

## **FACTORS INFLUENCING THE IMPLEMENTATION OF ACCOUNTING INFORMATION SYSTEM IN MANUFACTURING SMES IN JORDAN – A CONCEPTUAL ANALYSIS**

Lena Mustafa Mahmoud Zayed<sup>a</sup>, Dr. Ratna Sinha<sup>b</sup>

<sup>a</sup> Research Scholar, International School for Business and Research, Bangalore.

<sup>b</sup> Associate Professor, International School for Business and Research, Bangalore

### **ABSTRACT**

The Jordanian economy is gradually developed over these years with many hurdles and challenges. The government initiatives and the emergence of many private manufacturing SME's have enabled the growth and development of the manufacturing industry. With the emergence of technological revolution in almost all areas and its outcomes, which is witnessed in some of the developed and developing countries, there is a need for research in the area of technological influence on finance and accounts department of organizations. This research aims to understand the role of Accounting Information System in manufacturing SME's in Jordan. The study is designed with the objective to understand the various factors which influence the implementation of the Accounting Information System in Manufacturing SME's in Jordan. This conceptual paper is exploratory in nature and uses secondary data to determine the factors influencing the AIS in manufacturing SME's in Jordan.

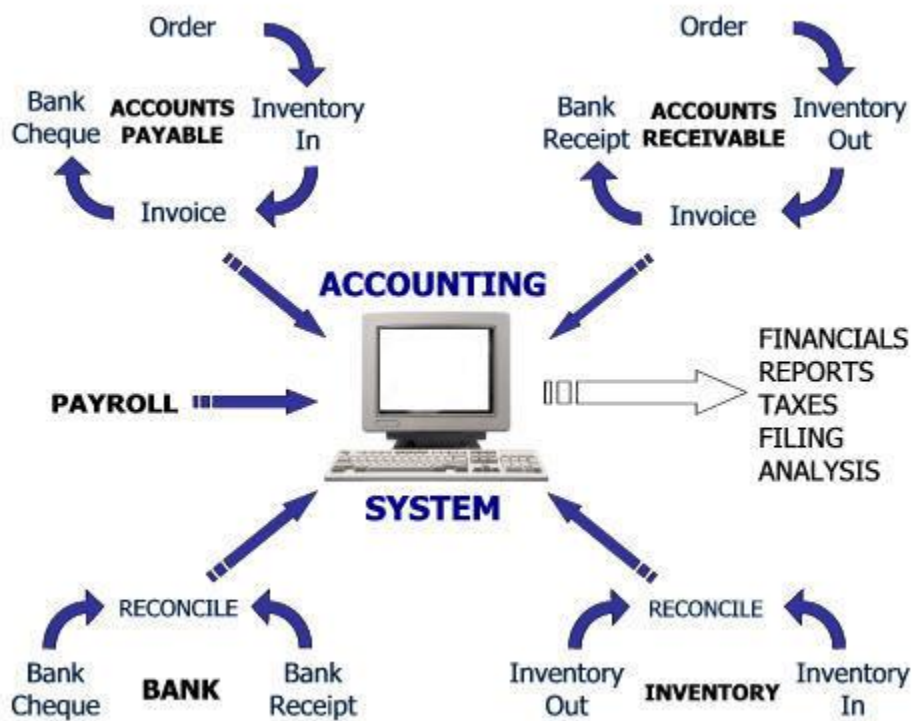
**Keywords:** AIS, Jordan, SME's

### **1. INTRODUCTION**

All organizations are seeking to increase their profitability and revenues through the utilization of available resources and make quick decisions based on correct and accurate information in a timely manner. This has increased the importance of management information systems, this is not limited to the private sector companies only, but also the governmental organizations are seeking to achieve the same previous goals and to contribute in the balance of payments of these organizations. Accounting information systems- as part of the management information systems- represent one of the most important systems in the economic unity and these organizations vary among each other in terms of the application of accounting information systems and the consciousness of their importance. The contemporary evolution of accounting led to the elaboration of an information system which connects all the organizational structures of a

company, in which the accounting information system is the basic component of technology system. It responds to information requirements of other departments as well as to external factors.

