The Mediating Effect of Acceptance of Using AIS on the Relationship between the Accounting Information Systems and Financial Performance in Jordanian Companies

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Abstract: The study aimed to establish the role acceptance of using AIS in the relationship between the timeliness and reliability in the AIS and financial performance in Jordanian companies. The study sample consisted of 85 from these Jordanian companies. This study analyzes the data using (SPSS) program. The results revealed a statistically significant relationship at the significance level (P≤0.05) between the acceptance of using AIS as mediating and timeliness and reliability AIS and financial performance in these Jordanian companies. Where the accounting information system used in our organization provides the reports requested by the external and internal parties in a timely manner and provides the information that the company needs in a timely manner, and stores and retrieves data easily without loss of time. Also, the accounting information system used in our organization helps maintain data integrity. Also, the accounting information system used provides reliable data and provides reliable financial reporting which is in compliance with laws and regulations.

Keywords: Acceptance of using AIS, Timeliness, Reliability, Financial Performance

I. INTRODUCTION

Accounting encompasses a system that presents information about a specific organization for the perusal of various groups of users. Users' decisions on the course of action can indeed be facilitated by use accounting information. Accounting comprises a process and the records of accounting assist in the construction of financial statements. Meanwhile, the management is generally equipped with diverse areas of knowledge, in theory as well as in practice. In other words, theories, methodology and the applicable models embraced by management adhere to the principles that comprise a blend of scientific themes including management accounting, statistics, economics, and even psychology. For any company, the accounting information system which the company uses is a very vital system as it furnishes managers at various levels the necessitated information. Using this information, managers could fulfil their responsibilities more effectively, particularly in planning, controlling resource, evaluating performance, as well as in making the decision (Saeidi, 2014). AIS are a backbone in facilitating the decision-making process through the provision of supervision, monitoring, as well as financial performance assessment. With AIS, companies are therefore assisted in providing the information that corresponds with the manifestation speed of the variables in the global and economic markets. In addition, among financial analysts, the use of AIS, which encompasses the use of accounting software, will reduce their time and effort in keeping abreast with the events and the changes, and in making the correct and timely decisions. The uses of AIS encompass the application of computerized accounting tools and software, and this usage has a direct linkage to the relevance and reliability of financial performance in the context of Jordanian companies. Among the uses of AIS is in recording the financial transactions of a business or organization (Hosni, 2017). As such, the success or failure of companies depends on AIS the effects of the possibility of making decisions on the financial performance, and the ability to continue its activities in the financial market (Al-Kassar and Abed, 2014). Therefore, the studies of AIS and its characteristics as well as figuring out the extent of the availability of quality in the outputs are important for making wise investment decisions and figuring out the problems which may arise as a result of using different software such as that using the appropriate timing, the sincerity of expression, and impartiality for the purposes of decision-making (Mkhademh, 2007). Furthermore, in this modern arena, the consistent expansion of information technology impacts AIS performance in business companies operating in Jordan. As indicated in Mkhademh (2007), the development appears to impact the companies' objectives, strategies, nature of work, as well as the tools the companies employ in reaching their established objectives. For this reason, it is crucial to improve the usage of conventional AIS because the modern technology and the factors of competition are turning the conventional AIS obsolete in terms of the instruments used in determining.
measuring and presenting the accounting information. Furthermore, in the context of Jordan, there appears to be great interest in AIS among the companies. Somehow, these companies are still incapable of taking the maximum advantage of it. However, as these companies can play a considerable role towards the systems, programs and communications in the construction of the service performance level, ignorance towards AIS could bring adverse effect on these companies’ market share, performance, and competitive position. In the context of Jordanian companies, AIS has been deemed as integral in their day-to-day operations. Still, Hamdan (2013) noted the presence of several factors which impede the effectiveness of AIS performance among these companies.

