9 | 5.84% | 100.00 | |
| | | | | % | |

Table 2. Distribution of Sample Characteristics

The overwhelming majority (66.88%) of the total sample work as accountants; this means most of respondents have a piece of good knowledge about the ABC system.

It should be noted that (31.17%) respondents have practical experience between six to less than ten years, while (29.87%) respondents have practical experience between 10 to less than 15 years. This indicates that the respondents have good and sufficient experience giving information and answering the questionnaire.

3.4.6 Descriptive Statistics

The SPSS used to analyse data where the hypotheses were tested With a 95 percent confidence level, there is a 5% level of significance.

First Dimension: The items under this dimension were related to the implementation of the ABC system and production efficiency.

| No | Item | Mean | Standard deviation |
|----|---|------|--------------------|
| | Activity based costing (ABC) system; contributes to a reduction of | | |
| 1 | production costs. | 4.42 | 0.56 |
| 2 | Activity based costing (ABC) system; Contributes to reducing marketing costs. | 4.24 | 0.79 |
| | Activity based costing (ABC) system; Contributes to reducing | | |
| 3 | selling costs. | 4.25 | 0.67 |
| | Activity based costing (ABC) system; contributes to the easy | | |
| 4 | measurement of costs. | 4.40 | 0.65 |
| 5 | Activity based costing (ABC) system; achieves production efficiency. | 4.33 | 0.61 |
| 6 | Staff training on activity-based costing system; Increases efficiency productivity. | 4.46 | 0.57 |

Table 3. The Means and Standard Deviations of Respondents to the First Dimension

Table 3 indicates that the answers did not differ among respondents to this set of questions first dimension, and there was no noticeable variation with low standard deviations.

The highest mean: (4.46) indicated that most respondents agreed that there was intense staff training on (ABC) systems. The ABC system also contributes to the easy measurement of costs, reduction of Production and selling costs, and achieving production efficiency. The least mean (4.24) indicated that the ABC system reduces marketing costs. This means that most of the trends of the responses of the sample were moving towards agreeing with the items of the first dimension and have a positive effect on the development of the costs system in the firm and achieving production efficiency. The means of their responses were focused on "strongly agree".

Second Dimension: The items under this dimension were related to implementation of the ABC system, and management is planning processes and making the decision.

| No | Item | Mean | Standard deviation | | | | |
|----|--|------|--------------------|--|--|--|--|
| 1 | Activity based costing (ABC) system; helps In determining Fairly and accurately costs. | | | | | | |
| 2 | Activity based costing (ABC) system; increases the effectiveness of control over administrative and financial costs. | 4.18 | 0.61 | | | | |
| 3 | Implementing an activity-based costing (ABC) system contributes to the planning processes and making a decision. | 4.48 | 0.57 | | | | |
| 4 | The implementation of an activity-based costing (ABC) system contributes to the pricing decision. | 3.90 | 0.83 | | | | |
| 5 | All departments of company contribute to preparing the cost report for decision-making. | 4.37 | 0.65 | | | | |
| 6 | Determination of employee responsibilities according to (ABC) system; helps make decisions. | 4.42 | 0.56 | | | | |

Table 4 indicated the answers did not differ among respondents to this set of questions first dimension, and there was no noticeable variation with low standard deviations. The highest mean: (4.51) indicated most of respondents agreed that the ABC system helps determine fairly and accurately costs, also contribute and help in planning processes, preparing cost reports, and making decisions. Also, the ABC system helps increase the effectiveness of control over administrative and financial costs. The least mean :(3.90) indicated the respondents agreed that the ABC system contributes to the pricing decision.

This means most of the trends of the sample responses were moving toward an agreement with the items of the second dimension. The ABC system contributes to management's planning processes and makes decisions. Their responses focused on "agree" and "strongly agree".

Table 4 indicated the answers did not differ among respondents to this set of questions first dimension, and there was no noticeable variation with low standard deviations. The highest mean: (4.51) indicated most of respondents agreed that the ABC system helps determine fairly and accurately costs, also contribute and help in planning processes, preparing cost reports, and making decisions. Also, the ABC system helps increase the effectiveness of control over administrative and financial costs. The least mean :(3.90) indicated the respondents agreed that the ABC system contributes to the pricing decision. This means most of the trends of the sample responses were moving toward an agreement with the items of the second dimension. The ABC system contributes to management's planning processes and makes decisions. Their responses focused on "agree" and "strongly agree".

