

The Extent of the Application of the Commercial Banks in Aqaba for Modern Methods of Accounting Information Systems

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Abstract This study tests the head of departments' perception towards the relationship between applying accounting information systems and production activities. The results show a positive significant relationship between AIS and production activities (i.e. production design, production planning and control, production operation and cost accounting). This study recommends that using modern methods to develop the skills of the interaction between the users of accounting information systems and between these systems.

Key words Accounting Information System (AIS), Production Activities, commercial banks

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1. Introduction

The accounting information systems mainstay for a job decision-making through the provision of performance evaluation and increasing importance of information and its findings for the purposes of supervision, monitoring and evaluation of performance and increasing the importance of accounting information in the help administrative decisions in commercial banks, so that the commercial bank facility to deal with money. Administrative decisions in banks all decisions relating to the management of these funds manage the investment of these funds, which are decisions based primarily on accounting information, hence the importance of providing information to all levels of management in the bank, as well as to all the various parties dealing with him. Indeed, the success of the information system accounting and failure depends on how to achieve this goal.

That's where applications, accounting systems have evolved and progressed the progress of technology in the world, Jordan and the fastest to use them. The use of these banks have will help in the provision of data and information fit the speed of occurrence of the variables in the markets of the world economic and physical, and will save time and effort for the financial analyst for its accounting software of modern information and rates may help him in these banks in order to keep up the events and keep up with the changes and take the appropriate decisions in time manner.

System is the primary source of information is to provide management with appropriate information for management decision-making process. The information system is known as "a set of components interconnected with each other on a regular basis in order to produce useful information, and communicate this information to users appropriately and timely manner, in order to assist them in the performance of the functions assigned to them (Abdul Razzaq, 2003).

2. The importance of the study

The importance of the study by linking modern methods in the field of accounting information systems for modern working environment of commercial banks in the area of Aqaba and that, considering that the banking sector Battabr active in the sectors of the Jordanian economy.

The study is aimed at the following:

1. Statement of the most important methods used in the field of the use of accounting information systems.
2. Statement of the most important international standards issued by the International Accounting Councils regarding the accounting information systems.

The study of the reality of accounting information systems used in terms of how to apply styles to the modernization and development of such systems and the degree of influence in the decision-making process in the commercial banks in Aqaba.

3. Objective of the study

The study aims to determine the extent of the application of the commercial banks in Aqaba for modern methods of accounting information systems in its accounting and how to take advantage of such data when making decisions concerning the interests of those banks and the interests of its customers in their business credit and investment, a check customer satisfaction, and whether there are differences between those banks in the application of those systems and the degree of utilization.

And study aims also measure the level of credit risk, which will face the bank if they decided to approve the granting of a client a certain amount of credit, and it bugs the information you provide accounting systems of modern, granting bank credit is accompanied always risky, and it is due to the fact fixed banking and life is that: "No credit without risk," so we are directing this study was to determine the interest rate offered by the modern accounting system to reduce these risks, and to try to reach a state of making sure as much as possible.

And also aims to look for the impact of the application of accounting information systems and modern evolution of technologies, tools and methods and technical complexity and its impact on the efficiency and performance of these systems, which deal with the banks to trade and investment credit for the improvement and development of work procedures are beneficial to the efficiency of these decisions.

4. Methodology

In this research, the Statistical Package for the Social Sciences (SPSS) was used for data entry as well as for examining the data later. Data preparation was the initial step, which aimed to convert raw data into a more structured format that is more appropriate for analysis. Tasks in this stage included data editing, data coding and data entry. Descriptive statistics were used to summarize respondent's characteristics, including demographic information, such as age, gender; also, questions about the participating company's profile, such as the numbers of Customer were included. Furthermore, inferential statistics were used to test hypotheses to determine the relationship between variables. In particular, Pearson Correlation was used to verify the association of interval level to the construct, whilst Chi-square was used to validate the association between nominal variables and the construct. Moreover, the Cronbach coefficient alpha was used for reliability tests. Lastly, the variable analysis tool, analysis of variance (ANOVA), was used to determine relationship between the extents of the application of the commercial banks in Aqaba for modern methods of accounting information systems.