The accounting information system is an important part from the management operations' perspective. It is the basic source of information for planning, operations and decision making. Therefore, the world has become a small global village. As a result of that, a community of information and knowledge where civilization elements and the strengths of the article moved to information and knowledge to the machine (Yassin 0.2006). The information is the most important feature of recent decades of the twentieth century, it has evolved information technology to increase the volume of information that must be handled, stored, and provided for a system which held a large process observation and management that has spread the information technology applications in. (6-5: various fields and at all levels (Qasim, 1998)



The availability of this efficiency in information systems is considered a basic factor in successful continuity or failure of any organization, and this importance is reflected by use of information and an intended way to support and coordinate administrative operations such as: planning, observation and decision-making in one hand, and a means for communication between the environment and with the organization's internal and external environment on the

other hand. Consequently, the organization before expansion , proliferation and geographic diversification in production , in face of intensive competition and the need for human resources , besides financing all other activities , find themselves in an urgent need to develop a system commensurate with size of these activities , which ensures flow of all information from the enormous and various units and analysing this information and using it to develop its overall performance in improving administrative operations performance in particular where the accounting information systems is the most important systems that produce and contribute main information in large and rationalized and support access to economic impact of communities income and the wealth and resources. therefore the welfare of thousand responses in those communities , as the accounting information systems contribute to the successful operation of administrative operation through available information which contributes to meet the different needs of the organizations of planning , observation and decision-making , which is one of basic functions for achieving the objectives of the organization whether the tasks and activities related to the planning or observation that achieved by taking appropriate administrative decisions under the surrounding circumstances , which contributes to rationalization of these decisions , and raising level of performance to achieve the organization goals.

## **2. BACKGROUND OF THE STUDY**

The Jordanian Economy is a service economy, not an oil-based one. Its economy faces several obstacles, including lack of natural resources and the Israeli wars and subsequent occupations of Palestine in 1948 and 1967, which drove thousands of Palestinians into Jordan as refugees. During the 1970s and early 1980s, Jordan's economy was greatly dependent on using external sources of finance, which included assistance and loans from more developed countries, such as Arab countries and international institutions, in addition to the remittances from Jordanians working abroad (Al-Quaryoty, 1989; AbuShair, 1997)

From 1982, Jordan experienced an economic recession (Al-Quaryoty 1989)-; many problems built up leading to the country's economic collapse in 1988-89 (El-Sakka 2005,p2). From 1982, Jordan experienced an economic recession (Al-Quaryoty, 1989), many problems built up, leading to the country's economic collapse in 1988-89 (El-Sakka, 2005). Al-Quaryoty (1989) identifies the external problems that confronted the Jordanian economy as the increase of foreign debt and its servicing deficits in the balance of payments, the decrease in remittance from Jordanian working abroad, the decrease of foreign aid, and the existence of various managerial problems such as over-staffing, unclear line of responsibility and low efficiency.

Jordan's economy is comprised mainly of small and medium enterprises (SMEs). They make about 96% of total Jordanian enterprises, employ 60% of the country's labor force and contribute 24% of the country's GDP. SMEs play a vital role in national economic development. There is an

association of Manufacturing SMEs in Jordan which is a group of enthusiastic manufacturers who wanted to create the leading organization of the industrial business community in Jordan and become a guide in innovation, creativity and teamwork for its members, Jordan SME Association has become a key player in identifying the problems, challenges and opportunities of the nation's SMEs. It works tirelessly to support the SMEs in achieving a better position in the market and to improve their competences. Jordan SMEs Association provides the necessary bridge between the public and private sector whilst supporting, enhancing, educating and promoting the interests of its members and of the country of Jordan as a whole. It is an organisation which never ceases to seek the improvement of the economic and social conditions of the nation.

