

# The Affect of Applying Accounting Information System on the Profitability of Commercial Banks in Jordan (A field study from Management's Viewpoint)

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## **Abstract**

This study aimed to identify the affect of applying accounting information systems on increase the profitability, and reduce the cost of banks in Jordan. The most important results that banks rely on accounting systems, by linking all the banking services of banks each department separately and linking between all departments at the same time , reliance on accounting information systems to satisfy the clients through the implementation of banking

clients as quickly and with minimal effort, Thus achieving a competitive advantage among banks , also the some of the actors in the commercial banks that Banks attempt to provide accurate information by showing the financial position for the clients and provide electronic access by the client to their account and make any deposit, withdraw and transfer money using the full connection between the electronic accounting systems.

The most important recommendations of the study to provide staff trained and fully aware of the accounting information systems and taking into consideration the culture of the client bank, which in turn leads to increased competition and attract clients and thus speeding up the implementation of banking services and not to loss of time and then reduce cost.

**Keywords:** Accounting Information Systems, Profitability, Banks, Electronic Services, Jordan

## **1. Introduction**

Banks expanded their work and their functions to the new aspects emerged from the diversity of business and banking services in the world. The changing strategies of banks in attracting and maintaining clients and the use of accounting information systems, modern and sophisticated to keep Clients' funds and provide the expected return and, thus, increase the profit rate of return earned by the banks.

The applying of accounting information systems have evolved and advanced the progress of technology in the world, and Jordan was the fastest of the states used to it. The banks use these new technologies to help in providing data processing and information suitable for speed of the variables in the markets of the world's economic and financial, which helps to provide the financial information of banks and accounting appropriate for the purposes of planning, controlling and decision-making. And to achieve an integrated vision of the potential of commercial banks and optimize the use of available resources. It will take time and effort for the financial analyst, offering programs of modern information and rates may help to keep up with events and changes, and take appropriate decisions in time. As many of the clients of those banks are turning to for advice and consultation on the assumption that these banks do their work on the basis of scientific and technical studies and to provide experiences of a deeper and broader than they have available. And because it also aimed to maintain its clients and their services they should provide all data and information they need accuracy, speed and at the appropriate time. Under these requires the banks should to realize the importance of using accounting systems developed with the effectiveness and efficiency affect the internal and external environment for banks is positive and thus achieving the objectives and increase profitability.

## **2. Methodology of the Study**

The study based on a descriptive analytical method, where primary data collected from society of the study and were analyzed statistically to get the results of the study. The questionnaire was a tool to collect primary data that designed to measure the affect of (AIS), in addition to interview with related authorities.

### *2.1 Problem Statement*

Facing commercial banks operating in Jordan directed from the competition strong with companies of the banking sector, and given the importance of accounting information systems and their role in financial control and management of banking operations of various kinds, to achieve the best performance, but an outstanding actor in an increasing profitability.

From here, came the idea for the study and application of knowledge of the impact of accounting information on the profitability of commercial banks operating in Jordan.

2.1.1 The problem of the study can be formulated in the following questions:

1. Does the application of commercial banks operating in Jordan, for E-services linked to the accounting department to increase the profitability of the bank?

2. Does the bank based on a computer (PC) in the implementation of banking services to clients Accounting Department and tied the highest degree of controlling, lead to increased profitability of the bank?

3. Does the application of accounting information systems to achieve connectivity and functional integration between the management and operating departments within the Bank regarding banking services to clients, thereby reducing the cost to the lowest possible level?

### *2.2 Objectives of Study*

That the commercial banks is a key element in the economic system of Jordan, because of the severity of the intense competition for the banking sector and the importance of financial systems that depend on them in the implementation of banking activities for different categories of clients, this study comes to achieve the following objectives:

1. Definition of accounting information systems and their characteristics and fundamentals underpinning.

2. Statement of the degree of reliance on accounting information systems in commercial banks operating in Jordan.

3. Statement of the impact of the application of accounting information systems in commercial banks operating in Jordan on the profitability of these banks.

4. Statement of the degree of reliance on accounting information systems in the implementation of banking operations in various levels and the degree of connectivity and functional integration achieved by systems of accounting information to various departments and executive levels.

### *2.3 Important of the Study*

The tremendous advances that have occurred in the business environment and the level of all the companies and sectors that seek to achieve its goals in growth and continuity and that is to make higher profit on invested capital, which has become affected by policies, laws, regulations and instructions governing the nature of the work which may lead to bear the expenses of money for the implementation of certain tasks and functions which will lead to material damage that would weaken the financial position of the institution, which may impact up to the final outcome of the summary of the activity and profitability.