**Problem Statement**

The accounting process is to produce financial statements and reports. Meanwhile, the accounting units use the (AIS) to expedite the accounting process in producing understandable financial statements and reports in a timely manner. In addition to processing financial information, the acceptable use of AIS significantly contributes to the planning and assessment of the financial performance of companies, which will enable them to continually operate in a highly competitive environment. Companies are required to take certain immediate measures in order to achieve their goals or to solve any future problems. In this regard, the objective of this process is to make available the accounting information that is vital to the managers at different levels for decision-making purposes for the improvement of the financial performance (Srivastava and Lognathan 2016). In a relevant study, Salehi (2010) stated that software of accounting information is not in line with the standards of accounting. The author further added that in the context of AIS, it appears to contradict other financial and managerial systems, and such contradiction has created a gap between AIS and financial and managerial systems, leading to flaws among companies. That accounting information produced by AIS is not only delayed but also fragmentary, and this affects the financial performance of the company. That improper usage of infrastructure resources may lead to low AIS infrastructure performance. Meanwhile, in the context of Jordanian industrial companies, Al-Saraireh (2013) reported the inability of their IT in generating and expanding the competitive advantage as well as in lending support to these companies’ institutional innovation and the strategy of excellence and in improving financial performance. Furthermore, this study makes a contribution to the information systems literature by providing evidence on the usefulness of using accounting information systems in enhancing performance, through acceptance of using AIS in the companies and development the system that used.

**Research Objectives**

The objectives of the study stem from the attempt at identifying the mediating effect of acceptance of using AIS on the relationship between the accounting information systems and financial performance in Jordanian companies. Also, the study attempts to prove evidence how the acceptance of using AIS mediates the relationships between AIS and company performance in Jordan. All these will be achieved through the accomplishment of the following objectives:

1. To examine the mediator of acceptance of using AIS on the relationship between timeliness of AIS and financial performance among Jordanian companies.
2. To examine the mediator of acceptance of using AIS on the relationship between the reliability of AIS and financial performance among Jordanian companies.

**Research Questions**

In line with the practical problems discussed above, the following research questions were set to be answered in this study:

1. Is there an impact on the mediator of acceptance of using AIS between the timeliness of AIS and financial performance among Jordanian companies?
2. Is there an impact on the mediator of acceptance of using AIS between the reliability of AIS and financial performance among Jordanian companies?

**The Significance of This Study**

The importance of research stems from the vitality of subject in the companies due to its significance and effectiveness for at all levels. Hence, the accounting information and financial performance process must be balanced. Further, in the process of financial performance as well as in the economic enhancement, the availability quality accounting information is vital, where a large amount of this information is produced by the use of AIS as well as from the financial performance’s financial statements.

**II. LITERATURE REVIEW**

**Acceptance of Using AIS in the Companies**

That the use of AIS in any company; be it manufacturing or service rendering cannot be overemphasized. AIS is the combination of similar components that are put together to collect raw financial data and transform them into useful financial information for the purpose of reporting them to decision makers. There are several digital and online financial information and these were as a result of the emergence of AIS as one of the most critical systems in any organization and has also changed its way of capturing, processing, storing and distributing accounting information to the users of the financial statement. Despite the usefulness and benefit of AIS some industry is yet to adopt it while some have low adoption level, some firms that have use of AIS do not know the benefit accruable from its use, hence researching into the impact of AIs on accounting activities and the relationship that exists between AIs and accounting activities in the companies (Adenike & Michael, 2016). Where the accounting information system had been widely used by
many companies to automate and integrate their business operations. The main objectives of many businesses to adopt this system are to improve their organizational efficiency and increase competitiveness ability. Also, the prior researches have shown that accounting information system use does Increases Company’s performance and operations efficiency. Thus, the use of AIS could provide companies with the right capabilities and resources in achieving the objectives and in encouraging company's use of the AIS for improving the performance (Saira et al. 2010).