Research community consists of all commercial banks in Aqaba and number (17) banks which are found in the Aqaba Special Economic Zone.

4.1. The study sample

The study sample wrapped myself in the (10) banks have been selected based on the level of cooperation we got from the banks.

4.2. Hypotheses of the study

1. Apply the commercial banks operating in the Aqaba Special Economic Zone in modern methods of accounting information systems.
2. Banks benefit of modern methods in accounting information systems in decision-making credit and investment in commercial banks operating in the Aqaba Special Economic Zone.
3. Benefit managers and staff of these modern methods in accounting information systems in commercial banks operating in the Aqaba Special Economic Zone in their decisions.
4. Benefit customers of commercial banks from information provided by the accounting information systems in modern rationalization of credit and investment decisions and selection of investment portfolios suitable for them.

5. Previous studies

(Levantine, 2004) study entitled: "The role of information Technology in the analysis of problems and make decisions in Almsman industrial service".

The study was based on the descriptive and analytical technique which is based on theoretical studies, which focused on studying how organizations are managed by the industrial and service through the use of appropriate technology for each of them to reach the regulatory decision-making in which to gain access to higher or lower costs.

The study recommended the need for modification of technology in line with the strategy in service organizations, and the necessity of making the distinction between routine and non-routine sections.

Al-Hantawi, (2001) has specified that the most important characteristics which makes the accounting information systems as effective and efficient, are the accuracy and speed of processing financial data into accounting information, therefore providing management with the necessary accounting information on time; in order to perform functions like planning, control, evaluation, speed and accuracy in retrieving stored overall and descriptive information when it is needed; adequate flexibility; general acceptance of workers; simplicity, and to be associated with other information systems in the entity.

(Khalid study, 2004), entitled: "evaluate the performance of accounting systems based on Computer and suitability to meet the needs of the administration".

This study aimed to evaluate the performance of the accounting systems of computer-based in service sectors and trade of different dimensions, (technical, behavioral and humanity) and through the identification of their efficiency and effectiveness in the performance of its functions, it is the human side to identify the extent of satisfaction reported by the users of these systems and their outputs.

The study recommends the development of accounting students abilities and skills in the field of computer and know how they are made by the programming and design of such systems, as well as the study recommends an assessment of the performance of the accounting systems of computer-based in the commercial and service sectors.

(Study Sharif, 2006) „the risk of accounting information systems electronic." The aim of this study is to identify the risks faced by the accounting information systems in electronic banking and identify the most important reasons that lead to the occurrence of such risks and actions that prevent the occurrence of such risks.

(Mahasna study, 2005): "The impact of the efficiency of information systems in the effectiveness of the decision-making process". The study aims to identify the impact of the efficiency of information systems in the effectiveness of the decision-making process and the study showed the role of managers in organizations to provide a basic foundation of information systems and specialized totalitarianism to strengthen their role in making sound decisions.

Among the most important findings of the study indicate the information systems of the impact on supplies of material and financial, technical and human resources and management in the identification of the problem and the development of alternatives and the comparison of the alternatives in the control and follow-up.

To use the system and to identify their needs and the need for their participation in the development of computerized information system and strengthening the relationship between users and information systems

and based on the information system and training programs for users and increased attention to the physical inputs, human and financial.

(Siam, 2004) "Evaluation of the effectiveness of computerized accounting information systems in the Jordanian commercial banks in the light of technological development". The study aimed to assess the effectiveness of computerized accounting information systems in commercial banks

The study focused on a statement on the role of accounting information systems as the backbone of information systems in banks, as provided by these systems of accounting information summarizes the events and processes that took place within the scope of the bank, and the resulting information necessary for effective decision making and governance.

The study concluded a series of recommendations, most notably the need to make use of the means of modern information technology in the development of information systems computerized accounting in the Jordanian commercial banks, as well as giving information systems development computerized accounting more attention because of the progress of these systems of data and information to contribute to the success of the banking sector and increase its ability to face global competition.

(Abdel Razek, 1993) the study entitled: "The extent of the use of computerized information in administrative decisions related to my job planning and control," An Empirical Study of industrial companies in the Jordanian public shareholding" .

