The Effectiveness of Accounting Information System in Jordanian Banks: From the Management Perspective

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Abstract

The study aimed to investigate the extent of accounting information system effectiveness in Jordanian banks. The researcher designed a questionnaire consisting of (29) paragraphs in order to achieve the objective of the study where he gathered the primary information for study sample. The statistical package for social sciences (SPSS) program was used to analyze and examine the hypotheses. The study sample consists of (197) individuals in Jordanian private commercial banks.

The study used many statistical methods. After analyzing the study hypotheses, the study reached to several conclusions; the most important ones were as follows:

1. The accounting information system in Jordanian banks is effective in applying the needs of the planning operations.
2. The accounting information system in Jordanian banks is effective in applying the needs of the observation operations too.
3. The accounting information system in Jordanian banks is effective in regard of applying the needs of the decision making operations as well.

According to the findings of the study, the study indicates the most important recommendations as mentioned below:

1. It is required from management in Jordanian banks to apply accounting information system to be able to for execution its several tasks including planning, observation, and decision-making operations in more effectiveness method on a wider scale.
2. Ensure to continuously improve accounting information system in Jordanian banks in order to cope up with Hi-Tech developments in both, financial and accounting sectors which would affect positively the administration jobs in banks such as: planning, observation, and decision making.

1. Introduction

The accounting information system became an important part from the management operation as well as a basic source for supporting and observing its plans and operations in addition to its large and important role in decision-making operations at organizations where the management should not neglect this role.

As the organizations lives nowadays information revolution era including knowledge fast access in all fields of life at specified period of time which human available capabilities cannot achieve and observation. Therefore, the world became a small global village which emerged as a result of that a community of information and knowledge where civilization elements and the strengths of the article moved to information and knowledge to the machine (Yassin 0.2006).

The information is the most important feature of recent decades of the twentieth century, it has evolved information technology to increase the volume of information that must be handled, stored, and provided for a system which held a large process observation and management that has spread the information technology applications in. (6-5: various fields and at all levels (Qasim, 1998).
The availability of this efficiency in information systems is considered a basic factor in successful continuity or failure of any organization, and this importance is reflected by use of information and an intended way to support and coordinate administrative operations such as: planning, observation and decision-making in one hand, and a means for communication between the environment and with the organization's internal and external environment on the other hand.

Consequently, the organization before expansion, proliferation and geographic diversification in production, in face of intensive competition and the need for human resources, besides financing all other activities, find themselves in an urgent need to develop a system commensurate with size of these activities, which ensures flow of all information from the enormous and various units and analyzing this information and using it to develop its overall performance in improving administrative operations performance in particular where the accounting information systems is the most important systems that produce and contribute main information in large and rationalized and support access to economic impact of communities income and the wealth and resources. therefore the welfare of thousand responses in those communities, as the accounting information systems contribute to the successful operation of administrative operation through available information which contributes to meet the different needs of the organizations of planning, observation and decision-making, which is one of basic functions for achieving the objectives of the organization whether the tasks and activities related to the planning or observation that achieved by taking appropriate administrative decisions under the surrounding circumstances, which contributes to rationalization of these decisions, and raising level of performance to achieve the organization goals.

1.1. The Study Problem and its Questions

The technological development and the information revolution taking place in the world and trade openness nowadays as well as the great economic in the world in general and in Jordan in particular have made the banks, including the Jordanian ones to cope with these developments on one hand and the presence of a strong competitive environment happening in banks sector on the other hand.

Therefore, an urgent need arises to determine the effectiveness of accounting information systems in Jordanian national commercial banks and how to take an advantage of the management for information that provides in field of planning and establishing goals and observing their implementation and take appropriate for its execution, as the information accounting systems is one of the essential elements that the management are based on performance of its missions; Do these systems meet the goals that banks management attempt to achieve?

The study topic emerged to discuss effectiveness of accounting information systems in Jordanian banks from the management prospective as the management is considered the main beneficiaries of the information provided by these systems, besides attempting to figure out the extent to which these systems meet their desired goals by the banks management. The study problem can be summarized through the following questions:

1. Are the accounting information systems in Jordanian banks effective to meet the needs of the planning process?
2. Are the accounting information systems in Jordanian banks effective to meet the needs of observation process?
3. Are the accounting information systems in Jordanian banks effective to meet the needs of the decision-making process?