Also, "the use of AIS is relatively accepted within accounting firms, which is large as a result of the ‘change’ that comes with the use of such an application. The use of AIS which is a computer-based application brings a new trend of change from the conventional way of accounting to a computerized way which most people are not prepared for or find very difficult to adapt to. It is seen that its use is majorly influenced by the companies. It was also found out that the majorities of recent users are within the diploma level of education and have minimal experience with the use of computers. This, therefore, creates a level of difficulty for effective usage of the applications available. For proper and effective use of AIS, there must be an increased awareness of the usage and of AIS to facilitate its wide use in the companies" (Awosejo et al. 2014). As explained in Odero (2014), AIS documents and processes data relating to transaction and events into information that assists users in planning, controlling and operating the businesses. The author further indicated that the use of AIS of companies would affect the nature of its reporting, and hence, financial performance.

Benefits the use of accounting information system can be evaluated by its impacts on the improvement of the decision-making process, quality of accounting information, performance evaluation, and internal controls and facilitating the company’s transactions, the effectiveness of AIS is highly important for all the organization performance. Therefore, performance management has a key role to play in improving the overall value of an organization. Control the efficacy of financial information reliability has affected performance (Soudani, 2012). AIS, which are an important system, measures firm performance, however, prior to defining AIS, information and information system need to be defined. In essence, information encompasses processed data comprehensiveness or data consequence that has become valuable and meaningful. Relevantly, the information system comprises a system that gathers and assesses data and have they dispensed to the users when the need arises. Information systems entail artificial systems with the capacity in assisting the decision process. In many past works, the need for a fit between the strategy of the business and that of information system has been stressed. Accordingly, AIS is mainly aimed at furnishing valuable information to managers in their decision-making. Esmeray (2016) stated that accounting information has also been viewed as financial accounting information; it furnishes information to the interior departments of a business.

**Timeliness**

Incorporate financial reporting, timeliness is a vital quality and in order to be relevant, information must be timely. Timely accounting information can affect a decision if it can be employed during the decision making process. Notably, timeliness on its own does not assure relevance to information but untimely information is deemed irrelevant. According to Hasan et al. (2014), in the context of accounting information, timeliness majorly impacts the process of decision making as well as financial performance that the timeliness significantly affects relevance. However, stressing on the timelines of reporting, may also adversely affects other characteristics of financial information. Loss ineffectiveness may also occur. According to FASB (2010), sometimes it is worth having timeliness of information at the expense of precision because approximation that is speedily made is often more valuable as opposed to having precise information that consumes too much time to prepare. Nonetheless, reliability being too questionable because of the stress on timelines may cause the information to severely lack in usefulness. Also, the timeliness refers to having the information available to a decision maker before it loses its capacity to influence decisions (Klinsukhon and Ussahawanitchakit 2016).

**Reliability**

Software package application in AIS in the form of systems of computerized accounting can increase ease of usage, accurateness, reliability, timeliness, content, format as well as satisfaction. As such, in order to increase management performance and data quality. Amiri and Salari (2013) mentioned that the matrix of the aforesaid factors is equipped with many item instruments. According to Aziz (2006), reliability is information that is free of errors and reflects the economic conditions and events honestly, and in a manner verifiable in the meaning that has a specific indication regardless of the person doing the interpretation. As defined by Jan (2016), reliability is the capacity to adopt the accounting information and financed by its users in the least degree possible fear and this is achieved the availability of the sincerity of the offer, and ability to verify and neutrality. Reliable financial reporting is an essential qualitative attribute of accounting information. Relevantly, Karuna (2009) mentioned the significance of reliability, considering its ability in determining if or not certain information is useful to those using the released financial statement. Likewise, the reliability of the audited corporate annual financial report is both important and essential in determining the usefulness of information to users of various types and levels. In the domain of accounting profession, reliability of reports is considered an integral characteristic of financial accounting information and for regulatory and professional agencies (Adediran et al.,
2013). Also, the reliability refers to the quality of information that assures that the information is reasonably free from error and bias, and faithfully represents what it purports to represent (Klinsukhon and Usuhasawanitchakit 2016).

