Characteristics of Accounting Information Systems in Commercial Establishments in Irbid City

Enas Fakhri Mohammad Abu-Eker
Department of Administrative and Financial Sciences
Al Balqa Applied University, Salt, Jordan

Muneer Mohamad Falah Jaradat (Corresponding author)
Department of Administrative and Financial Sciences
Al Balqa Applied University, Salt, Jordan
E-mail: mun-jar@bau.edu.jo

Issa Abedalaziz Alrawashdeh
Department of Administrative and Financial Sciences
Al Balqa Applied University, Salt, Jordan

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Abstract

The study aimed to investigate the characteristics of accounting information systems in commercial establishments in Irbid city. It found that information produced by the accounting information systems in commercial establishments are appropriate and can be relied upon, and accounting information systems are realistic, the subsystems are linked to these systems. But the systems are not flexible, do not increase the accuracy of forecasting the results of future events, are not consistent with the size of the company's activity, and the accounting methods used to produce accounting information are not biased.

The recommendations of this study represent increase the flexibility of the accounting information system in commercial establishments in Irbid, improve the ability of accounting information to predict future events accurately, biased accounting techniques should be used to
produce accounting information, develop the accounting information system to match the size of the company's activity.

**Keywords:** Accounting, Information systems, Commercial establishments, Irbid, Jordan

**1. Introduction**

The accounting system is designed to provide accounting information to internal and external users, so its design will take into consideration the objectives that it will achieve. By providing accounting information with certain characteristics that must be provided in order for the accounting system to have the desired purpose.

The design and development of the accounting system in a manner consistent with the needs of management leads to the upgrading of the institution and increase its viability and competitiveness. The impact of accounting systems at the national level extends to the importance of providing information appropriate to the prosperity of institutions that constitute the national economy as a whole.

The efficiency and effectiveness of the accounting system depends on the availability of certain characteristics related to the elements and outputs of this system. The most important is the appropriateness and reliability of the information that represents the outputs of the system, in addition to the realism of the system and the interdependence of its subsystems and its flexibility.

Although there are characteristics that can be judged on the efficiency and effectiveness of accounting information systems, there is some privacy that is reflected in the nature and requirements of accounting information systems such as the difference in the sector in which it operates, the financial capacity of the enterprise and the diversity of its services and activities, management convictions and system-based staff... etc.

**1.1 Hypotheses of the Study**

This study tests the following Hypotheses:

1 - Information produced by the accounting information systems in commercial establishments in Irbid is appropriate.

2 - Information produced by accounting information systems in commercial establishments in Irbid can be relied upon.

3 - Accounting information systems in commercial establishments in Irbid are realistic.

4 - The subsystems are linked to the accounting information system in the commercial establishments in Irbid.

5 - Accounting information system in commercial establishments in Irbid flexible.

**1.2 Objectives of the Study**

This study attempts to achieve the following objectives:
1 - To determine the appropriateness of the outputs of the accounting information systems in the commercial establishments in Irbid

2 - To determine the reliability of the information issued by the accounting information systems in commercial establishments in Irbid.

3 - To know the realism of accounting information systems in commercial establishments in Irbid.

4 - To identify the extent of interdependence of the subsystems in the accounting information system in commercial establishments in Irbid.

5 - Identify the flexibility of the accounting information system in commercial establishments in Irbid

1.3 Important of the Study

The most important point of the study is that accounting information systems have a big role in making administrative decisions and thus affect the project in the short and long term. Which increases important of study is the sector to be studied which is one of the important sectors that help boost the national economy with revenue and drive progress at the local level. And the scarcity of studies that examined the subject of the study on the target sector increases the importance of this study.

2. Literature Review

Altheebeh, Z. (2019) study: This study aims to determine the extent to which Jordanian companies understand the importance of accounting information systems. The results of the study are that Jordanian companies in all their names do not recognize the importance of specialization of accounting information systems, and therefore do not include it from the required allocations when announcing the recruitment. The study recommended the universities that study the specialization of accounting information systems, to educate companies about the nature of this specialization and the benefits offered by the students of this specialization, which adds value to these companies through the issuance of leaflets and seminars and lectures called by the managers of companies and decision makers

Baquer, M., Khnefr, H., Por, H., et. al. study (2018): This study aims to study the factors influencing the willingness of small and medium enterprises in the application of accounting information systems. The results showed that 61.7% of projects want to apply accounting information systems to meet the needs of the market and the project at the same time, while 38.3% do not see the need to apply these systems.

The study recommended the establishment of a mechanism to clarify the importance of applying accounting information systems in business establishments and the necessity of providing expertise and promoting them and increasing governmental support for the SME sector through issuing laws and legislations that facilitate the work of these projects.