So that this study is trying to investigate the impact of the applying of accounting information systems on the profitability of commercial banks operating in Jordan, due to the lack of studies looking at the impact of new regulations on the financial position of banks, which is affected by a factor of profitability.

Therefore, this study is trying to investigate the application of accounting information systems for the lack of literature studies and research that take into account the factor of profitability.

### *2.4 Hypotheses of Study*

Through the questions that are given in the problem statement, so the hypotheses was formulated as an attempt to answer the problem of the study:

1- No statistical significant effect between the applying of commercial banks to the E-services linked with department of accounting and increase profitability.

2- No statistical significant effect between the adoptions of the banks on the computer (PC) in the implementation of banking services to clients linked with accounting department and tied the highest degree of controlling and increase profitability.

3- No statistical significant effect between the applying of accounting information systems represented in the achievement of connectivity and functional integration between the management and operating department within the bank regarding banking services to clients and cost reduction to the lowest possible level.

### *2.5 Society and Instrument of Study*

To achieve the objectives of the study and to identify the affect of applying accounting information systems on the profitability of commercial banks operating in Jordan. The population of the study were from the board of directors (CEO's hereafter), financial managers (CFO's hereafter), head of departments, and executive authorities in commercial banks operating in the Hashemite Kingdom of Jordan, out of (23) bank (13) commercial banks were studied as study sample, in addition to personal interview with relevant parties (46) questionnaire were distributed, (38) questionnaire considered acceptable and appropriate for the study of applying accounting information systems on the profitability of commercial banks operating in the Hashemite Kingdom of Jordan.

### *2.6 Statistical Techniques That Used and Testing Hypotheses*

The study calculated several statistical measures are the mean, t - test, and the Cronbach alpha test, and standard deviation, and news of variance of the differences, and Tukey test . As for the answers of questions was to accept the standard question (alternative hypotheses) is said to be the mean is greater than 3, and to have meaning it must T value be greater than table value or that the level of significance less than 0.05.

## **3. Literature Review**

Sori's study (2009): this study seeks to examine the use of Accounting Information Systems (AIS) by ZBMS Sdn. Bhd., and its contribution to the knowledge management and strategic role of the organization. ZBMS is a company that registered in Kuala Lumpur and operates in construction industry. The company used automated AIS known as 'Contract Plus – Financial & Project Accounting' package commercially developed by a private company (ZYXW). Wide variety of people that involve in the company's operation within and outside the organization uses accounting information generated by this system for decision-making Based on input provided by operational level managers, the Contract Plus software produces monthly projects' income statements, balance sheets and statement of changes in financial position for the strategic and tactical managers to plan, control and make decision on the resources allocation. The role-played by AIS enhanced the organizations' accounting

functions, and add information value. The automated AIS speed up the process to generate financial statements and overcome human weaknesses in data processing. The system enhances management of resources and the process of monitoring, control and prediction of ZBMS business for better future. With the advent of AIS, the growth of tacit and explicit knowledge could be seen from the intensive training of personnel at the early stage of system implementation to the development and use of company's own manual in training of new staff and assisting the job of existing staff. Given the benefit of AIS to ZBMS, this paper recommended that the source of data should be fully automated, and the existing system should be upgraded through computerize the pre-tendering and post-tendering of projects to enable AIS integration.

Xiang, & Yin, study (2011) with the booming development of Modern information technology revolution, accounting environment has been greatly changed, and the traditional accounting information system already cannot satisfy the diversity and personalized needs of enterprise stakeholders. This paper is meeting the needs of corporate stakeholders on event accounting approach, it introduces event vouchers in the economic transaction and operational matters process, realizes the event information and accounting information system's seamless docking, and then with the "three-base system" as the design ideas, finally constructs the accounting information system based on events approach.

Yatim's study (2009) this study examined the economic rationale and justification for profit distribution practices in Islamic financial institutions in Malaysia. The classification on the pool of funds mobilized and scrutiny on funds employed were investigated in order to form the basis in the upholding of shari'ah dictates in the practices of distribution of profit by the practitioners of shari'ah-compliant financial institutions. The frameworks identified in this study include the principle of true and fair view financial information, the principle of fairness to mankind and the adoption of fund accounting approach in accounting practices for profit distribution. There appear evidences of unjustifiable practices in the course of distribution of profit by the practitioners in this sector of economy. As such, this study offers a guide aimed at ensuring the upholding the principle of on-going concern of the shariah-compliant financial institutions businesses.