1.2. Hypotheses of the Study

The following hypotheses are summarized based on the study problem:

The First Hypothesis: The accounting information systems in Jordanian banks are ineffective to meet the needs of the planning process
The Second Hypothesis: The accounting information systems in Jordanian banks are ineffective to meet the needs of observation process.

The Third Hypothesis: The accounting information systems in Jordanian banks are ineffective to meet the needs of the decision-making process.

1.3. Objectives of the Study

The primary objective of this study attempts to identify effectiveness of accounting information systems in the Jordanian banks while the detailed objectives of the study are mentioned below: The study includes variables factors as follows:

First: Independent variables relating to hypothesis (1-3): the effectiveness of accounting information systems to meet the process (planning first hypothesis and observation second hypothesis and decision-making third hypothesis). If this is the mission of the three basic functions of management, which will be limited by the researcher in this study accounting systems used in Jordanian banks and how to achieve the needs of the management functions of planning, observation and decision-making.

Second: The dependent variable and the effectiveness of accounting information systems is considered one of the most important factors associated with administrative performance directly, as the accounting information systems is a technical instrument and an essential foundation that cannot be dispensed in administrative functions of various where they used for planning purposes in the stages of pre-implementation as it is also used for function of observation and evaluation of performance operations. Therefore, it is an indispensable mechanism to take any administrative decision. The figure (1.1) shows variables of the study.

1.4. Objectives of the Study

The primary objective of this study attempts to identify effectiveness of accounting information systems in Jordanian banks, the study objectives details are as follows:

- Explaining efficiency of accounting information systems in Jordanian banks in terms of responsiveness to the management requirements of the functions of planning, observation and decision-making.
- Clarification the extent of adoption by the departments at Jordanian banks on accounting information systems for implementing their missions.
- Development appropriate framework for covering full literatures of accounting systems as well as meeting the management needs and its associated concepts and related topics of mutual influence.
- Concluding results and proposes recommendations to build on the results of the study which will help in increasing efficiency of accounting information systems at Jordanian banks for achieving their goals.

1.5. Importance of the Study

Importance of the study focuses on efficiency of accounting information systems at Jordanian banks through their important and required role that these systems play in success of banks administration by providing information to the appropriate accounting for performance of its functions as required which may lead to success of these banks, which will consequently be reflected on the economy Jordanian benefits as large banking sector plays an important role in Jordanian economy which involves the study of the efficiency of these systems to integrate these banks with rest of the sectors that contribute to development of the national economy which addressed by the study as well as it emphasizes its importance.
1.6. The Study Limits

The scope of the study is as follows:

- **Human Limits:** They include the active managers at Jordanian Banks.
- **Spatial Limits:** They include all the banks in Amman.
- **Temporal Limits:** They include the temporal period in which the study was applied during 2013.

1.7. Determinants of the study

The study here outlines some of the difficulties and obstacles as follows:

1. The study is applied on Jordanian banks and therefore the dissemination results will be limited to them.
2. It is known also that depending on the information in questionnaire may involve a degree of personal bias and lack of reliability by answering some of the study members who will fill out the questionnaire.

1.8. Procedural Definitions

**System:** It is a group of elements that are associated with each series of relationships in order to perform a specific function or set of functions system is a set of elements that make up system entities that are either material ones such as: Computers or screens or communication lines or paper or writing instruments, printing or moral components including programs, files, instructions and relationships which make up to connect system components with each other so that these elements constitute a useful system perform a specific function or certain functions (Qasim, 2003: 17).

**Accounting Information Systems:** It is one of administrative organization entities which deal with gathering, indexing, processing, analyzing and connecting appropriate financial information for decision-making of other parties and facility management. Moreover, Accounting Information Systems is considered one of the basic entities of management information system where the difference between the two terms is limited in respect to the first data and accounting information while the second one is about all data and information that affect the activity of established (Moskoff Seekmen, 2002).

