

**THE INFLUENCE OF ORGANIZATIONAL FACTORS  
ON ACCOUNTING INFORMATION SYSTEMS (AIS)  
EFFECTIVENESS: A STUDY OF JORDANIAN SMES**

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**Abstract**

*Actually, accounting information systems (AIS) implementation in Jordan is suffering from many troubles, such as the inadequacy of the users of those system, besides the weakness of the output, also. Which leads to the shortage in the productivity of the organizations, and low level of competitiveness and the overall performance of the firms. AIS is affected by many variables, this paper examines the effect of organizational factors on AIS effectiveness in the specific context of small and medium enterprises (SMEs) in Jordan. The proposed model of this paper includes five variable. Four of them are the independent variables; AIS sophistication, manager tenure, firm size, and internal experts. And the dependent variable is Accounting Information System (AIS) effectiveness.*

**Keywords:** Information Systems (IS); AIS effectiveness; AIS Sophistication; Manager Tenure; Internal Experts.

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**Introduction:**

As an economy based on knowledge emerges, information is essential for any ongoing organization (Pugsley, Wright, Diochon, & Hunter, 2000). The globalization of products, services, markets, and competition has increased the need for flexibility, quality, cost-effectiveness, and timeliness (Hunter, Diochon, Pugsley, & Wright, 2002). A key resource for attaining these requirements is Information Systems (IS) (Hunter & Long, 2002). Particularly accounting information systems (Mitchell et al., 2000). Successful information systems are highly desirable especially in developing countries where funds for investment and development are scarce. There are documented out-right failures of information systems of up to 30 percent in developing countries. The situation is exacerbated by a shortage of skilled and knowledgeable personnel, coupled with inadequate pay to keep them at their job (Ssemaluulu, 2012).

Hunter and Long (2002) claimed that IS has revolutionized business practices and now plays a more central part of business strategies, and have become a major technological innovation during the last five decade (Thong, 2001). Effective IS would lead to more available and more quickly retrieved information including external information, internal information, and previously encountered information (Huber, 1990). The reason is that accounting information can help SMEs manage short-term problems in the areas such as costs, expenditure and cash flow, by providing information to support monitoring and control (Ismail, 2009).

The effectiveness of an information system can be described through a number of different perspectives (DeLone & Mclean, 1992). Evaluation of an effective systems can be shown through the output produced as required, increased productivity, improve performance, and increased control over the decision related to the information that is produced by the AIS. Thus, the information generated expected can make the decision making process more effective. The information delivered is easier to interpret and understand, as well as that the dissemination of information to all functional departments could be improved (Ugboma, 2004). According to (Kim, 1988) the assessment of the effectiveness of AIS relies on the use of AIS as perceived by the user regarding the quality of the information produced.

Recently, International Federation of Accountants (IFAC) stated that competence in IT is one of the most crucial factor in the knowledge economy, whereby newly emerging professional

accountant must possess sufficient IT knowledge and skills due to the pervasive use and indispensability of IT in the business world (IFAC, 2010). The development of information technology has more effect on capital markets. IT helps firms communicate with investors who live around the world and investors can invest in stock markets in many countries. Therefore, IT is a strategy to generate global competitive advantage of business that leads to improved organization performance (Gunasekaran et al., 2001).

Decisions can confuse managers without access to information, specially, in today's competitive and turbulent environments. The information system, which is planning, design and deployment as efficient and effective way, can help to improve the organization and create competitive advantage, and to achieve strategic advantage, financial and business benefits (Sepahvand & Arefnezhad, 2013). Evidence suggests that poor performance of the IS function is a serious inhibitor to good business performance (Carlson & McNurlin, 1992). (Carlson & McNurlin, 1992) also found evidence in several of the organizations they studied that high IS effectiveness is associated with high organizational performance.

### **Problem Statement:**

Performance is the one of critical factors in SMEs success. Unfortunately, the reality of SMEs in developing countries reveals that, this important component of economy is less productive and faces many constrains (Davidsson, 2004). (Ismail and King, 2005) stated that accounting information system has a significant relationship with performance. More than 90% of enterprises in the Asian productivity organization (APO) member countries are SMEs and they account for about 75 percent of the Gross Domestic Product. But in many countries they face the constraints of technological weakness, lack of human resource skills, weak management systems, unavailability of appropriate and timely information, insufficient use of information technology, poor product quality. As a result, there exists a low level of performance (Asian Productivity Organization, 2006, 2011).