Grande, et.al study (2011) This research study is aimed, based on empirical evidence, at measuring the relationship between the use of the Accounting Information Systems (AIS) by the Small and Medium Sized Enterprises (SMEs) in Spain, and firms' improved performance indicators and productivity. This empirical study is based on a survey carried out among small and medium-sized firms to ascertain the extent to which development and implementation of accounting information systems had taken place, and subsequently an analysis was made as to how much this introduction may impact on improvement in outcome indicators and productivity. As interesting results we have found that there is a positive relationship among the SMEs that use AIS for fiscal and bank management and better performance measures. This research provides value added in accounting literature given the scarcity of works dealing with the relationship between the application and use of AIS and performance and productivity indicators in SMEs in Spain.

Chill's study (2010) the study aimed to investigate the extent of accounting information system effectiveness in Iraqi private commercial banks. In order to achieve the objective of the study, the researcher designed a questionnaire consisting of (29) statements to gather 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 Iraqi private commercial banks. The study used many statistical methods. After analyzing the study hypotheses, the study reached to several conclusions; the most important were 1- The accounting information system in Iraqi private commercial banks is effective in applying the requirements of the planning operations. 2- The accounting information system in Iraqi private commercial banks is effective in applying the requirements of the control operations. 3- The accounting information system in Iraqi private commercial banks is effective in regard of applying the requirements of the decision making operations. According to the findings of the study, the study list below shows the most important recommendations: 1- Necessarily involve management in Iraqi private commercial banks to exercise accounting information system to be able to perform multiple tasks such as planning, controlling, and decision making more efficiently and on a wider scale. 2- Ensure to continuously improve accounting information system in Iraqi private commercial 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, control, and decision making.

#### **4. The Theoretical Side**

##### *4.1 Introduction*

The banks are at the present time occupies a prominent and highly focused in all areas of economic and commercial activity and financial state, and has led global economic development to focus on banking in its various forms.

In general, the bank is a facilities finance the exercise of the function key which attract and collect money from applicants - whether natural or legal persons, and then employ them in investment for which the bank offered, and most importantly to provide what they need different sectors of the individuals and institutions from funding sources in the form of overdraft and loans and advances and discounting bills of exchange, in addition to providing other banking services (Wedyan, Lu'ay, 2009).

##### *4.2 Instrument Reliability*

Tested the reliability of the Instrument used to collect primary data, based on a test, Cronbach's alpha coefficient, where it amounted to Cronbach alpha for each dimension and all dimensions of society as follows:

1. The first dimension: the value of alpha for statements of the first dimension related to the affect of the applying of commercial banks operating in the Hashemite Kingdom of Jordan for e-services linked to the accounting department and increase profitability, as the value of alpha (.78).

2. Second dimension: the value of alpha for statements of the second dimension regarding the effect of adoption the computer in the implementation of banking services to clients and which relates to Accounting Department and tied the highest degree of control and increase the profitability of the bank, as the value of alpha (.81).

3. The third dimension: Alpha amounted to statements of the third dimension for the affect of the applying of accounting information systems represented in the achievement of connectivity and functional integration between the management and operating departments within the Bank regarding banking services to clients and cost reduction to the lowest possible level, as the value of alpha (.72).

4. The value of alpha for all statements of all dimensions together (.91).

All these values are higher than (.60) which means that there is reliability in the study instrument.

#### *4.3 Instrument Validity*

To verify the validity of the study instrument, as well as the validity of the study tool and the compatibility of the study questions with dimensions were tested through a factor analysis, this test showed the following results for each dimension:



Table 1. factor analysis of the first dimension related to the affect of the applying for e-services linked to the accounting department and increase profitability.

Statements of dimension	extraction	Evaluation
1	.48	Essential
2	.54	Basic
3	.70	Basic
4	.74	Basic
5	.68	Basic
6	.59	Basic
7	.88	Basic
8	.86	Basic
9	.75	Basic
10	.89	Basic
11	.62	Basic
12	.75	Basic
13	.78	Basic
14	.66	Basic
15	.52	Basic

Table 2. factor analysis of the second dimension related to the impact of adoption the computer in the implementation of banking services to clients and which relates to Accounting Department and tied the highest degree of control and increase the profitability of the bank and.

Statements of dimension	of extraction	Evaluation
1	.52	Basic
2	.78	Basic
3	.69	Basic
4	.81	Basic
5	.71	Basic
6	.67	Basic
7	.87	Basic
8	.86	Basic
9	.70	Basic
10	.86	Basic
11	.61	Basic
12	.74	Basic
13	.75	Basic
14	.78	Basic
15	.54	Basic
16	.54	Basic
17	.66	Basic
18	.59	Basic

Table 3. Factor analysis of the third dimension related to the impact of the application of accounting information systems represented in the achievement of connectivity and functional integration.