**Efficiency:** Executing the right things at the right time in appropriate manner (Sharif, 1997).

**Efficiency of Accounting Information Systems:** It is the ability of the accounting system to achieve its goals, which provide the most important information, that is characterized by trapping and reliability that will help decision-makers from inside and outside the facility for achieving its goals. Efficiency means that the degree of effectiveness measured by achievement of specific goals where the system that achieves its objectives is effective system while the other which does not realize its objectives is ineffective (Fidel, 2007).

**Planning:** Planning function is considered as the first step at management missions and even preceded by all of them as it includes activities for identifying the goals, objectives and future results to be achieved as well as clarifying the events, actions, policies and programs needed to achieve those objectives and results (Harem: 2009).

**Observation:** It is one of the elements of administrative process missions as it aims to observation and measure the actual performance and compare it with what is planned through using regulatory standards in which this performance is compared and according to the results of the comparison that is determined by positive achievements which must be corrected and avoided in the future and thus achieve the desired goals of observation.

**Decision-Making:** It means responsibility of management to adopt one alternative from among other options.
2. Literature Review

Alqatnani conducted a study in (2002): Entitled “Impact of use of accounting information on management performance in industrial corporations in Jordan”. The study aimed to analyze and clarifying role of accounting system in production of high-quality accounting information appropriate to meet the needs of accounting performance confidentiality in industrial corporations in Jordan, and the extent of the relationship between natural relationship and quality of accounting information and its impact on use of accounting performance at areas of planning, observation and decision-making. As the researcher chose a random sample consisted of (45) companies that is equivalent to (61%) of the study community. The study findings show the following: a positive relationship and statistical significant correlation between elements of the accounting system and the quality of produced accounting information. The existence and effect relationship statistical moral significant for using accounting information performance at industrial corporations in Jordan in fields of planning, observation and decision-making based on results of the study. The researcher recommended: A need of different departments of accounting performance at public shareholding companies in Jordan with expansion in employing accounting information to achieve most favorable application in fields of accounting performance in (planning, observation, and decision-making) to accomplish the tasks, functions and objectives efficiently and effectively. The researcher benefited too from this study in establishing hypotheses study of being close to the subject of the study. The researcher also assisted in learning more about role of the accounting system in production of appropriate information accounting quality to meet the needs of accounting performance in areas of planning, observation and decision-making which are variables used by the researcher in his study. This study differed from the current one as it deals with different sector and environment where it discusses Jordanian industrial shareholding companies while the current study argues about Jordanian Banks sector.

Siyam Study (2004) entitled "Evaluation of effectiveness of computerized accounting information systems in Jordanian Banks under technological development" This study aimed to assess the effectiveness of systems Accounting information, through a set of criteria that reflect the effectiveness of the performance of these systems of quality, flexibility, reliability and simplicity, and to achieve the objectives of the study questionnaire was designed and distributed to the public and financial managers in financial departments of accounting information at Jordanian banks (Listed in Jordanian market and only at a parchment Exchange (ASE) for the year (2003) of 9 Banks, which have been distributed (45) questionnaire, which was adopted for purposes of analysis (42) questionnaire. The study findings to computerized accounting information systems in the Jordanian banks in lost Technological development characterized by quality, through the accuracy and adequacy of the outputs of these systems and timing appropriateness of the submission of decision-making and appropriately, thereby contributing to the rationalization as it the study findings that computerized accounting information systems at Jordanian banks under Technological, flexible, simple, reliable development in descending order as next (quality, reliability, flexibility, simplicity). The researcher recommended was the most important Enhance interest in computerized accounting information systems and work to develop them.

Alqtauna Study (2005) entitled "Impact of the use of information technology on the effectiveness of accounting information system: A study about banks corporations and insurance listed on the Amman Stock Exchange within the first market." It was aimed to identify the impact of the use of IT Information on the effectiveness of the information system of accounting in banks and insurance companies in Amman Stock Exchange within the first market, where two questionnaires have been developed in order to achieve objectives of the study, first objective is about the purpose of measuring the effectiveness of the accounting system, and the second one was for purpose of measuring impact of technology Information on the effectiveness of the accounting information system, the number of banks in this study was (13) Bank of facilities and the number of insurance (10), were questionnaire distributed on (138) where statistical analysis was processes at (113) questionnaires. The study included the use of information technology impact on effectiveness of the accounting information
system as it was the most influential factor is use of telecommunications networks, followed by hardware, software, and databases and found that the banking sector has levels technological higher than in the insurance companies. The study recommended the need to increase investment in information technology and work to keep pace with technological developments as presence of specialists within career level to solve any failures.