This study focused on identifying the extent of the use of accounting information in management decisions related to my job planning and control and the application of all industrial companies Jordanian public shareholding listed on the Amman Financial Market , which numbered (41) listed companies.

The most important finding is that most industrial company's Jordanian public shareholding use of accounting information, and close ratios when making management decisions related to the function of planning or control, or both.

(Alkhan ,1988) study accounting control in light of electronic systems and their applications in the Central Bank of Jordan.

This study aimed to follow control procedures followed in the Department of Computer in the Central Bank of Jordan, and in the rules of the accounting -mail, and comparing the actions regulators that you must follow, including possible audit procedures, regulatory and follow the latest scientific methods in the application of these procedures have been used researcher in the study curriculum descriptive and analytical study of accounting control procedures in the electronic financial.

Where the study focused on tracing procedures for accounting control both types of public oversight and control over the application in the Department of Computer and in the accounting system mail, and the study of the accounting system mail in the Central Bank of Jordan and determine the control procedures used in the stages of the system, both the input stage or the stage of processing of the data or phase output

The control procedures for applications and good enough to ensure the accuracy and validity of the information extracted as a result of processing the data entered into the system.

6. Data analyses

Description of personal factors and functional respondents:

Table 1 shows a description of personal and functional factors of the sample individuals, as follows:

- Gender: it is shown that 86.0 % of the sample is male, and 14.0%
- Age range: it is shown that 42.0% of the sample their age from 21 to 30 years and 34.0% between 31-40 years, 14.0% between 41 to 50, 6.0% between 51- 60 years, 4.0 % of that % less than 20 years.
- Education: 62.0% of the sample study has Bachelors degree, and 26.0% of the sample has Masters Degree, 6.0% of the sample has Post Graduate degree, and the same percentage has High School.
- Experience years: 30.0% of the samples study their experience from 4 to 6 years and 26.0% between 7- 9 years, 24.0% less than 3 years, 20% equal or more than 10 years.

Table 1. The frequencies and percentages of the personal levels of the respondents

Factor		Frequency	Percentage %
Gender	Male	43	86.0
	Female	7	14.0
Age	less than 20 years	2	4.0
	21- 30 years	21	42.0
	31 – 40 years	17	34.0
	41-50 years	7	14.0
	51 -60 years	3	6.0
	61 more	----	----
Education	High School	3	6.0
	Bachelors degree	31	62.0
	Masters degree	13	26.0
	Post Graduate degree	3	6.0
Experience years	less than 3 years	12	24.0
	4 – 6	15	30.0
	7 – 9	13	26.0
	10 years and more	10	20.0

6.1. Stability of the Measure

The stability of the measure was tested using Cronbach's alpha coefficient, it is shown from table 2 that: Alpha value related to items of application of modern methods in accounting information systems equals to 0.843.

Alpha value related to items of decision-making equals to 0.64.

Alpha value related to items of administrative decisions equals to 0.697.

Alpha value related to items of rationalizing their decisions equals to 0.858.

Alpha value related to all items equals to 0.911.

Table 2. Stability of the Measure

Item	Alpha value
The application of modern methods in accounting information systems	0.843
Take advantage of modern methods in decision-making	0.640
The effect of using modern methods to administrative decisions	0.697
Customers to take advantage of information in rationalizing their decisions	0.858
Total	0.911

All these values are greater than 0.60 which means that the measure is stable.

The first hypothesis: apply commercial banks operating in the Aqaba Special Economic Zone in modern methods of accounting information systems.

All the other paragraphs got circles of calculation is greater than 3.00, and the levels of significance Show less than 0.05, it is statistically significant, i.e., that all these things are available. We note Paragraph No. 4, which measure the extent of use of modern methods for the application of accounting information systems first prize and a mean 4.31. Came paragraph No. 1, which measure the extent of use of modern methods of planning for accounting information systems came in second and a mean 4.29. Came Paragraph No. 9, which measures how the efficiency of electronic devices available to the Bank ranked last paragraphs within statistically acceptable and a mean 4.01.