Statements of dimension	of extraction	Evaluation
1	.69	Basic
2	.73	Basic
3	.84	Basic
4	.72	Basic
5	.71	Basic
6	.66	Basic
7	.55	Basic
8	.92	Basic
9	.72	Basic
10	.68	Basic
11	.65	Basic
12	.35	Acceptable
13	.50	Basic

the above evaluation of the test extraction (Loading) as standard (Stevens) that the statements that get the satisfaction is greater than (0.30) and less than (0.40) is considered acceptable and statements that get to satisfy the largest of (0.40) and less than (0.50) are considered essential and statements that receive equal or more extraction of (0.50) are considered essential where each statement to show that the weight is different from any other to satisfy the (important) with the dimension to which it belongs.

### 5. Describe for Respondents' Demographic Backgrounds

Table 4. variable of sex

Variable	Group of variable	Frequency	Percentage	Cumulative Percentage
Sex	Male	26	68.4	68.4
	Female	12	31.6	100

Table No. (4) Shows that the numbers of male respondents, who are 26, with percentage (68.4%) of the number of respondents, while the rest are female with rate (31.6%), this is considered as an indication that the banks adopt more males than females in banking activities.



Table 5. variable of age

Variable	Group of variable	Frequency	Percentage	Cumulative Percentage
Age categories	20 – less 30	16	42.1	42.1
	30 – less 35	8	21.1	63.2
	35 – less 40	9	23.7	86.8
	More than 40	5	13.2	100

Table No. (5) shows the that (42.1%) of the members of the study sample is the age category (20 less than 30 years), which constitute the largest proportion, which may indicate that banks use to attract and hire individuals with ages moderate and to take advantage of them for a long time and equip them with skill and highly experienced with the passage of time.

The percentage (23.7%) of individuals aged under the category (35 less than 40 years) and occupies the second place and the proportion (13.2%) of those who are age category (40 + years) and a good percentage, which may indicate that banks maintain a large proportion of employees with experience.

Table 6. Variable of Qualifications

Variable	Group variable of	Frequency	Percentage	Cumulative Percentage
Qualifications	PhD	1	2.6	2.6
	Master	1	2.6	5.2
	Bachelor	33	86.8	92
	Diploma	3	8	100

We observe from table no. (6) that the percentage (86.8%) of the members of the study sample have qualified a bachelor's degree with total of 33 respondents, the proportion (2.6%) holds a doctorate and master's and by (7.9%) are the holders of a diploma, which shows the diversity of the banks in the qualifications and the various functional levels.

Table 7. Fourth: variable specialization for the sample of the study

Variable	Group variable of	Frequency	Percentage	Cumulative Percentage
specialization	Accounting	8	21.1	21.1
	Management	10	26.3	47.4
	Finance	13	34.2	81.6
	Economics	2	5.2	86.8
	Other	5	13.2	100

Table No. (7) shows the variable specialization, the percentage (34.2%) are those who have specialization in finance, banking, they come primarily and then Business Administration by (26.3%), accounting specialization comes in third place by (21.1%), and ranked Last amounting to a rate (5.3%) devoted to the economics. As for the other disciplines, it is limited to the following disciplines:

Computer science, management information systems, programming and systems analysis in addition to the specialty of international relations and strategic studies, and this suggests that banks with qualified staff and functional with different disciplines and focuses on modern systems, and related disciplines and computer systems.

Table 8. variable of experience

Variable	Group of variable	Frequency	Percentage	Cumulative Percentage
Experience	Less than 5	11	31.6	31.6
	5 – 10	12	28.9	60.5
	11 – 15	8	21.1	81.6
	More than 16	7	18.9	100

The table 8 Shows that the percentage (31.6%) with experience ranging from 5 years it occupies the first place and this is consistent with the age variable table, which showed that ages between respondents (20 less than 30) the percentage (28.9%), which is located in the second are those who have experience ranging from (6 - 10 years).

Table 9. variable of Job

Variable	Group of variable	Frequency	Percentage	Cumulative Percentage
Job title	General or Branch manager	3	7.9	7.9
	Financial manager	2	5.3	13.2
	Assistant financial manager	5	13.2	26.3
	Managing Director	5	13.2	39.5
	Accountant	15	39.5	78.9
	Other	8	21.1	100

Table No. (9) Shows that the percentage (39.5%) of the members of the study sample are those who occupy the accounting function are ranked first, and second post of Assistant

financial manager and Managing Director of a rate (13.2%) As for the other functions which are occupied by the rest of the sample was the function of Fund Manager and Client Services and Operations Management and assistant directors and heads of various departments in the banks.

## **6. Analyzing Data for Hypothesis Test**

To measure the impact of the application of accounting information systems on the profitability of commercial banks operating in Jordan, it was used a series of statements correspond to the dimensions that will be answered by this study and verify the impact of information systems on the profitability of banks and what are the means used by the information systems to achieve its objectives.