Alnassan, H. (2018) study: This study aimed at investigating the views of a sample of commercial banks operating in the Gaza Strip concerning the extent of accounting information
systems effectiveness in all commercial banks in the Gaza Strip from management board’s viewpoint. The study results indicated that the effectiveness of accounting information systems represented in (system quality, service quality, information quality) meets the requirements of planning, decision-taking, and controlling processes. The researcher recommended building awareness among banks' management boards regarding the importance of accounting information systems because that is positively reflected on the management functions. Banks are also urged to acquire the most updated information systems that are characterized by efficiency and effectiveness. These systems should be selected in a way that meets banks' needs.

Alhoder, M. (2016) study: The study aimed to find out the ability of computerized accounting information systems to increase the efficiency of measurement and accounting disclosure of social performance industrial companies. The study problem is represented in the key question: What is the role of computerized accounting information systems in increasing the efficiency of measurement and accounting disclosure of social performance in industrial companies.

The study reached several results including: The computerized accounting information systems increase the quality of measuring the social activities in industrial companies ($x^2=(17)$, df(3), $p(0.000) X^2=4.06$) by a high degree of relative importance (81%). The computerized accounting information systems reduce the variation of social performance measurement results in industrial companies ($x^2=(28.2)$, df(3),$p(0.000) X^2=3$) a high degree of relative importance (76%). The study recommended the necessity for the use of specific criteria in the computerized accounting information systems to measure the social costs, and for making use of the potential of computerized accounting information systems in increasing the measurement and accounting disclosure of social performance.

Albehissy, O. and Meqdad, S. (2013) study: This study aims to examine measure and analyze the effect of the accountants’ participation in the development of the accounting information systems (AIS) in the corporation listed in Palestine Stock Market. The study concludes that the use of computerized accounting information systems affect the financial performance, the accountants’ participation in all development stages of computerized accounting information systems affect the financial performance, and there is a participation for those accountants in the development of the computerized accounting information systems, despite of all the limitations over the accountants’ participation in the development. In addition; the study concludes that there is lack of practical experience, and awareness of the senior management level of the importance of the accountants’ participation in the development of accounting information systems (AIS). The study recommended improving skills of Palestinian accountants through conducting courses and workshops to build up their professional experience in the fields related to modern information technology and the need to increase the senior management’s awareness of the importance of the accountants’ participation in the development of accounting information systems (AIS).

Klboneh, A., Zreqat, K., Zreqat, O., Salama, R. (2011) study: The study aimed to investigate the effect of the use of computerized accounting information systems on the financial performance in the shareholding industrial Jordanian companies. The results showed that there
were no statistically significant differences between the averages of the three financial performance measures which were used in the study (ROA, ROE and EPS) before and after using the computerized accounting information system. These results indicated that there is no effect for the computerized accounting information systems on the financial performance of the companies.

The study recommended conducting further studies on the same subject and using other variables to measure the financial performance and for longer test windows.

2.1 The Difference Between This Study and Previous Studies

This study differs from previous studies with two main points:

1- The society of this study is the commercial companies in the city of Irbid and there is no previous study dealing with this society

2. This study examines the availability of the characteristics of accounting information systems which are appropriate, reliability, realism, interconnection, flexibility. This is not available in previous studies.

2.2 Instrument Reliability

The reliability of the tool was examined through the Cronbach's Alpha coefficient test. Table 1, show that the all values of alpha are greater than (0.60) meaning that there is a reliability in the study tool.

Table 1. Result of Cronbach Alpha

<table>
<thead>
<tr>
<th>#</th>
<th>Dimension</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Appropriate</td>
<td>0.80</td>
</tr>
<tr>
<td>2</td>
<td>Reliability</td>
<td>0.74</td>
</tr>
<tr>
<td>3</td>
<td>Realism</td>
<td>0.93</td>
</tr>
<tr>
<td>4</td>
<td>Interconnection</td>
<td>0.68</td>
</tr>
<tr>
<td>5</td>
<td>Flexibility</td>
<td>0.72</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>0.85</td>
</tr>
</tbody>
</table>

3. Hypotheses Test

Hypothesis I: Information produced by the accounting information systems in commercial establishments in Irbid is appropriate.
Table 2 shows that all items, except for item (5) have obtained arithmetic means greater than (3.00) and p-value less than (0.05) which indicates that they are statistically significant.

That means accounting information is capable of influencing the decisions of users of accounting information, shows the correctness of the expectations of the previous decision maker and assesses the decisions adopted, relates to the purpose to be achieved, and is provided in a timely manner to decision makers.