Paragraph No. 7 and despite the fact that the arithmetic mean was greater than the 3.00 level of significance, but the viewer was larger than 0.05, which means that he is not used to develop modern methods of accounting information systems have applied.

Paragraph No. 8 got to the middle 3.19, which is greater than 3.00, but the level of significance viewer than 0.05, which means that he is not statistically significant, meaning it does not use modern methods to

develop the skills of the interaction between the users of accounting information systems and between these systems.

As for all the paragraphs have got t middle 3.96, and the 0.00 level of significance scenes which is less than 0.05. Any acceptance of the hypothesis that it is the first , which means that commercial banks operating in the Aqaba Special Economic Zone apply modern methods in accounting information systems.

Table 3. Mean, standard deviations, t value, and P-Value of apply modern methods in accounting information systems

No	Item	Mean	Std. deviation	t-value	P-Value
1	Organization uses modern methods to plan for accounting information systems	4.29	0.67	17.82	0.00
2	Organization uses modern methods to the security of accounting information systems	4.28	0.76	16.00	0.00
3	Organization uses modern methods for the acquisition of Accounting Information Systems	4.22	0.76	14.81	0.00
4	Organization uses modern methods for the application of accounting information systems	4.31	0.74	16.26	0.00
5	Organization uses modern methods to support the accounting information systems	4.13	0.80	13.04	0.00
6	Organization uses modern methods to monitor the performance of accounting information systems	4.14	0.77	13.60	0.00
7	Organization uses modern methods for the development of accounting information systems in place to have	3.09	1.02	0.85	0.40
8	Organization uses modern methods to develop the skills of interaction between users and accounting information systems and between those systems	3.19	1.10	1.58	0.12
Total		4.01	1.01	9.27	0.00

The second hypothesis: banks benefit of modern methods in accounting information systems in decision-making credit and investment in commercial banks operating in the Aqaba Special Economic Zone.

With the exception of paragraph No. 12, all the other paragraphs got calculation is greater than 3.00, and the levels of significance Show less than 0.05, it is statistically significant. We note paragraph No. 10, which measures the extent to help accounting systems in modern determine the size of the loan the investment could be granted to the client, the first prize and a mean 4.27. Came Paragraph No. 15, which measures the extent of help systems, modern accounting in determining the time required to repay the loan in second place and a mean 4.25. The paragraph No. 13, which measure the extent of the impact of modern methods of accounting information systems in decision-making came in the final paragraphs within statistically acceptable and a mean 4.14. We note paragraph 12, the arithmetic mean was greater than the 3.00 level of significance, but the viewer was larger than 0.05, which means that the banks are not studies on the stages of the investment to be distributed to shareholders.

The paragraphs together have got a central account of \$ 4.05, and the 0.00 level of significance scenes which is less than 0.05. It is accepted any second hypothesis, that the banks take advantage of modern methods in accounting information systems in decision-making credit and investment in commercial banks operating in the Aqaba Special Economic Zone.

Table 4. Mean standard deviations, t value, and P-Value of decision-making

No	Item	Mean	Std. deviation	t-value	P-Value
9	According to modern accounting systems in determining the size of the investment could give him a loan to the client.	4.27	0.73	16.05	0.00
10	The application of modern methods in accounting information systems is important for the work of the bank.	4.22	0.90	12.47	0.00
11	The Bank studies on the stages of investment and distribute	3.05	0.83	0.52	0.60

No	Item	Mean	Std. deviation	t-value	P-Value
	it to shareholders.				
12	Affect modern methods of accounting information systems in decision-making.	4.14	0.73	14.49	0.00
13	The system of accounting information quickly contact between him and the users.	4.21	0.73	15.40	0.00
14	According to modern accounting systems in determining the time required to repay the loan.	4.25	0.65	17.61	0.00
15	According to modern accounting systems in accelerating the decision-making process credit and investment in commercial banks.	4.21	0.76	14.75	0.00
	Total	4.05	0.38	25.29	0.00

The third hypotheses: that the use of modern methods of accounting information systems in banks operating in the Aqaba Special Economic Zone have an impact on administrative decisions with managers.