(Abu Khadra & Al-Hayale & Al-Nasir, 2012 ) revealed that Jordanian companies do not have effectiveness accounting information systems , and there is no enough evidence that support the sole relationship between the system development process and its effectiveness level . Therefore,

a comprehensive review of the current relevant literature showed that there have been many theoretical gaps that could be addressed by the study:

First, Reviews of AIS literature showed that most AIS studies have incorporated organizational factors such as organizational structure, business strategy, IT sophistication, and environmental condition in their research (Chenhall & Langfield-Smith, 1998; Chong & Chong, 1997; Mia & Clarke, 1999; AL-Eqab, 2009). But have neglected the influence of these factors on AIS effectiveness.

Second, prior researches have ignored the influence of the four dimensions of IT sophistication as one of the contingency factors on AIS effectiveness in particular. (Hunton and Flowers, 1997) also suggested that more comprehensive AIS studies are needed to more fully explain the relationship between IT and accounting in general and accountants in particular.

Third, some studies argue that there is inconsistency in results of effectiveness research and their conclusions is due to the large number of determinants related to AIS effectiveness as well as to the significant interaction among these determinants (Rai et al. 2002; Sabherwal & Jeyaraj & Chowa, 2006)

Fourth, since limited studies have examined the accounting information system effectiveness in Jordanian companies (Abu Khadra and Al-Haylee and Al-Nasir, 2012) particularly, and Middle East generally. Most of previous AIS studies were conducted in developed countries such as Australia, United Kingdom, United States and Canada. So, there is a need to focus more on scientific research in this area.

## **Literature Review:**

### **AIS effectiveness**

AIS effectiveness is considered as one of the most common dependent variables in Accounting Information System (AIS) Literature (DeLone & McLean, 1992; Thong et al., 1996; Seddon, 1997; Foong, 1999). According to Raymond (1990) AIS effectiveness is defined as the extent to which Accounting Information System (AIS) actually contributes to achieving company goals. In accounting several studies show that accounting information system effectiveness depends on the quality of the information system output, that will reflect in the user's needs. The effectiveness

of AISs helps companies to increase the performance through provide the manager better and useful information to make the decisions, and to prepare the reports on daily and weekly basis (Kouser & eRana & Shahzad, 2011).

### **AIS sophistication**

AIS sophistication refers to the number of AIS applications portfolio adopted by responding firms. It has been argued that the investment in sophisticated IT/IS would help firms to produce more properly and timely information to help the manager for effective decision making (Huber, 1990). An appropriate level of IT/IS and AIS sophistication was found to have a positive and significant impact on the Company's ability to align IT strategy and effective AIS (Hussin et al., 2002; Ismail & King, 2007). Hence, it is expected that firms with more sophisticated AIS will have a higher degree of AIS effectiveness.

### **Manager tenure**

Manager's tenure refers to the length of time the CEO has been in their current job. Researchers found contradictory results when examining the manager's tenure. Experienced managers with their organizational 'know how' can facilitate a smooth adoption processes, and at the same time use their authority to establish an atmosphere for a successful AIS implementation (Kimberly and Evanisko, 1981). CEOs with longer tenure have a better knowledge of the organizational operations and would be more competent in handling unforeseen events that may arise due to the adoption AIS. Hence, more experienced managers will be more advantageous for the adoption of more complex innovation (Damanpour and Schneider, 2009).

On the other hand, some researchers argue that top managers new to their position brings innovative ideas and are more open to change (Huber et al., 1993).

In an empirical study Sharma and Rai (2003) found that organizations with a CEO on a shorter tenure had a higher adoption rate. The majority of studies that investigated manager's tenure verified a significant influence on IS adoption (Damanpour and Schneider, 2006). Hence, it predict a positive association for the relationship between manager's tenure and Accounting Information System (AIS) Effectiveness for SMEs.