Development the Hypotheses

Information provided to the user in time is regarded as useful information, and hence, the information from any information system has to be accessible right when it is necessitated in order that user would be able to take the right action. The notion of timeliness in financial report denotes the availability of information to decision makers before its capacity in impacting decisions is gone. In Adediran et al. (2013), timeliness relates to the time needed to expose the accounting information of financial performance. In general, older information is less useful, but Achim and Chis (2014) reported that there are occasions where information retains its timeliness even after the reporting period has passed and this is usually the case when users have to recognize and evaluate trends to make forecasts basing on past events.

A study by Alrjoub (2017) found no impact imparted by AIS timeliness on the development of corporate financial performance in companies in Jordan. In the context of Hasan et al. (2014), no significant difference of opinion was found among users in regards to the timeliness of the information presented in the corporate annual report. Furthermore, a relationship between AIS timeliness and financial performance was reported in Bukenya (2014). Harash et al. (2014) also examined the impact of the timeliness criterion in AIS on performance. According to Shagari et al. (2017), timeliness has a significant influence on information quality, while Al-Dmouret al. (2017) there are significantly moderating the relationship between the qualitative characteristics of financial reporting (timeliness) and non–financial performance. Considering the above discussion, the following hypothesis is presented:

H1- There is a significant relationship between the roles of acceptance of using AIS as a mediating variable between the timeliness in the AIS and financial performance among Jordanian companies.

According to Aziz (2006), reliability means that the information is free from errors and reflects the economic conditions and events honestly and in a manner verifiable in the meaning that has a specific indication regardless of who do that. In Jan, (2016) reliability is the capacity to adopt the accounting information and finance of its users in the least degree possible fear and this is achieved the availability of the sincerity of the offer, and ability to verify and neutrality. Also, the term ‘reliability’ in financial reporting context becomes a vital qualitative attribute of accounting information. Meanwhile, Matovu (2005) mentioned the presence of a relationship between reliability and the performance of SMEs. Further, Mushtaha et al. (2011) examined the projected effect of AIS reliability in Jordanian and Palestinian banks in their financial performance indicators. According to Alawaqleh and Al-Sohaimat (2017), among listed industrial companies in the Saudi Stock Market, a positive linkage exists between AIS characteristics (reliability) and the investment decision-making process. Relevantly, Al-Rifai et al. (2009) referred to reliability as the degree to which AIS has been verified in terms of reliability in handling financial data and converting it into accounting information. The study by Harash et al. (2014) looked into the effect of the reliability criterion in AIS on performance. Abu Mahadi (2017) on the other hand, measures the principles of the reliability of electronic AIS and analyzed the financial, operational, and stock performance indicators in the banking sector. In a study by Nakhaei et al. (2014), AIS reliability was found to impact the improvement of management decision. Considering the above discussion, the following hypothesis is presented:

H2- There is a significant relationship between the roles of acceptance of using AIS as a mediating variable between the reliability in the AIS and financial performance among Jordanian companies.

III. METHODOLOGY

This study focuses on identifying factors that affect the acceptance of using AIS. The present study was carried out primarily to analyze the situation in Jordan regarding the acceptance of using AIS that improve the financial performance process, where this study used a questionnaire method to collect the data to examine the relationship between acceptance of using AIS as a mediating and timeliness and reliability in accounting information system and financial performance. Where the population of the study consists of industrial and service companies listed in the Amman Stock Exchange, which was involved in continuous industrial and service activities. A total of 85 companies participate in the study comprising 55 service companies and 30 industrial companies. A total of 175 questionnaires were completed and returned.