Except paragraph No. 23, all the other paragraphs got of calculation is greater than 3.00, and the levels of significance Show less than 0.05, it is statistically significant. Was dissolved paragraph No. 21, which measures the extent to which the financial statements are estimated, extracted according to modern methods to reduce the credit risk, the first prize and a mean 4.26. Paragraph No. 22, which measures the extent to which information systems modern accounting to determine the functions of staff to facilitate their work in second place and a mean 4.21. The paragraph No. 19 , which measures the extent of supporting information accounting information systems managers to better distribution of the resources of the bank's investment came in the final paragraphs within statistically acceptable and a mean 4.00.

As for the paragraph No. 23, the arithmetic mean was greater than 3.00 However, the level of significance was the biggest viewer than 0.05, i.e., that there is difficulty in the use of information systems, accounting , or part of it.

The paragraphs together have got a central account of 4.00, and the 0.00 level of significance scenes which is less than 0.05. It is accepted any third hypothesis, namely that the modern methods used in accounting information systems in banks operating in the Aqaba Special Economic Zone have an impact on administrative decisions with managers.

Table 5. Mean, standard deviations, t value, and P-Value of administrative decisions

No	Item	Mean	Std. deviation	t-value	P-Value
16	Systems provide accounting information needs of managers for the completion of tasks and decision-making as required.	4.19	0.91	12.09	0.00
17	According to modern accounting information systems to help managers to determine the amount available for investment.	4.05	0.71	13.68	0.00
18	According to information accounting information systems managers to better distribution of the resources of private investment bank.	4.00	0.80	11.50	0.00
19	Provide accounting information systems of modern information about credit allocated for the granting of loans at any time to help managers to make the right decision.	4.19	0.68	16.08	0.00
20	According to the financial statements the estimated extracted according to modern methods to reduce the credit risk.	4.26	0.76	15.30	0.00
21	Works of modern accounting information systems to identify staff functions to facilitate their work.	4.21	0.80	13.91	0.00
22	There is no difficulty in the use of information systems, accounting, or part of it.	3.12	0.93	1.17	0.25
	Total	4.19	0.91	12.09	0.00

7. Results

The study reached the following conclusions:

1. Apply the commercial banks operating in the Aqaba Special Economic Zone in modern methods of accounting information systems.
2. Do not use modern methods for the development of accounting information systems have applied.
3. Do not use modern methods to develop the skills of interaction between users and accounting information systems and between these systems.
4. Banks benefit of modern methods in accounting information systems in decision-making credit and investment in commercial banks operating in the Aqaba Special Economic Zone.
5. Banks are not studies on the stages of the investment to be distributed to shareholders.
6. The use of modern methods of accounting information systems in banks operating in the Aqaba Special Economic Zone has an impact on administrative decisions with managers.
7. There is difficulty in the use of information systems, accounting, or part of it.
8. Customers benefit commercial banks from information provided by the accounting information systems in modern rationalization of credit and investment decisions and selection of investment portfolios appropriate to him.
9. There is a strong relationship between the outputs of modern accounting information systems and between credit and investment decisions in commercial banks in the Aqaba Special Economic Zone.
10. The financial budget prepared on the basis of modern accounting systems does not provide accurate information expected to help the bank to credit protection.
11. Modern accounting systems are not useful in identifying areas in which the bank can invest in them.

8. Recommendations

The study recommends the following:

1. Banks obstacle to the use of modern methods for the development of accounting information systems have applied.
2. Banks Aqaba study recommends using modern methods to develop the skills of the interaction between the users of accounting information systems and between these systems.
3. The need to prepare studies on the stages of the investment to be distributed to shareholders.
4. An attempt to overcome the difficulty of using accounting information systems or any part thereof.
5. Work on the development of the financial budget prepared on the basis of modern accounting systems to provide accurate information expected to help the bank to credit protection
6. Activating the modern accounting systems to be able to identify areas in which the bank can invest in them.
7. The study recommends the need for continuous improvement in accounting information systems as this has a positive role in the decision-making credit and investment.
8. Further studies on the role of modern methods in accounting information systems in decision - making other non- credit and investment.

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