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# The Role of Environmental Uncertainty in the Link between Accounting Information System and Performance Small and Medium Enterprises in Iraq

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**Abstract-** This article is useful to small and medium enterprises (SMEs) managers in their decisions on the adoption of accounting information system (AIS) that should fit the environmental uncertainty of SMEs, which will help them to attain competitive advantages as well as better performance. The article examines the impact of environmental uncertainty as moderating on the relationship between AIS and performance SMEs Iraq. The empirical studies investigating a direct relationship between AIS and performance SMEs have attracted criticisms, including the use of a bivariate methodology.

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# The Role of Environmental Uncertainty in the Link Between Accounting Information System and Performance Small and Medium Enterprises in Iraq

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**Abstract-** This article is useful to small and medium enterprises (SMEs) managers in their decisions on the adoption of accounting information system (AIS) that should fit the environmental uncertainty of SMEs, which will help them to attain competitive advantages as well as better performance. The article examines the impact of environmental uncertainty as moderating on the relationship between AIS and performance SMEs Iraq. The empirical studies investigating a direct relationship between AIS and performance SMEs have attracted criticisms, including the use of a bivariate methodology. While this relationship is critical to organizations using AIS, the critics suggest that other factors will effect on the relationship between AIS and performance SMEs. In this article, the authors propose that dimensions of environmental uncertainty are important moderators on relationship between AIS and performance SMEs.

**Keywords:** Performance SMEs, Accounting information system (AIS), Environmental uncertainty.

## I. INTRODUCTION

Small and medium enterprises (SMEs) outnumber large companies by a wide margin and play an important economic role in many countries. SMEs particularly have a vital role to play in the development of Iraq. For example the available data from the Central Organization for Statistics (COS) indicates that private sector in Iraq consists primarily of SMEs (Harash et al. 2013a,b,c). But despite their significance, SMEs are faced with the threat of failure with past statistics indicating that three out five fail within the first few months. In the previous literature the use AIS can play a dominant role in assisting SMEs to performance small and medium enterprises better and stronger. Where, that many researchers are of the opinion that the role of AIS is important to enable SMEs to develop performance there. To achieve this goal, SMEs need to be responsive to the changes in the environments, in particular to the information technology revolution. Nowadays, information technology is a must in many SMEs. It is difficult to gain competitive advantage and survive without some adoption or implementation of this advancement in technological products. Studies has

shown that the most widely use information system is accounting information system, specifically in financial reporting aspects (Marriot and Marriot, 2000; Riemenschneider and Mykytyn Jr, 2000; and Ismail, 2007).

## II. PERFORMANCE SMEs

SMEs performance in today's economic environment is a critical issue for academic scholars and practicing managers. In general, performance is defined as the operational ability to satisfy the desires of the company's major shareholders (Smith & Reece, 1999). Performance is referred to as being about doing the work, as well as being about the results achieved. Performance is a multidimensional construct, the measurement of which varies, depending on a variety of factors that comprise it (Mwita, 2000). Performance management is a systematic process by which an organization involves its employees, as individuals or teams, in improving organizational effectiveness in the accomplishment of mission and goals.

Performance and success have been defined in various ways in the literature, and in any business, the related parties always want to see good performance in their business (Islam et al. 2011). In general, performance management includes activities to ensure that goals are consistently being met in an effective and efficient manner. Performance management can focus on performance of the organization, a department, processes to build a product or service, employees, etc. The performance is the result of strategies the company employs to achieve market-oriented and financial goals (Harash et al. 2014b,c,d,e).

In short, financial performance SMEs depends on the success of companies in the market, both locally and internationally (Harash et al. 2013a,b,c). For each individual, success may be dependent on his/her own target or desire to achieve certain outcomes (Davis & Cobb, 2010; Islam et al. 2011). The level of success of a company within the SMEs sector is measured through its performance based on a selected period of time.

In business studies, the concept of success is sometimes used to refer to a company's financial

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performance (Islam et al. 2011). Given that SMEs often play a significant role in improving the economy of a country and leads to economy development globally, this puts performance as one of the key issues for SMEs where management is concerned. Usually a company's performance is seen from the extent it manages to achieve its purposes and goals (Harash et al. 2013a,b,c; Harash et al. 2014b,c,d,e). Various scholars have attempted to provide a clear definition of performance, but they had yet to come to an agreement over a common definition, particularly regarding some aspects of terminology issues, analytical levels, and the conceptual basis for assessment. Performance of a company can be defined in various ways depending on the questions in mind when we inquire about a company's performance (Davis & Cobb, 2010; Islam et al. 2011).