Fidel Study (2007) entitled “the effect of environmental factors, organizational and behavioral and technological effectiveness of accounting information systems at Jordanian banks in Republic Yemen –Field Study " It aimed to determine the effect of environmental factors, organizational and behavioral and technological effectiveness of accounting information systems, both of these factors taken collectively or independently, and study sample consists of 340 employees at financial departments and accounting departments in Jordanian banks in Yemen where (172) questionnaires was processed for analysis. The study concludes several findings as follows: Upon dealing with factors as one package, it was found that there were positive effectiveness of for technological and organizational factors of accounting information systems, while there was no effect for each of environmental and behavioral factors, but in case in analyzing each factor independently, it was proved existence of a clear and positive impact for all variables of the study effectiveness of accounting information systems used in business banks in Yemen. The study recommended a need for participation of both staff and users in design of accounting information systems in addition to development and necessity to use computers and sophisticated software, besides expanding use of administrative decentralized system.

A study conducted by Ismail & King (2007) entitled "Factors influencing the alignment of accounting information systems in small and medium sized Malaysian manufacturing firms" The study aimed to identify the factors that affect use of accounting information systems in factories, small and medium-sized enterprises in Malaysia. The study sample consisted of (214) companies that have accounting systems. The study concluded that the use of accounting information systems shall connect information flow from the top and bottom at these companies, besides helping the staff and employees at them to achieve their goals. In addition to application of these systems will enable companies to provide accurate information to the relevant government agencies. Consequently, the study assisted the researcher to identify more factors affecting employing of accounting information systems and thus will influence the effectiveness of a subject’s of the current study. The difference between this study and the current one is that the first one discussed the small and medium-sized factories sector issues, while the current study deals with banks in Jordan, taking into account the difference in an environment where the first study was conducted in Malaysia while the current study was in Jordan.

Sajady, et al (2008) conducted a study entitled "Evaluation of the Effectiveness of accounting information Systems". The study aimed to evaluate the effectiveness of information systems companies from the perspective of financial managers (347) of the total industrial company (1383) of companies registered in the financial stock market in city of Tehran, Republic of Iran. The study indicated an application of accounting information systems in these companies at a good level which helps in improving process of decision-making by financial managers as well as it assists to improve internal observation as well as quality of financial reports. This study benefited from evaluating accounting information systems and its impact on improving the decision-making process besides developing the observation which is considered a part from the current study variables. The difference between this study and the current one is that the first one deals with industrial sector matters, while the current study discussed banks issues, taking into account the difference in an environment where the first study conducted in Iran while the current study was implemented in Jordan.

Mashhour & Zaatreh (2008) conducted a study entitled "Framework for Evaluating the Effectiveness of Information Systems at Jordan Banks: An Empirical Study". The study aimed to identify how the investment in information systems at Jordanian banks contributes to the effectiveness of accounting information systems. In addition to measurement of the factors that determine the effectiveness of accounting information systems in banks sector in Jordan which is the main subject of
the study. The study sample consisted of (12) Jordanian banks. The study concluded that the accounting information systems and dramatically affect the performance of these banks as well as their level of competitiveness among them. Additionally, competitiveness between banks is the subject of the study. The study benefited the researcher, particularly in construction of its instrument, being similar to the study topic. The difference between this study and the current one is that the second attempted to evaluate investing in information systems in general and whether this will benefit to Accounting Information Systems effectively, while the current one discusses the effectiveness of accounting information systems from the viewpoint of administration, taking into account the difference in the environment, as the current study was conducted in Jordan.