Statement (5) achieved mean less than (3.00), this means it has no statistical significance. So that accounting information does not cease the accuracy of forecasting the results of future events.

As for all the statements, the mean is (3.60) and the p-value is less than (0.05), statistically significant; this means that hypothesis I is accepted where information produced by the accounting information systems in commercial establishments in Irbid is appropriate.

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Mean</th>
<th>Std. Devi</th>
<th>T-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Accounting information is capable of influencing the decisions of users of accounting information</td>
<td>3.80</td>
<td>1.01</td>
<td>3.56</td>
<td>0.00</td>
</tr>
<tr>
<td>2</td>
<td>Accounting information shows the correctness of the expectations of the previous decision maker and assesses the decisions adopted</td>
<td>4.15</td>
<td>0.88</td>
<td>5.88</td>
<td>0.00</td>
</tr>
<tr>
<td>3</td>
<td>Accounting information relates to the purpose to be achieved</td>
<td>3.85</td>
<td>0.81</td>
<td>4.68</td>
<td>0.00</td>
</tr>
<tr>
<td>4</td>
<td>Accounting information is provided in a timely manner to decision makers.</td>
<td>3.70</td>
<td>1.03</td>
<td>3.04</td>
<td>0.01</td>
</tr>
<tr>
<td>5</td>
<td>Accounting information increases the accuracy of forecasting the results of future events</td>
<td>2.50</td>
<td>1.15</td>
<td>-1.95</td>
<td>0.07</td>
</tr>
<tr>
<td></td>
<td>Total (appropriate)</td>
<td>3.60</td>
<td>0.47</td>
<td>5.73</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Hypothesis 2:** Information produced by accounting information systems in commercial establishments in Irbid can be relied upon.

Table 3 shows that all items, except for item (7) have obtained arithmetic means greater than (3.00) and p-value less than (0.05) which indicates that they are statistically significant.
That means accounting information represents economic events honestly and gives a real impression, is based on objective and verifiable measurement rules, is prepared so that comparisons can be made for the results of consecutive financial periods.

Statement (7) achieved mean less than (3.00), this means it has no statistical significance. So that the accounting methods used to produce accounting information are not biased.

As for all the statements, the mean is (3.75) and the p-value is less than (0.05), statistically significant; this means that hypothesis I is accepted where information produced by accounting information systems in commercial establishments in Irbid can be relied upon.

Table 3. The mean, standard deviation, T values, and p-value related to reliability

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Mean</th>
<th>Std. Devi</th>
<th>T-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Accounting information represents economic events honestly and gives a real impression.</td>
<td>4.25</td>
<td>0.64</td>
<td>8.75</td>
<td>0.00</td>
</tr>
<tr>
<td>7</td>
<td>The accounting methods used to produce accounting information are biased.</td>
<td>2.95</td>
<td>0.94</td>
<td>-0.24</td>
<td>0.82</td>
</tr>
<tr>
<td>8</td>
<td>The accounting information is based on objective and verifiable measurement rules.</td>
<td>4.00</td>
<td>0.73</td>
<td>6.16</td>
<td>0.00</td>
</tr>
<tr>
<td>9</td>
<td>Accounting information is prepared so that comparisons can be made for the results of consecutive financial periods</td>
<td>3.80</td>
<td>1.06</td>
<td>3.39</td>
<td>0.00</td>
</tr>
</tbody>
</table>

Total (reliability) | 3.75 | 0.39 | 9.08 | 0.00 |

**Hypothesis 3:** Accounting information systems in commercial establishments in Irbid are realistic.

Table 4 shows that all items, except for item (11) have obtained arithmetic means greater than (3.00) and p-value less than (0.05) which indicates that they are statistically significant.

That mean the accounting information system is compatible with the nature of the activity in which the company operate and with the company's relationship with others, the design of the accounting information system takes into consideration the conditions and capabilities of the users of this information system and takes into account the objectives of the users of this information system.

Statement (11) achieved mean less than (3.00), this means it has no statistical significance. So that the accounting information system is not consistent with the size of the company's activity.
As for all the statements, the mean is (3.79) and p-value is less than (0.05), statistically significant; this means that hypothesis I is accepted where accounting information systems in commercial establishments in Irbid are realistic.