### *6.1 Analyze of Data of the First Hypothesis*

Table No. (10) shows that all statements received mean greater than (3) and significance level less than (0.05) and, therefore, all the statements are statistically significant, and the statement No. (9), relating to open accounts for clients directly to the use of computers (Information Systems) and less time and effort, which means reduced cost as based banks to accounting systems to streamline the time and effort and access to lower cost has reached the arithmetic mean of this statements (4.23) and standard deviation (0.43) and the first rank. And statement No. (7,8, 11) came in second, where was the arithmetic mean a (4.15), and the statement No. (2,3, 7) have replaced the rank third and mean (4.13) The statement (4), indicating that banks rely on the design of spreadsheets showing the number of electronic services provided to clients electronically, which reduces the cost of operations after service was ranked as the fourth and this suggests that banks are trying to rely on accounting information systems to save time and avoid overtime as possible.

Table No. (10) Shows statement No. (15) got the last rank and mean (3.86) which means that the bank does not depend based exclusively on accounting information systems in the implementation of all services, banking activity may indicate that some banking operations cannot be implemented using accounting information systems may be due to the type of clients and the bank's policies towards some banking services and their consequences.

Table 10. The applying of commercial banks operating in the Jordan for e-services linked to the accounting department to increase the profitability of the Bank:

#	Statement	mean	Sta. deviation	T- test	Sig. level
1	providing information covering all types of banking operations at the lowest cost possible is achieved through the accounting information systems	<b>4.00</b>	<b>0.86</b>	<b>7.08</b>	<b>0.00</b>
2	The implementation of electronic banking services are based on the size of the operation requested by the client and therefore the volume of credit is determined in advance	<b>4.13</b>	<b>0.34</b>	<b>20.36</b>	<b>0.00</b>
3	The output accounting information systems are used to determine the degree of credit to clients	<b>4.13</b>	<b>0.77</b>	<b>8.97</b>	<b>0.00</b>
4	Electronic tables are designed to show the number of services provided to clients electronically, which reduces the cost of operations after service	<b>4.1</b>	<b>0.74</b>	<b>8.87</b>	<b>0.00</b>
5	The implementation of banking services to clients using the Internet reduces the cost of the service provided to the client	<b>3.97</b>	<b>0.36</b>	<b>16.37</b>	<b>0.00</b>
6	The implementation of banking services to clients using the Internet results for less expensive service costs	<b>3.97</b>	<b>0.59</b>	<b>10.13</b>	<b>0.00</b>
7	Accounting information systems provide accurate information on the financial position and credit to the customer at the lowest possible risk	<b>4.13</b>	<b>0.41</b>	<b>16.84</b>	<b>0.00</b>
8	All technical possibilities that contribute to the strengthening of information systems and to raise banks operational performance are available for the most Banks	<b>4.15</b>	<b>0.54</b>	<b>13.06</b>	<b>0.00</b>
9	Opening accounts for clients directly with the use of computers (Information Systems) and with minimal time and effort means lower cost	<b>4.23</b>	<b>0.43</b>	<b>17.69</b>	<b>0.00</b>
10	The achieved feature by using information systems and accounting information is to reach the lowest possible cost to the banking service	<b>4.07</b>	<b>0.48</b>	<b>13.66</b>	<b>0.00</b>
11	Based on the nature of the service requested by the client and the time it is electronically executed ,resultsfor determining the cost of this service	<b>4.15</b>	<b>0.36</b>	<b>19.31</b>	<b>0.00</b>
12	Managers are being helped to develop procedures and realistic objectives by drawing plans and future policies to ensure that accounting information systems will achieve expectations	<b>4.00</b>	<b>0.69</b>	<b>8.83</b>	<b>0.00</b>
13	In case of short-term planning of activities using accounting information systems, it is relying on different statistical methods to estimate the costs of banking service	<b>3.94</b>	<b>0.69</b>	<b>8.39</b>	<b>0.00</b>
14	The accounting information systems provide a cost standard used in determining the cost of current service	<b>3.97</b>	<b>0.67</b>	<b>8.86</b>	<b>0.00</b>
15	Banks use computer technology in the implementation of all services and daily activities	<b>3.86</b>	<b>0.77</b>	<b>6.88</b>	<b>0.00</b>
	total	<b>40.5</b>	<b>0.61</b>	<b>40.57</b>	<b>0.00</b>

## 6.2 Testing First Hypotheses



- There is no significance statistical relationship between the application of commercial banks for Electronic Services linked to accountings department and banks profitability.
- There is significance statistical relationship between the applications of commercial banks working in Jordan for Electronic Services linked to accountings department and banks profitability.