3. Methodology of the Study
The study consisted of two theoretical and applied aspects, the theoretical one deals with scientific thoughts and views related to accounting information systems where the researcher used the descriptive approach in presenting the data, and analytical approach in analysis of the results of the study, which aimed to identify the effectiveness of accounting information systems at Jordanian banks regarding the collection and analysis of data along with testing the hypotheses.

3.1. The Study Community and its Sample
The study population consisted of all Jordanian banks. The study sample includes only (20) banks in the capital city of Amman. A questionnaire was distributed on all managers in these banks from top managers in each bank. (250) questionnaires were distributed on the study community. The total number of valid and suitable questionnaires suitable for analysis was (197) as a whole have undergone statistical analysis as this percentage is the right represented by the study community (Sekaran, 2003).

3.2. Data Collection
For the purpose of obtaining data and information to carry out the purposes of the study, the following instruments were applied:

1. Information on the theoretical aspect of the study including, articles, theses, books Arab and foreign scientific and specialized subject of the study.
2. A questionnaire as a measurement instrument has been designed to rely on a group of writers and researchers in the subject matter for obtaining raw data that is necessary to complete the practical aspect of the study by taking into account clarity of its goal, components, accuracy, clarity and homogeneity as well as unity of direction of movement along with the scale besides type of form and manner that serves the objectives and hypotheses of the study in addition to data collection contains multiple choices, specific answers or closed questions.

3.3. The Study Instrument
The questionnaire occurred into parts as follows:

First: The first section shows variables related to demographic for the study sample through five paragraphs including (Age, gender, qualification, and years of experience and academic specialization).

Second: The second section shows variables related to the effectiveness of accounting information systems in Jordanian banks through (3) main dimensions for measuring them and (29) questions where the answers for them used an indicator for measuring the effectiveness in each dimension. As a result, it was agreed upon for using the scale after modifying it through addition, deletion, dividing, integration, confirmation and reformulation where the scale was corrected linguistically before and after passing arbitration. The scale consisted of (29) paragraphs responsiveness ranging (1-5).
4. Findings of the Study

First Hypothesis: “The effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the planning process”

The study used all mathematical averages and standard deviation to answer this hypothesis as well as the paragraph importance as shown in Table (1).

Table 1: The effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the planning process

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the planning process</th>
<th>Mathematical Average</th>
<th>Standard Deviation</th>
<th>Paragraph Importance Order</th>
<th>Effectiveness Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Using of accounting information contribute significantly in increasing planning operation effectiveness at the bank.</td>
<td>4.62</td>
<td>0.52</td>
<td>1</td>
<td>Too high</td>
</tr>
<tr>
<td>7</td>
<td>The management depends on accounting information to estimate the numbers of planning budgets for the bank.</td>
<td>4.47</td>
<td>0.82</td>
<td>2</td>
<td>Too high</td>
</tr>
<tr>
<td>2</td>
<td>Reliance of the bank management on accounting information increases effectiveness of the planning operation.</td>
<td>4.44</td>
<td>0.63</td>
<td>3</td>
<td>Too high</td>
</tr>
<tr>
<td>10</td>
<td>The accounting information system at the bank provides predictable financial information which assists the management in finalizing the bank future plans.</td>
<td>4.32</td>
<td>0.66</td>
<td>4</td>
<td>Too high</td>
</tr>
<tr>
<td>3</td>
<td>The accounting information system at the bank provides a basis for planning of investment operation by the bank management.</td>
<td>4.28</td>
<td>0.78</td>
<td>5</td>
<td>Vary High</td>
</tr>
<tr>
<td>5</td>
<td>The accounting information has a great significance by the bank management perspective in improving level of strategic plans.</td>
<td>4.19</td>
<td>0.78</td>
<td>6</td>
<td>High</td>
</tr>
<tr>
<td>9</td>
<td>The accounting information system at the bank provides in transforming the goals and policies of the bank to procedures and executive programs in form of planning budgets.</td>
<td>3.96</td>
<td>0.88</td>
<td>7</td>
<td>High</td>
</tr>
<tr>
<td>8</td>
<td>The accounting information system at the bank provides effectively in direct specifications of the bank goals and multiple alternatives to fulfill the functions of planning.</td>
<td>3.92</td>
<td>1.00</td>
<td>8</td>
<td>High</td>
</tr>
<tr>
<td>6</td>
<td>Plans and objectives of the bank are processed on the basis of information provided by the accounting information systems.</td>
<td>3.85</td>
<td>0.90</td>
<td>9</td>
<td>High</td>
</tr>
<tr>
<td>4</td>
<td>Accounting information in the bank provided a basis for planning financial and human resources. General of Mathematical Average and Standard Deviation</td>
<td>3.81</td>
<td>0.90</td>
<td>10</td>
<td>High</td>
</tr>
</tbody>
</table>