Research Model

Acceptance of using AIS as a mediating variable between the timeliness and reliability in the AIS and financial performance
For the purpose of the reliability of the study, Cronbach’s alpha was applied. To measure the internal consistency, the Cronbach’s alpha is used to measure how closely related a set of items are in a group. In other words, Cronbach’s alpha is not a statistical test; rather it is a coefficient of reliability or consistency. Where the table shows that the highest Cronbach’s alpha value was 0.84 for financial performance, whereas the alpha value was 0.82 for timeliness. However, the alpha value of reliability was 0.80, whereas the alpha value was 0.79 for Acceptance of using AIS, indicating the acceptance of reliability.

**Domain** | **Cronbach Alpha** | **reliability Test** | **R. test**
--- | --- | --- | ---
Timeliness | 0.82 | 0.82 |
Reliability | 0.80 | 0.80 |
Acceptance of using AIS | 0.79 | 0.80 |
Financial Performance | 0.87 | 87.0 |
Total | 0.86 | 0.86 |

**Hypotheses Testing**

In order to test this hypothesis and ascertain the role of acceptance of using AIS as mediating variable to the relationship between the timeliness and reliability in the AIS and financial performance in Jordanian companies, Multiple Regression analysis was performed. Multiple regressions applied are an extension of simple linear regression. It is used when we want to predict the value of a variable which is based on the value of two or more other variables. Multiple regressions also allow you to decide the overall fit of the model and the relative contribution of each of the predictors to the total variance explained. And in order to ascertain the relationship between the role of acceptance of using AIS and financial performance among Jordanian companies, Multiple Regression analyses were used.

There is a significant relationship between the roles of acceptance of using AIS as a mediating variable between the timeliness in the AIS and financial performance among Jordanian companies.

In order to test this hypothesis and ascertain the role of acceptance of using AIS as mediating variable to the relationship between the timeliness in the AIS and financial performance among Jordanian companies, Multiple Regression analysis was performed. The table shows that:

**Result of Multiple Regressions Analysis of the role of acceptance of using AIS as Mediating Variable between the Timeliness and Financial Performance**

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>&quot;t&quot; value</th>
<th>&quot;t&quot; sig</th>
<th>B</th>
<th>R</th>
<th>R²</th>
<th>&quot;F&quot; value</th>
<th>&quot;F&quot; sig</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timeliness</td>
<td>9.478</td>
<td>0.023</td>
<td>0.437</td>
<td>0.897</td>
<td>0.804</td>
<td>388.600</td>
<td>0.00</td>
<td>Accepted</td>
</tr>
<tr>
<td>Acceptance of using AIS</td>
<td>11.494</td>
<td>0.00</td>
<td>0.530</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Independent variable: Timeliness
* Mediating variable: Acceptance of using AIS
* Dependent variable: Financial performance

The table shows a statistically significant relationship at the significance level of \((P\leq0.05)\) of the role of acceptance of using AIS as mediating variable to the relationship between the timeliness in the AIS and financial performance in Jordanian companies, where "F" value was 388.600 and was statistically significant at (0.00). (R) The value was 0.897, and...
(R2) value was 0.804; hence, the first hypothesis was accepted. There is a significant relationship between the roles of acceptance of using AIS as a mediating variable between the reliability in the AIS and financial performance among Jordanian companies.

In order to test this hypothesis and ascertain the role of acceptance of using AIS as mediating variable to the relationship between the reliability in the AIS and financial performance among Jordanian companies, Multiple Regression analysis was performed. The table shows that:

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>&quot;t&quot; value</th>
<th>&quot;t&quot; sig</th>
<th>B</th>
<th>R</th>
<th>R²</th>
<th>&quot;F&quot; value</th>
<th>&quot;F&quot; sig</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliability</td>
<td>8.316</td>
<td>0.00</td>
<td>0.360</td>
<td>0.888</td>
<td>0.789</td>
<td>352.761</td>
<td>0.00</td>
<td>Accepted</td>
</tr>
<tr>
<td>Acceptance of using AIS</td>
<td>14.226</td>
<td>0.00</td>
<td>0.615</td>
<td>0.960</td>
<td>0.921</td>
<td>359.305</td>
<td>0.00</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

* Independent variable: Reliability
* Mediating variable: Acceptance of using AIS
* Dependent variable: Financial performance

The table shows a statistically significant relationship at the significance level of (P≤0.05) of the role of acceptance of using AIS as mediating variable to the relationship between the reliability in the AIS and financial performance among Jordanian companies, where "F" value was 352.761 and was statistically significant at (0.00). (R)

The value was (0.888), and (R2) value was 0.789; hence, the second hypothesis was accepted.