Table 11. the outcome of the test the first hypothesis

No.	Hypothesis	Mean	Sta. deviation	T-test	Sig. level
1	Electronic services and increase profitability.	4.05	0.61	40.57	0.00

To test the hypothesis, it has been used t-test in accepted or rejected alternative hypothesis by determine if the arithmetic mean of each statements combined is greater than 3, and to have meaning it must T value be greater than table value or that the significance level less than 0.05. as shown in Table (11) to the arithmetic mean is greater than (3) with statistically significant and therefore the null hypothesis is rejected and accept the alternative hypothesis, which states that there is a statistically significant relationship between the applying of commercial banks to e-Services linked to accounting section and banks profitability.

### 6.3 Analyze of Data of the Second Hypothesis

Table No. (12) shows that all items received a mean greater than (3) and significance level less than (0.05), and therefore, all the statements(questions) relating to second dimension has statistical significance, statement (9 ) ranked in the first, which states that banks through the accounting information systems control all accounting records related to computerizes operations, which means that banks are heavily dependent on the systems in this dimension has reached the arithmetic mean of this statement (4.23) and a standard deviation (0.43). statement (17) Was ranked by second place with mean (4.18) and a standard deviation (0.51), it was found that banks rely on the direct link with the central bank, which is the concerned authority in the oversight of the operations of commercial banks, through direct connection with the Bank for the implementation of banking operations and that link the accounting operations of the electronic clearing, which represent a high percentage from the operations of commercial banks.

The third place was to statement (8,11) where it was found that the accounting information systems are affected by regulatory developments, as well as banks use systems of accounting information in reducing the impact of the risks that might be exposed to the bank of some clients, through the monitoring of movements of clients through the financial reports submitted by of information systems.

In fourth place was number of statements (2, 3,7 and, 16). but The last place was to statement (15) with mean (3.86) and standard deviation (0.77) where the analysis showed that it is estimated the role of information systems and with other control but without high ratios'

Table 12. There a statistically significant between the bank's dependencies on computers in the implementation of banking services to clients linked to accounting section and the highest degree of control and profitability.

No.	Statement	Mean	Sta.	T-test	Sig.
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			deviation		level
1	The use of accounting information systems as a tool to monitor all activities of the Bank	4.01	0.86	7.08	0.00
2	The accounting information systems monitoring tool monitors the implementation level, trends, and thus contribute significantly to identify waste and extravagance in the bank	4.13	0.34	20.36	0.00
3	The application of accounting systems that meet the bank's internal control and the use of bases and accounting rules in achieving the objectives of the bank	4.13	0.77	8.97	0.00
4	to prevent errors and tampering of evidence in various stages of the accounting is achieved t Through the accounting information systems	4.07	0.74	8.87	0.00
5	Accounting information systems lead to the development and strengthening of accounting and supervisory staff in the bank	3.98	0.36	16.37	0.00
6	Accounting information systems contribute to determine the deviations in the force before they occur, helping the bank to detect and treat	3.97	0.59	10.37	0.00
7	Through the accounting information systems ,sources and uses of funds are monitored with high efficiency	4.13	0.41	16.48	0.00
8	Organizational aspects of the bank's influence on the effectiveness of control systems and accounting information	4.15	0.54	13.06	0.00
9	Through the accounting information systems, all the records relating to computerized operations are monitored.	4.23	0.43	17.69	0.00
10	Accounting information systems provide tools and methods required by the Department to follow up the implementation of banking services	4.07	0.48	13.66	0.00
11	Using the accounting information systems reduces the impact of financial risk that might be exposed to the bank by clients	4.15	0.36	19.31	0.00
12	Accounts are submitted on time for the purpose of determining the specific deviations and abuses through reports of accounting information systems through the stages of the continuous provision of banking services	4	0.69	8.83	0.00
13	Through the accounting information systems, the impact of financial risk that might be exposed to the bank by clients is prevented	3.94	0.69	8.39	0.00
14	Through the output of accounting information systems, Bank resources are used efficiently	3.97	0.67	6.88	0.00
15	the role of accounting information systems in the control of short-term activities is strengthen by using other methods of control (such as decentralization or accounting responsibility)	3.86	0.77	6.88	0.00
16	To determine the efficiency and effectiveness in the implementation of the operational activity of the Bank is achieved through the output of accounting information systems	4.13	0.66	10.49	0.00
17	Bank's commitment to the laws and instructions issued by the regulatory authorities are checked Through the accounting	4.18	0.51	14.25	0.00

	information systems				
18	The lowest possible cost to the banking service achieved by using accounting information systems.	4.07	0.71	9.34	0.00
	Total	4.06	0.62	38.14	0.00

#### *6.4 Test the Second Hypothesis*

- There is no significance statistical relationship between the bank's dependency on computers in the implementation of banking services to clients that tied with accounting department with highest degree of controlling and increase profitability.
  