Table (1) shows the effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the planning process where mathematical means ranging between (3.81 – 4.62) in comparison with the general mathematical mean in Jordanian Banks to meet the requirements of the planning process (4.19).

The standard deviation the effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the planning process ranging between (1.00-0.52) in comparison with the general standard deviation in Jordanian Banks to meet the requirements of the planning process (0.79) which indicate that diffusion among the sample members replies that they agreed at the most study instruments paragraphs in which one of them states that “using of accounting information contributes greatly in increasing the effectiveness of bank planning operation “at the first position with a
mathematical mean (4.62) and standard deviation (0.52) in comparison with the general mathematical mean and the general standard deviation.

Generally, replies results of paragraphs questionnaire are high as the effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the planning process. 

**Second Hypothesis:** “The effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the observation process”

The study used all mathematical averages and standard deviation to answer this hypothesis as well as the paragraph importance as shown in Table (2).

**Table 2:** The effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the observation process

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the observation process</th>
<th>Mathematical Average</th>
<th>Standard Deviation</th>
<th>Paragraph Importance Order</th>
<th>Effectiveness Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>16</td>
<td>Accounting information systems in the bank provides additional information such as (Analytical lists, statistical tables and charts)</td>
<td>4.29</td>
<td>0.82</td>
<td>1</td>
<td>Very High</td>
</tr>
<tr>
<td>18</td>
<td>Accounting information systems in the bank provides standards and observation indicators which enable the management to detect violations in addition to analyzing their causes and solve them. Accounting information systems in the bank contributes effectively to detect negative violations about the budget as well as taking the corrective measures for their remedy.</td>
<td>4.29</td>
<td>0.89</td>
<td>1 (Repeated)</td>
<td>Very High</td>
</tr>
<tr>
<td>19</td>
<td>The bank through observation operation aims at implementing the plans besides providing the management with useful information for taking the right decisions.</td>
<td>4.24</td>
<td>0.72</td>
<td>2</td>
<td>Very High</td>
</tr>
<tr>
<td>12</td>
<td>Accounting reports in the bank contributes directly in establishing observation procedures and internal observation. The bank management conducts observation on implementing the activities and established plans in all work stages depending on the available accounting information.</td>
<td>4.17</td>
<td>0.65</td>
<td>3</td>
<td>High</td>
</tr>
<tr>
<td>17</td>
<td>The bank management conducts observation on implementing the activities and established plans in all work stages depending on the available accounting information.</td>
<td>4.03</td>
<td>0.86</td>
<td>4</td>
<td>High</td>
</tr>
<tr>
<td>11</td>
<td>Accounting information helps in following up the effectiveness of the decisions at the bank. The bank management considers that observation on implementing the plans through the accounting information as an important mean and instrument for its assistance in accomplishing the missions and achieving the goals.</td>
<td>4.00</td>
<td>0.81</td>
<td>5</td>
<td>High</td>
</tr>
<tr>
<td>20</td>
<td>Accounting information in the bank provides observation reports about different administrative levels performance at appropriate time. Accounting information systems in the bank contributes observation reports about different administrative levels performance which enables the management to take the corrective decisions and procedures regarding them.</td>
<td>3.93</td>
<td>0.85</td>
<td>6</td>
<td>High</td>
</tr>
<tr>
<td>15</td>
<td>Accounting information in the bank provides observation reports about different administrative levels performance at appropriate time. Accounting information systems in the bank contributes observation reports about different administrative levels performance which enables the management to take the corrective decisions and procedures regarding them.</td>
<td>3.85</td>
<td>0.87</td>
<td>7</td>
<td>High</td>
</tr>
<tr>
<td>13</td>
<td>General of Mathematical Average and Standard Deviation</td>
<td>4.03</td>
<td>0.82</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (2) shows the effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the observation process where mathematical means ranging between (3.74 – 4.29) in comparison with the general mathematical mean in Jordanian Banks to meet the requirements of the observation process (4.19). The standard deviation the effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the observation process ranging between (0.65-0.90) in comparison with the general standard deviation in Jordanian Banks to meet the requirements of the observation process (0.82) which indicate that diffusion among the sample members replies were relatively low which indicate that the sample members agreed at the most study
instruments paragraphs in which one of them states that “using of accounting information contributes greatly in increasing the effectiveness of bank observation operation “at the first position with a mathematical mean (4.29) and standard deviation (0.52) in comparison with the general mathematical mean and the general standard deviation (0.82, 0.85) , additionally, a paragraph of a questionnaire indicates that “accounting information systems provide observation reports about different administrative levels performance which enables the management to take the corrective decisions and procedures regarding them” obtained the last position with mathematical mean of (3.74) and standard deviation (0.88) in comparison with the mathematical mean and general standard deviation. Generally, replies results of paragraphs questionnaire are high as the effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the observation process.