Table 4. The mean, standard deviation, T values, and p-value related to realism

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Mean</th>
<th>Std. Devi</th>
<th>T-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>The accounting information system is compatible with the nature of the activity in which the company operates.</td>
<td>3.90</td>
<td>0.91</td>
<td>4.41</td>
<td>0.00</td>
</tr>
<tr>
<td>11</td>
<td>The accounting information system is consistent with the size of the company's activity.</td>
<td>2.65</td>
<td>0.99</td>
<td>-1.58</td>
<td>0.13</td>
</tr>
<tr>
<td>12</td>
<td>The accounting information system is compatible with the company's relationship with others.</td>
<td>3.95</td>
<td>1.00</td>
<td>4.25</td>
<td>0.00</td>
</tr>
<tr>
<td>13</td>
<td>The design of the accounting information system takes into consideration the conditions and capabilities of the users of this information system</td>
<td>4.25</td>
<td>0.55</td>
<td>10.16</td>
<td>0.00</td>
</tr>
<tr>
<td>14</td>
<td>The design of the accounting information system takes into account the objectives of the users of this information system.</td>
<td>4.20</td>
<td>0.77</td>
<td>6.99</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Total (realism)</td>
<td>3.79</td>
<td>0.29</td>
<td>12.34</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Hypothesis 4:** The subsystems are linked to the accounting information system in the commercial establishments in Irbid.

Table 5 shows that all items obtained arithmetic means greater than (3.00) and p-value less than (0.05) which indicate that they are statistically significant.

That mean Sub-systems are linked objectively and use outputs of each other as inputs for others, there is a central data processing unit to prevent it from occurring again for each subsystem.

As for all the statements, the mean is (4.02) and p-value is less than (0.05), statistically significant; this means that hypothesis I is accepted where the subsystems are linked to the accounting information system in the commercial establishments in Irbid.
Table 5. The mean, standard deviation, T values, and p-value related to interconnection

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Mean</th>
<th>Std. Devi</th>
<th>T- value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Sub-systems are linked objectively.</td>
<td>3.95</td>
<td>0.89</td>
<td>4.79</td>
<td>0.00</td>
</tr>
<tr>
<td>16</td>
<td>Sub-systems use outputs of each other as inputs for others</td>
<td>4.30</td>
<td>0.80</td>
<td>7.26</td>
<td>0.00</td>
</tr>
<tr>
<td>17</td>
<td>There is a central data processing unit to prevent it from occurring again for each subsystem</td>
<td>3.80</td>
<td>1.36</td>
<td>2.62</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>Total (Interconnection)</td>
<td>4.02</td>
<td>0.66</td>
<td>6.86</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**Hypothesis 5**: Accounting information system in commercial establishments in Irbid is flexible

Table 6 shows that item (20) has obtained arithmetic mean greater than (3.00) and p-value less than (0.05) which indicate that it is statistically significant. That mean the accounting system responds to changes in the organizational structure.

Statements (18, 19) achieved mean less than (3.00), this means it has no statistical significance. So that the accounting system does not take into consideration the variables that may occur in the information management needs and may occur in the external environment surrounding the economic unit.

As for all the statements, the mean is (3.07) but p-value is greater than (0.05); this means that hypothesis I is rejected where accounting information systems in commercial establishments in Irbid are not realistic.

Table 6. The mean, standard deviation, T values, and p-value related to flexibility

<table>
<thead>
<tr>
<th>No.</th>
<th>Statement</th>
<th>Mean</th>
<th>Std. Devi</th>
<th>T- value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>18</td>
<td>The accounting system takes into consideration the variables that may occur in the information management needs.</td>
<td>2.55</td>
<td>1.00</td>
<td>-2.02</td>
<td>0.06</td>
</tr>
<tr>
<td>19</td>
<td>The accounting system takes into consideration the variables that may occur in the external environment surrounding the economic unit.</td>
<td>2.65</td>
<td>1.35</td>
<td>-1.16</td>
<td>0.26</td>
</tr>
<tr>
<td>20</td>
<td>The accounting system responds to changes in the organizational structure.</td>
<td>4.00</td>
<td>1.03</td>
<td>4.36</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Total (flexibility)</td>
<td>3.07</td>
<td>0.76</td>
<td>0.39</td>
<td>0.70</td>
</tr>
</tbody>
</table>
4. Results

1-Information produced by the accounting information systems in commercial establishments in Irbid is appropriate.

2-Information produced by accounting information systems in commercial establishments in Irbid can be relied upon.

3-Accounting information systems in commercial establishments in Irbid are realistic.

4-The subsystems are linked to the accounting information system in the commercial establishments in Irbid.

5-Accounting information systems in commercial establishments in Irbid are not flexible.

6- Accounting information systems do not crease the accuracy of forecasting the results of future events.

7-The accounting methods used to produce accounting information are not biased.

8- The accounting information system is not consistent with the size of the company's activity.

5. Recommendations

1-Increase the flexibility of the accounting information system in commercial establishments in Irbid.

2-Improve the ability of accounting information to predict future events accurately.

3-Biased accounting techniques should be used to produce accounting information

4-Develop the accounting information system to match the size of the company's activity.

References


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