- There is significance statistical relationship between the bank's dependency on computers in the implementation of banking services to clients that tied with accounting department with highest degree of controlling and increase profitability.

Table 13. the outcome of the test the second hypothesis:

No.	Hypothesis	Mean	Standard deviation	T-test	Significant level
1	Controlling throughout using computer and increase profitability.	4.06	0.62	38.14	0.00

To test the hypothesis, it has been used t-test in accepted or rejected alternative hypothesis by determine if the arithmetic mean of each statements combined is greater than 3, and to have meaning it must T value be greater than table value or that the significance level less than 0.05. as shown in Table (13) to the arithmetic mean is greater than where the arithmetic mean (4.06) with statistically significant and therefore the null hypothesis is rejected and accept the alternative hypothesis, which states that there is a statistically significant between the bank's dependency on computers in the implementation of banking services to clients that tied with accounting section with highest degree of control and increase profitability.

Based on the Table (14), the arithmetic mean greater than separation points reached where (4.06) and with statistically significant, therefore the nihilism hypothesis is rejected and accept the alternative hypothesis, which states a significance statistical relationship.

With the exception of statement (13), the table No. (14) shows that all items obtained mean larger than (3.5) with level of significance less than (0.05) therefore, all statements except No. (13) has statistical significance relationship.

Statements No. (8,12) in the first place it obtained mean (4.26) where the accounting information systems provide information and data related to operational activity and linked by the current liquidity available to the bank to avoid operational risk. The statement No. (3) has second place with mean (4.18), where banks rely on linking all banking services each department individually and with other departments within the bank, leading to the speed and accuracy in the completion of banking services.

### 6.5 Data Analysis of the Third Hypothesis

Table 14. there is a relationship between the application of accounting information systems represented in the achievement of connectivity and functional integration between the management and operating departments within the bank and reduce the cost to the lowest possible level.

No.	Statement	Mean	Sta. deviation	T-test	Sig. level
1	Accounting information systems lead to assess the degree of potential risk, which can be avoided	4.10	0.76	8.92	0.00
2	Accounting information systems contribute to provide a constant flow of information about the various banking	4.13	0.66	10.49	0.00

	services and the level of each section				
3	banking services of the bank are linked to each department individually and with other departments	4.18	0.39	18.58	0.00
4	Complexity in the Jordanian laws and legislation related to the process of foreign trade (import and export) enhance the Bank's role in the implementation of the service at the possible lowest cost	3.97	0.59	10.13	0.00
5	Speculation on interest rates for some types of banking services from abroad, check the advantage of highly competitive	4.05	0.51	12.54	0.00
6	Policy towards clients are judged on the efficiency and effectiveness of bank credit through the accounting information systems	3.63	0.91	4.26	0.00
7	Accounting information systems affect the increase in customer demand due to competition, which leads to increased volume of activity	4.10	0.64	10.50	0.00
8	What is needed is to provide the bank information and data to measure the risk of operational activity that might be exposed to the Bank	4.26	0.60	12.95	0.00
9	Laws and regulations governing the nature of the work of staff in the bank in a selection and implementation of service are achieved by using accounting information systems	4.07	0.53	12.33	0.00
10	To avoid operational risks are automatically planning services activity based on a margin of safety by the size of the operation	4.05	0.61	10.58	0.00
11	information systems base and management policies in support of creativity and active participation of its staff will certainly real commitment towards the development and profitability	4.15	0.54	13.06	0.00
12	Through the accounting information systems, it is to identify and measure the degree of liquidity required in a short time and early to avoid the liquidity risk	4.26	0.44	17.44	0.00

13	Through the accounting information systems, it is to provide information and data on interest rates and banking services compete with banks	3.34	1.12	1.88	0.068
Total		4.02	0.70	29.24	0.00

The table (14) shows the statement (11) ranked in the third place with mean of (4.15) and through the development of database information systems and linking them with management policy and interaction with bank staff to achieve the commitment to reach the main objective represented in achieving the profitability.

The statement No. (2) came in the fourth place with mean of (4.13), where the accounting information systems contribute to provide a constant flow of information about the various banking activities and at the level of each section. In fifth place comes a statement no. (1,7) with arithmetic mean of (4.10) where the two statements linked with each other and in the extent of risk assessment and the status of clients.

The statement (13) ranked last in central arithmetic (3.34) and moderately in terms does not provide accounting information systems full information on interest rates and banking services at banks and this may be due to the adoption of the banks to actual reality and instructions issued Central Bank, through the control represented by the compliance with the instructions and laws about interest rates, services, and compliance within the allowable rates and to achieve the goal of profitability.