**Third Hypothesis**: “The effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the decision-making process”

The study used all mathematical averages and standard deviation to answer this hypothesis as well as the paragraph importance as shown in Table (3).

**Table 3**: The effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the decision-making process

<table>
<thead>
<tr>
<th>Question Number</th>
<th>Effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the decision-making process</th>
<th>Mathematical Average</th>
<th>Standard Deviation</th>
<th>Paragraph Importance Order</th>
<th>Effectiveness Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>27</td>
<td>Accounting information systems provide the user of accounting data with financial reports periodically and regularly.</td>
<td>4.20</td>
<td>0.96</td>
<td>1</td>
<td>Very high</td>
</tr>
<tr>
<td>21</td>
<td>Accounting information systems provide the management with necessary and appropriate information facilitating the decision-making process.</td>
<td>4.10</td>
<td>0.82</td>
<td>2</td>
<td>High</td>
</tr>
<tr>
<td>23</td>
<td>Accounting information systems provide decision-maker with appropriate for decision nature in terms of quality, time and cost.</td>
<td>3.94</td>
<td>0.70</td>
<td>3</td>
<td>High</td>
</tr>
<tr>
<td>22</td>
<td>Accounting information systems at the bank produce information with an economic nature which used by decision-makers (Management) in predicting value of the variables in decision-making forms.</td>
<td>3.90</td>
<td>0.74</td>
<td>4</td>
<td>High</td>
</tr>
<tr>
<td>29</td>
<td>Accounting information systems at the bank provides feedback (Reciprocal) to ensure reconsideration of the taken decisions to improve their effectiveness.</td>
<td>3.88</td>
<td>0.81</td>
<td>5</td>
<td>High</td>
</tr>
<tr>
<td>25</td>
<td>Accounting information systems at the bank help the top management in decision-making in taking into account the long-term effects of these decisions.</td>
<td>3.85</td>
<td>0.82</td>
<td>6</td>
<td>High</td>
</tr>
<tr>
<td>28</td>
<td>Decisions are made by managers based on information provided by the accounting information system at the bank, mainly away from the personal assessment.</td>
<td>3.73</td>
<td>1.08</td>
<td>7</td>
<td>High</td>
</tr>
<tr>
<td>24</td>
<td>Accounting information system at the bank takes into account different forms of decision-making in terms of nature of the information in decision-making process.</td>
<td>3.72</td>
<td>0.76</td>
<td>8</td>
<td>High</td>
</tr>
<tr>
<td>26</td>
<td>Accounting information systems at the bank help to achieve harmony between the decisions taken by the management with the changes that occur in the environment of the bank.</td>
<td>3.61</td>
<td>0.84</td>
<td>9</td>
<td>High</td>
</tr>
</tbody>
</table>