3.4.7 Hypotheses Testing

To test the study's hypotheses, the Researcher used a one-sample t-test, and level of statistical significance was $\alpha \le 0.05$.

| Table 9: Hypotheses Testing | | | | | | | | | | |
|-----------------------------|-----|-----|--------|---------------|--------------|-----------------------|--------|--------------------|----------------------------------|----------|
| Нуро. | N | df | Mean | Mean Diff. | Std. Dev. | Std. Error Mean | t | Sig.(2- tailed) | 95% Confidence of the Diff | Interval |
| | | | | | | Mean | | | Lower | Upper |
| | | | | | | | | | | |
| First | 154 | 153 | 4.3549 | 1.3549 | .46474 | .06324 | 21.424 | .000 | 1.228 | 1.481 |
| | | | | | | | | | | |
| Second | 154 | 153 | 4.3148 | 4.31481 | .42420 | .05773 | 74.746 | .000 | 4.199 | 4.430 |

 Table 5. Hypotheses Testing

Testing the First Hypothesis

"There is a positive relationship between implementation of (ABC) system and production efficiency."

Table 5 indicated a significant statistically relationship between the (ABC) system and production efficiency. One sample t-test indicated through significant levels found the significance level for this relationship was (0.0), which is less than the acceptable statistical margin of error (0.05). It means there is a significant statistically relationship. Furthermore, Table 5 indicated that mean of this dimension were (4.35), which indicated a positive trend, and the mean of these responses was 1.35. A positive value, which

means a significant statistical relationship between the two variables was positive.

Hence, the first hypothesis confirmed a significant statistically positive relationship between costing systems and production efficiency activities.

Therefore, an (ABC) system achieves production efficiency and thus achieves costs control.

This result agrees with that reported by Daldoom (2007), Yasmina et al. (2018), Al Hanini (2018), Ahmed (2019), and Effiong and Akpan (2019).

Testing the Second Hypothesis

"There is a positive relationship between the implementation of the ABC system and management's planning processes and making a decision".

Table 6 indicated a significant statistically relationship between (ABC) system and management's plan processes and making a decision. One sample t-test indicated through significant levels found the significance level for this relationship was (0.0), which is less than the acceptable statistical margin of error (0.05). It means there is a significant statistically relationship.

Furthermore, Table 6 indicated that mean of this dimension were (4.31), which indicated a positive trend, and the mean of these responses was 4.31. A positive value, which means a significant statistical relationship between the two variables was positive.

Hence, researchers can say the second hypothesis confirmed a significant statistically positive relationship between an (ABC) systems and management in planning processes and making decisions.

Therefore, an (ABC) system contributes to the planning processes and making a decision and thus achieve costs control.

This result was constant with that reported by Daldoom (2007), Yasmine et al. (2018), Al Hanini (2018), Ahmed (2019), and Omar and Hassan (2020).

4. Conclusions and Recommendations of the Study

4.1 Conclusions of the study

The results of the study of data collected through questionnaires distributed to a sample indicate the following:

- 1. The (ABC) system; contributes to a reduction in production, selling, and marketing costs and contributes to the easy measurement of costs.
- 2. The (ABC) system; achieves production efficiency, and Staff training on (ABC) systems; will Increase efficiency productivity.
- 3. The (ABC) system; helps determine fairly and accurately costs and increase the effectiveness of control over administrative and financial costs.
- 4. The (ABC) system; contributes to the pricing decision, planning processes, and preparing the cost report for decision-making.
- 5. The (ABC) system; helps managers make cost and price decisions.

The researchers believe the conclusions indicate that the (ABC) system achieves cost control.

4.2 Recommendations of the study

Based on the results, Researchers can determine the number of recommendations as follows:

- 1. All Saudi's manufacturing firms should adopt the (ABC) system for reduce the cost of their products, increase production efficiency, achieve cost control, and raise profitability.
- 2. We are conducting future studies about applying the (ABC) system in various economic fields.
- 3. The accounting departments in Saudi universities should teach modern costs methods such as the (ABC) system and do some science visits to companies.

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