### *6.6 Test the Third Hypothesis*

There is no statistically significant relationship between the applications of accounting information systems represented in the achievement of connectivity and functional integration between the management and operating departments within the Bank regarding banking services to clients and cost reduction to the lowest possible level.

There is significant statistically relationship between the applications of accounting information systems represented in the achievement of connectivity and functional integration between the management and operating departments within the Bank regarding banking services to clients and cost reduction to the lowest possible level.

Table 15. concerning the outcome of the third test the hypothesis

No.	Hypothesis	Mean	Sta. deviation	T-test	Sign. level
1	Represented in the achievement of connectivity and functional integration between the management and operating departments within the bank which related to the service.	4.02	0.70	29.24	0.00

To test the hypothesis, it has been used t-test in accepted or rejected alternative hypothesis by determine if the arithmetic mean of each statements combined is greater than 3, and to have meaning it must T value be greater than table value or that the significance level less than

(0.05), and upon Table (15), the arithmetic mean larger than the point where the separation was (4.02) and statistically significant, and therefore the null hypothesis is rejected and accept the alternative hypothesis, which states a relationship of statistical significance.

## 7. Results

Based on analysis of data on the impact of the application of accounting information systems on the profitability of commercial banks operating in Jordan, the results of this study are the following:

1. Has been accepted hypothesis according to table No.(10,12,&14) which investigate the impact of accounting information systems representative to provide electronic services and the use of the computer with a high degree of controlling and to achieve connectivity and functional integration between the administration and departments operating within the Bank and related e-service banking, which affecting the application of accounting information to achieve high profitability of banks, taking into consideration elements of success of the accounting systems.
2. as shown in table No.(10). Be to rely on accounting information systems to satisfy the clients through the implementation of banking clients as soon as possible and with minimal effort, achieving a competitive advantage between the banks, and also showed the corresponding partial to some of the actors in the commercial banks in the region of Jordan try banks to provide accurate information between the financial centers to clients and providing electronic access to by the client to his account and make any deposit, withdraw and transfer using the full connection between the electronic accounting system.
3. As shown in table No. (12), Based banks to accounting information systems through the development of what is needed bank information, data measuring the effects of current activity and thus prevent or avoid any risk of operating current (internal), according to a poll from the interview, achieving control over clients accounts and preparation of studies credit for the financial centers to clients who respect of banking facilities by the department in the bank.
4. Also table No. (12),shows that To achieve the objectives of growth and continuity in achieving the primary objective of the Bank and based on the profitability of the banks rely on other methods of control as well as accounting systems and through follow-up and communication with stakeholders on an ongoing basis.
5. Table No. (12), shows that banks achieved' objectives to increase the factor of profitability depending on accounting information systems by providing a constant flow of accounting information on a variety of direct banking services (within the Bank) and indirectly using electronic methods and the level of each section leading to



the exercise of control and high functioning on the costs of services and the liberalization of the impact of service on the bank.

6. According to table No. (14) Banks rely on the accounting systems and that by connecting all the banking services of the bank each department separately and the link between all departments at the same time, which in turn leads to the speed and accuracy in the implementation of banking operations and to achieve satisfaction for employees.
7. Table No.(14) shows that Banks based on the outcomes of accounting information systems in determining the amount of liquidity, helping them to make decisions as soon as the banking and high accuracy at the lowest possible cost, leading to increased growth and profits.
8. Table No.(14), shows that the accounting information systems Affected by organizational aspects of the bank.
9. According to table No.(14) and interviews with related authorities the commercial banks seeking in the Jordan region to achieve automated systems within the bank, full accounting link, development of a comprehensive database, and protected from factors immoral.
10. The interviews showed that Some oldest departments resist change, and the trend towards modern systems even though the application of accounting information systems in banking, but within narrow limits, this in turn adversely affects the role of these computerized systems as they face some of the departments and sections in the routine of banking.

## **8. Recommendations of the Study**

Despite the affect of the applying of accounting information systems to increase the profitability of commercial banks operating in Jordan, but there are some recommendations which, if introduced could increase the better the profitability of commercial banks operating in Jordan areas previously mentioned, as follows:

1. Should be provided staff and cadres trained and fully aware of the accounting information systems.
2. That the departments in the banks to keep pace with developments and the introduction of technology and computing for all works and services required by the customer service representative. To achieve the lowest possible level of cost which will inevitably lead to maximize profitability?

3. Taking into consideration the culture of the client bank, which in turn leads to increased competition and attract clients and thus speeding up the implementation of the service (s) and non-banking loss of time and thus reduce cost.
4. Further studies and research in the field of accounting information systems and their affect on the profitability of banks, through the study of the obstacles that may limit its role as well as the most important study of the principles and procedures that must be taken out as well as accounting information systems.

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