This paper tries to discuss the various dimensions of Accounting information systems prevailing in the manufacturing SMEs. It is also thought of, during the research that there could be better performance in terms of profitability and sales if a proper accounting information system is in place in these organisations.

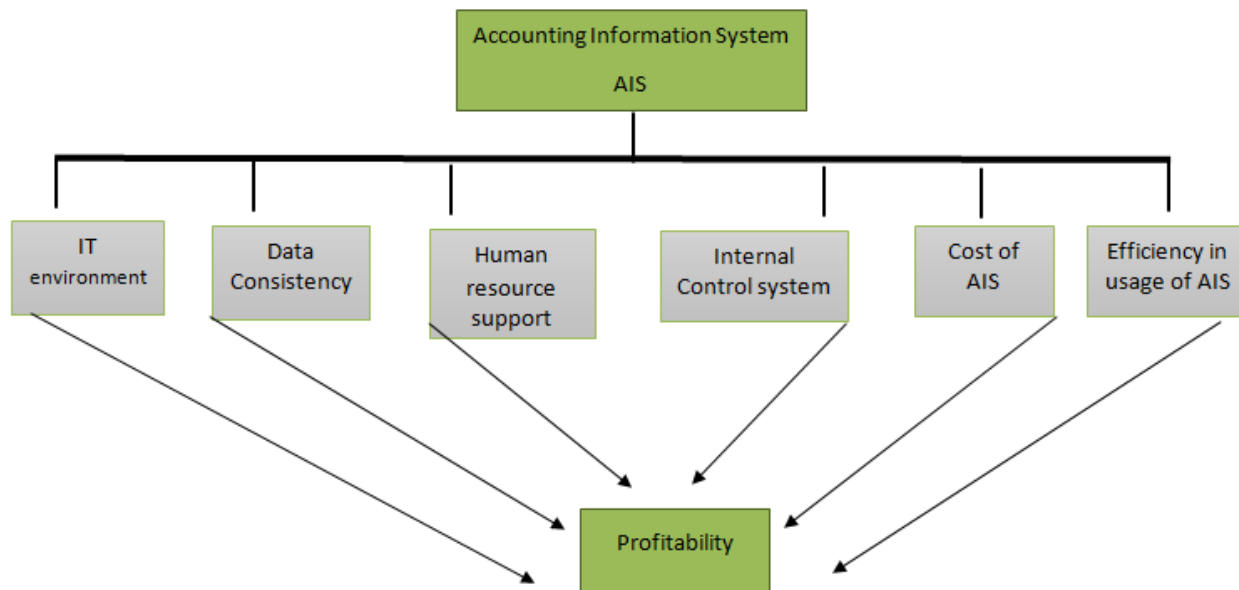
### **3. ACCOUNTING INFORMATION SYSTEM**

The technological development and the information revolution taking place in the world and trade openness nowadays, as well as the great economic in the world in general and in Jordan in particular have made the Manufacturing SMEs, including the Jordanian ones to cope with these developments on one hand and the presence of a strong competitive environment happening in Manufacturing SMEs sector on the other hand. Therefore, an urgent need arises to determine the effectiveness of accounting information systems in Jordanian national commercial Manufacturing SMEs and how to take an advantage of the management for information that provides in field of planning and establishing goals and observing their implementation and take appropriate for its execution, as the information accounting systems is one of the essential elements that the management are based on performance of its missions; Do these systems meet the goals that Manufacturing SMEs management attempt to achieve? The study topic emerged to discuss effectiveness of accounting information systems in Jordanian Manufacturing SMEs from the management prospective as the management is considered the main beneficiaries of the information provided by these systems, besides attempting to figure out the extent to which these systems meet their desired goals by the Manufacturing SMEs management. The study problem can be summarized through the following questions:

1. Are there any support structure components of Accounting Information System in SMEs manufacturing industry in Jordan?

2. To study the IT environment for AIS, human resource support, data consistency, internal control system, cost of AIS and efficiency in usage of AIS in SMEs manufacturing industry in Jordan .
3. Does the support structure components of Accounting Information Systems impact on profitability in SMEs manufacturing industry in Jordan ?
4. What are the critical factors of support structure components influencing AIS in SMEs manufacturing industry in Jordan?
5. What factors are influencing AIS and profitability?