### **Firm size**

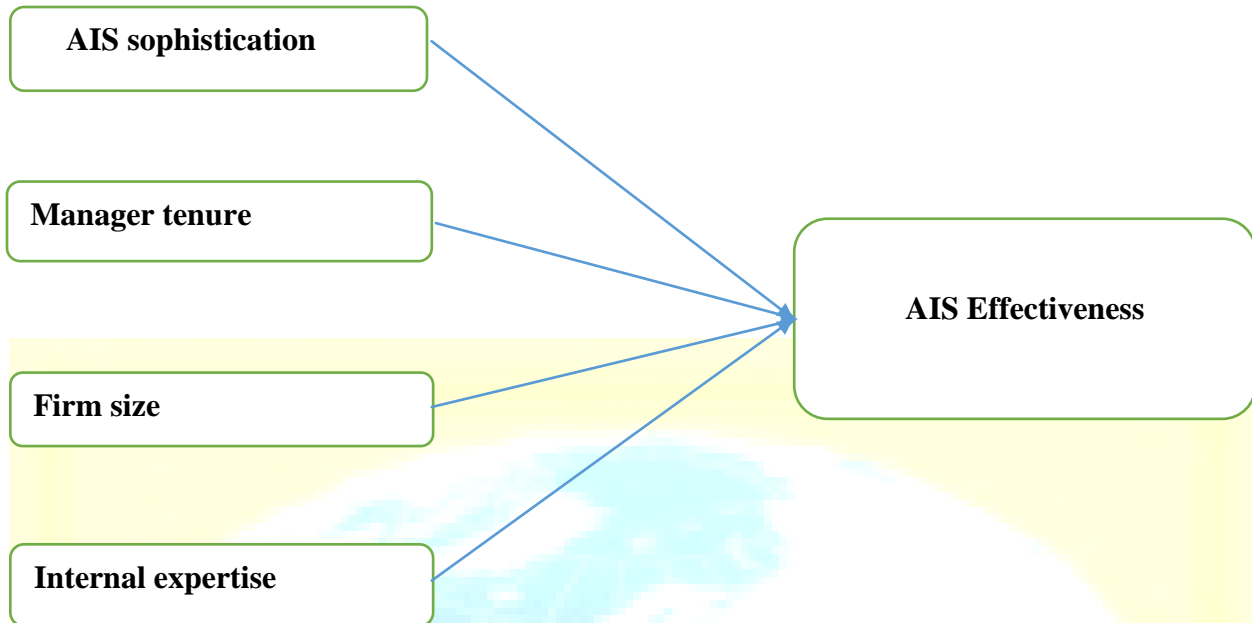
Firm size has long been considered as one of the most important factors that influence IT/IS sophistication. Generally, the large firms are more likely to adopt or make extensive use of IT/IS (Winston & Dologite 1999). In smaller firms computerization projects are also less likely to succeed, when compared with the larger, because they have a limited resources and lack of formalization of information systems (IS) structure (Thong 2001). Most small Companies do not have any funds readily available to invest in IT and AIS and suffering of shortage in the support to help them to choose the right and proper technology. Therefore, it is expected that the size of the firms are more likely to achieve higher degrees of Accounting Information System(AIS)effectiveness for SMEs.

### **Internal experts**

SMEs also have a lack of internal accounting experienced and IT/IS experts (see, for example, Gable & Raman 1992; Mitchell et al. 2000; Ravarini et al. 2002). This often results in a lower level of awareness and understanding of the importance of accounting information and also the capability of IT to generate the information. This in turn will effect SMEs from adopting the strategic accounting information (IS) and information technologies (IT). Hence, the research model also includes internal expertise as a factor that might influence AIS Effectiveness in Jordanian SMEs. The existence of accounting staff in the company may help SME owners/managers to can understand the importance of accounting information in monitoring their financial performance, whilst IT staff may assist them in identifying the right technology to generate the required information. Therefore, it is expected that the internal experts are more likely to achieve higher degrees of Accounting Information System (AIS) effectiveness for SMEs.

### **PROPOSE FRAMEWORK:**

The proposed research model is shown in Figure 1: four variables are hypothesized to have a positive relationship with AIS effectiveness: AIS sophistication, manager tenure, firm size, and internal expertise. The dependent variable is Accounting Information SYSTEM (AIS) effectiveness



**Figure 1: The Research Model proposed framework**

#### **CONCLUSION:**

This paper provided a comprehensive review of the relationship between Organizational factors that related to the Accounting Information System (AIS) Effectiveness in the specific context of SMEs in Jordan. Practically speaking, according to the literature review the developing countries are suffering from the lack of this kind of study. Specifically the studies of investigation of the (AIS) Effectiveness. So that, this paper focused on filling the gaps that mentioned in the problem statement section to enrich the existing literature of AIS and to improve the understanding of the relationships between the components of the framework of this paper in this relationship, and also to give a clear recommendations for future studies in this context.

This paper is similar to prior studies have many recommendations for future researches. Firstly, this paper assured that it is important to execute more studies in this field, since there is a clear shortage according to literature review in this field studies. Secondly, this paper suggested to the future studies to moderate or mediate some variables that have a significant relationship between Organizational Factors and (AIS) Effectiveness may lead to more improvement because there's inconclusive results in the previous research .

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