The findings of many studies have not managed to provide a common definition to indicate or ascertain performance (Hagedoorn & Cloudt, 2003). Regardless of the differences among researchers on what the definition of performance is, they agree that it is generally associated with expectations for success (Noori et al. 2009). Performance can be measured using proxies like profitability, return on equity, liquidity, solvency, and sales growth and all these can be extracted from the financial statements and/or reports. Information on performance is useful in predicting the capacity of the enterprise hence analyzing how well or poorly an enterprise is doing against its set objectives (Harash et al. 2013a,b,c).

Information on performance is useful in predicting the capacity of the enterprise hence analyzing how well or poorly an enterprise is doing against its set objectives (Levasseur, 2002). Profitability is a key component of performance. From the management's point of view, profitability reflects the effectiveness with which management has employed both the total assets and the net assets that are recorded on the balance sheet. Effectiveness is assessed by relating net profit to the assets utilized in the generation of the profit.

From the owners' viewpoint of view (the shareholders in the case of a company), profitability means the returns achieved, by the efforts of management, on the funds invested by the owners (Harash et al. 2013). Iraq as the one of the less developed country, witnessed many changes during the last three decades, such as, the chaos of political and economic transformations that followed the invasion by the U.S. In addition, the recent unprecedented changes have affected the country significantly in all segments of Iraqi society (Sana & Abbas, 2005) and sector of SMEs in particular. These events changed the basic features of sector of SMEs and the instability and constants changes have become a dominant feature of the sector of SMEs in the Iraqi environment as reflected in the use AIS which affected the performance of SMEs in the Iraq.

### III. ACCOUNTING INFORMATION SYSTEM (AIS)

Accounting, as a system is the collection of procedures, methods, techniques, legal regulations, rules and experts and its renaissance is in line with technological changes and globalization and that keeps track of a company's financial transactions. Using standardized guidelines, the transactions are recorded, summarized, and presented in a financial report or financial statement such as an income statement or a balance sheet. Here, accounting information systems are viewed as a system that helps management in planning and controlling processes by providing relevant and reliable information for decision making. It suggests that accounting information system functions are not solely for the purpose of producing financial reports. Its role goes beyond this traditional perspective.

Generally literature on accounting in the AIS shows that several scholars have investigated the adoption of the system among large firms only. Very little knowledge is known about the evolution of computing in SMEs (Urquía Grande et al. 2011). Accounting information system define is 'a system that processes data and transactions to provide users with information they need to plan, control and operate their businesses (Saira et al. 2010). One of the bigger problems faced by SMEs in Iraq is technical difficulties (Arokiasamy & Ismail, 2009). This is mostly due to poor experience how to administer and information system. Prior researches have shown that information system adoption did increase firms' performances and operations efficiency especially in big organization (Saira et al. 2010). AIS are a tool which, when incorporated into the field of Information and Technology systems (IT), were designed to help in the management and control of topics related to firms' economic-financial area. AIS also provide information on both actual and budget data which would help firm to establish, plan, and control operation (Urquía Grande et al. 2011). Good management of resources and better control of expenditure, budgeting and forecasting enhance the wellbeing of firm (Saira et al. 2010).

AIS refer to collection, storage and processing of financial and accounting data to help managers to make planning, controlling and evaluating (Emeka-Nwokeji, 2012; Saira et al. 2010). AIS also refers to perceiving of user information satisfaction to decision making and monitoring when organization has coordination and control with information that is produced from AIS (Islam et al. 2011). AIS are one of an important component of modern information system (IS) (Abdallah, 2014). The AIS is certainly played an important role that contributes to firm's value added by providing internally generated input i.e. financial statements, such into should help firm made better strategic plan (Hussein, 2011; Sori, 2009).

Developments in the areas of accounting, and IS over the last decades of twentieth century have widened the range and roles of AIS (Hussein, 2011).

#### IV. ENVIRONMENTAL UNCERTAINTY

Environmental uncertainty represent one of the major contingencies faced by a company. The contingency theory (Galbraith, 1973, 1974, 1977, 2002) one of the major strands of thinking about organizations is contingency theory, which defines uncertainty as the variable which makes the organization contingent upon the environment (Nobre et al. 2010). Contingency theory emphasizes the significance of the situational influence on accounting information system and the performance of companies (Harash et al. 2014a). The outstanding definition by Galbraith denotes the relationship between information and uncertainty. He defined uncertainty as the difference between the total amount of information that the organization needs to have in order to accomplish the tasks, and the amount of information in possession of the organization (Galbraith, 1973). Millike (1987) defined uncertainty as unpredictability of the state of the environment, inability to predict the impact of environmental change, and inability to foresee the consequences of a response choice (Sung et al., 2010).