General of Mathematical Average and Standard Deviation 3.88 0.84

Table (3) shows the effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the decision-making process where mathematical means ranging between (3.61 – 4.20) in comparison with the general mathematical mean in Jordanian Banks to meet the requirements of the decision-making process (3.88). The standard deviation the effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the decision-making process ranging between (0.70-1.08) in comparison with the general standard deviation in Jordanian Banks to meet the requirements of the decision-making process (0.84) which indicate that diffusion
among the sample members replies were relatively low which indicate that the sample members agreed at the most study instruments paragraphs in which one of them states that “Accounting information systems provide the user of accounting data with financial reports periodically and regularly for decision-making operation “at the first position with a mathematical mean (4.20) and standard deviation (0.96) in comparison with the general mathematical mean and the general standard deviation (0.82, 0.85) , additionally, a paragraph of a questionnaire indicates that “Accounting information systems at the bank help to achieve harmony between the decisions taken by the management with the changes that occur in the environment of the bank.” obtained the last position with mathematical mean of (3.61) and standard deviation (0.84) in comparison with the mathematical mean and general standard deviation. Generally, replies results of paragraphs questionnaire are high as the effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the decision-making process was high

4.1. Conclusions

The study discussed a number of questions besides making assumptions related to nature of the effectiveness of the systems accounting information , as well as the study concluded several findings, contributed to solving the problem of the study , along with answering its questions and hypotheses , the study also attempts here to refer to the most of these conclusions :

1. Results of the study analysis showed that the effectiveness of accounting information systems in Jordanian Banks to meet the requirements of the planning process was high. This study results is consistent with Alqatnani (2002) study which indicated a presence for impact of statistical significant and moral relationship to use accounting information on Jordanian banks performance in areas of planning, observation and decision- making , as it confirmed by the financial reports in a sample of Jordanian banks in terms of size of increased revenues which is normal as the planning is one of the important elements in increasing revenues and reducing expenses in the long run .

2. Results of the analysis showed that the level of effectiveness of accounting information systems in Jordanian banks in meeting the requirements of observation process was a high. This result is consistent with the study which indicated that correspondence between design of the accounting information system (Nicolaou, 2000) and coordination requirements and organizational observation created more successful system, as well as congruence between system design and those requirements which contribute effectively to give an impression of observation and accuracy of the information which is also shown during the financial reports of the banks by comparing revenues with expenses as the first one increased steadily resulting from observation , which reflected positively on revenues. This considered natural since that the observation has a significant role in rationalization of expenditures and increasing the revenues.

3. The results of the study statistical analysis that the level of effectiveness of accounting information systems in general at Jordanian banks in decision -making process to meet the requirements was high, which concluded an application of information systems. These findings are consistent with (Sajady, etal, (2008) study which concluded that application of accounting information at good level shall improve decision- making process by managers as it also helps to progress quality of internal observation. This study result was illustrated by financial data in terms of the steady increase in capital along with another increase too in financial position where it led consequently to an increase in revenues besides reducing of expenses. These conclusions sound logic since that such increase is a result of making the right decision.

4. The study results showed that the statistical analysis demonstrated that both elementals of planning and observation obtained a higher degree of importance than the decision-making process.
4.2. Recommendations

According to the results obtained from actual statistical analysis of the data, the following recommendations are observed:

- Emphasis on continuous improvement of accounting information systems in Jordanian banks, which will enable them to keep pace with technological developments in financial and accounting fields as it reflects positively on administrative jobs at the bank including planning, observation and decision-making processes.

- Necessity of managements in Jordanian banks to give priority to usage of accounting information systems for performance of their multiple functions such as: planning, observation and wider decision –making for accomplishing them more effectively.

- Discussing aspects of increasing the effectiveness of the planning process in Jordanian banks due to their importance at the long run, in addition to giving more importance for planning of financial and human resources at the banks because of their importance to success of the planning process.

- Concentrating more on the observation process in Jordanian banks for its major impact on reducing expenses and increasing revenues as an example of the Jordanian banks, besides giving more emphasis on benefit of outputs of the accounting information systems that provide reports on the performance of the different administrative levels which enable the management take corrective actions and decisions regarding them.

References