Also, in order to ascertain the role of acceptance of using AIS as mediating variable to the relationship between the timeliness and reliability in the AIS and financial performance of Jordanian companies, Multiple Regression analyses were used. The table shows that:

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>&quot;t&quot; value</th>
<th>&quot;t&quot; sig</th>
<th>(β) values (Standardized Coefficients)</th>
<th>R</th>
<th>R²</th>
<th>&quot;F&quot; value</th>
<th>&quot;F&quot; sig</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Timeliness</td>
<td>5.559</td>
<td>.000</td>
<td>.190</td>
<td>0.960</td>
<td>0.921</td>
<td>359.305</td>
<td>0.00</td>
<td>Accepted</td>
</tr>
<tr>
<td>Reliability</td>
<td>7.442</td>
<td>.000</td>
<td>.215</td>
<td>0.960</td>
<td>0.921</td>
<td>359.305</td>
<td>0.00</td>
<td>Accepted</td>
</tr>
<tr>
<td>Acceptance of using AIS</td>
<td>3.044</td>
<td>.003</td>
<td>.119</td>
<td>0.960</td>
<td>0.921</td>
<td>359.305</td>
<td>0.00</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

* Independent variable: (CAIS)
* Dependent variable: Financial Performance
* Mediating variable: Acceptance of using AIS

The table shows a statistically significant relationship at the significance level of (P≤0.05) of the role of acceptance of using AIS as mediating variable between the timeliness and reliability in the AIS and Financial Performance among Jordanian companies. Here, "F" value was (359.305) and was statistically significant at (0.00). (R) The value was (0.960), and (R2) value was (0.921). Also, there is a statistically significant relationship at (P≤0.05) level, of acceptance of using AIS as mediating variable on the financial performance among Jordanian companies, with t value at 3.044 (P= 0.00).

**Correlation Coefficient**

The table shows that there are correlation coefficients were applied in the sample between the accounting information systems and financial performance [(0.756) (Sig. 0.00)], and between accounting information systems and acceptance of using AIS [(0.846) (Sig. 0.00)], and also between financial performance and acceptance of using AIS [(0.843), (Sig. 0.00)]. These indicate a high relationship between the study variables.
### IV. CONCLUSION

This study examined the relationship between acceptance of using AIS as a mediating variable to the relationship between the timeliness and reliability in the AIS and financial performance. Specifically, it examined the relationship between the timeliness and reliability in the AIS and financial performance in listed industrial and services companies in the Amman Stock Exchange. The results revealed a statistically significant relationship at the significance level (P≤0.05) between the acceptance of using AIS as mediating and timeliness and reliability AIS and financial performance in these Jordanian companies. Where the accounting information system used in our organization provides the reports requested by the external and internal parties in a timely manner and provides the information that the company needs in a timely manner, and stores and retrieves data easily without loss of time. Also, the accounting information system used in our organization helps maintain data integrity. Also, the accounting information system used provides reliable data and provides reliable financial reporting which is in compliance with laws and regulations.

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### Table

<table>
<thead>
<tr>
<th>Financial Performance</th>
<th>.756**</th>
<th>.843**</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.000</td>
<td>.000</td>
<td>-</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
<td>-</td>
</tr>
<tr>
<td>N</td>
<td>175</td>
<td>175</td>
<td>175</td>
</tr>
</tbody>
</table>