Some researchers in their studies have explained by defining the concept of uncertainty which originate from three sources as in; (1) the external environment, (2) organizational interdependence or the internal environment and (3) task characteristics (Al-Temimi Suhail et al. 2012; Harash et al. 2014a; Sicotte & Bourgault, 2008). That means that uncertainty represents the dimension to measure environment and have multi effect on other factors. Donaldson (2001) refers to the following: The Contingency Theory of

organization is a major theoretical lens used to view organizations. He supported the notion of the theoretical and practical use of the Contingency Theory to explain the behavior of organization and study the designing and measuring the performance of these organizations according to relationship with environment (Al-Temimi Suhail et al. 2012; Donaldson, 2001; Emmanuel et al. 1990; Harash et al. 2014a).

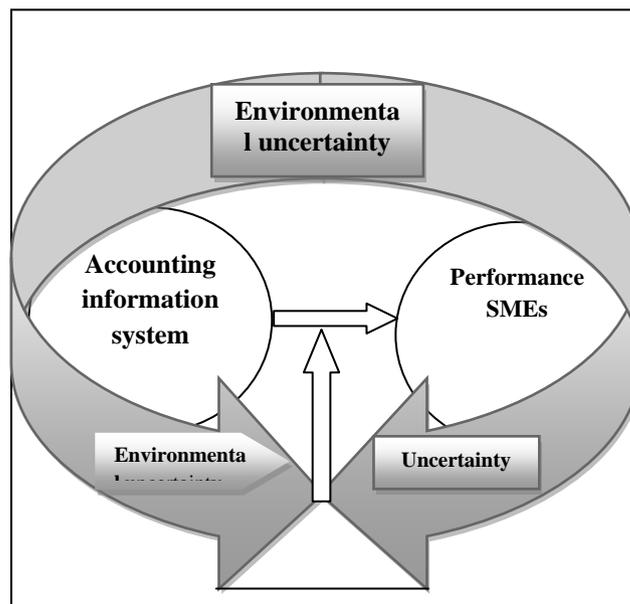
In this context, Contingency Theory play vital role to study the organizations and their performance and contains much of importance in the history of organizational science (Harash et al. 2014a). The research in Contingency Theory is a basis of much that is taught today. In addition, scholars actively pursue contingency research in the contemporary era and it is being projected into the future in a series of exciting theoretical and empirical developments (Al-Temimi Suhail et al. 2012; Harash et al. 2014a).

#### V. CONTINGENCY FRAMEWORK

The Conceptual Framework below shows the relationship between the variables under study. The independent variable is the Accounting information system, moderator variable are the Environmental uncertainty and the dependent variable is the performance SMEs.

The model describes the influencing mechanism of AIS on financial performance SMEs and considers the role of Environmental uncertainty in the mechanism. It shows how the dimensions of AIS impact the aspects of performance SMEs, and how the Environmental uncertainty moderator these relationships. Based on their underlying rationale, the following sections present the detailed hypotheses related to these relationships.

Figure1 : Proposed theoretical framework



In order to exam the proposed relationships between AIS and performance SMEs. There is a proposition developed as a basis to examine the relationships between performance of SMEs and AIS for the research. Additionally, a proposition second was also developed to test the proposed moderating effects of Environmental uncertainty on the relationship between AIS and performance SMEs. Current study developed the following proposition:

1: *There is a positive relationship between Accounting information system (AIS) and the performance of SMEs in Iraq.*

2: *Environmental uncertainty moderator the relationship between Accounting information system (AIS) and the performance of small and medium enterprises (SMEs).*

## VI. CONCLUSION

This study confirm that environmental uncertainty does act as a full moderating variable in the performance of SMEs in Iraq. Most previous studies on the environmental uncertainty, Accounting information system and performance use data on large, companies. Our study is one of the few that shed light on how corporate environmental uncertainty as moderating impact the relationship between Accounting information system and performance Small and medium enterprises. Conceptually, the study indicate the performance of SME vary with the choice of the AIS they adopted. This is significant for at least three parties, i.e. customers, companies and the relevant authorities' bodies, to strategize on containing the existence of the effect in SMEs by accordingly controlling the selected factors.

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