For the purpose of the study, a conceptual model has been developed. This model is developed based on literature review which brings out the important components of AIS in any organization. The components include IT environment, Data consistency, human resource support, internal control system, cost of Accounting information system and the efficiency in the usage of Accounting Information System.



*Source: Developed by the Scholar and Guide*

**a. IT environment:**

IT environment plays a vital role in the Accounting Information systems arena. IT is the main source of all other functions and it is crucial for any organisation to have the right kind of IT environment in order to gain high efficiency. Information technology must be compatible with and support the components of Accounting Information systems.

**b. Data Consistency:**

The data which is documented in the Organisations are usually varied in nature. There is a need to maintain consistency in data recording in order to apply the data in an effective way. In the IT database management terminology, it also means that data should be allowed to affect only in allowed ways according to the technology built.

**c. Human Resource Support:**

Human Resources are the big source of support the effective implementation of Accounting Information Systems. They are responsible for various activities related to all the departments in the organisation. With regard to the Accounting Information system, it is the human resource that has to drive the technology involved.



*Source: "Accounting Information System", by Hall, J.A., 2011*

**d. Internal Control System:**

Internal control is the process by which management structures an organization to provide assurance that an entity operates effectively and efficiently, has a reliable financial reporting system and complies with applicable laws and regulations. Internal controls are policies and procedures put in place to ensure the continued reliability of accounting systems. Internal control procedures in accounting can be broken into seven categories, each designed to prevent fraud and identify errors before they become problems.

**e. Cost of Accounting Information systems:**

The cost and the affordability factor are also to be considered while implementing the Accounting Information systems in the manufacturing SMEs. The turnover and the proportionate allocation of cost to the accounting is a crucial factor before considering. Various measures have to be taken in order to optimize the benefits of installing the accounting information system.

**f. Efficiency in using AIS:**

After installing the Accounting Information systems as a technology in Manufacturing SMEs, the organisation should make sure if it is efficient enough to implement and sustain the system in the organisation. If any system is inefficient it would be a hassle for the organisation to carry it forward.

**4. CONCLUSION**

This study has focused mainly on understanding the accounting information systems prevailing in the Manufacturing SMEs at Jordan. It has thrown light on the Accounting information systems present in the Industry and the factors influencing the consideration of AIS. The study has also attempted to conceptually analyse the dimensions involved in the AIS set up. In these lines, this paper has given rise to several questions which are to be answered through an empirical analysis which would help the stakeholders in the Manufacturing SMEs in Jordan.

**REFERENCES AND BIBLIOGRAPHY**

- Mohammed Shanikat, Organisational change and Accounting Information systems; a case study of privatisation of Jordan Telecom, PhD Thesis, School of Accounting and finance, University of Wollongong, 2008.<http://ro.uow.edu.au/theses/103>.
- 2nd OECD conference of ministers responsible for small and medium-sized enterprises (SMEs), The Organisation for Economic Co-operation and Development (OECD) – Report, 2004/05.
- Ahmad Al-Hiyari1 et al, (2013), Factors that Affect Accounting Information System Implementation and Accounting Information Quality: A Survey in University Utara Malaysia, American Journal of Economics 2013, 3(1): 27-31.
- Ali Mahmoud AbdallahAlrabei (2014), The Impact of Accounting Information System on the Islamic Banks of Jordan: An Empirical Study, European Scientific Journal February 2014 edition vol.10, No.4 ISSN: 1857 – 7881 (Print) e - ISSN 1857- 7431.
- Alqatnani, 2002 Impact of use of accounting information on management performance in industrial corporations in Jordan, European Journal of Management April 2014, Vol. 7, No. (1): Pgs. 01-08.



- Basel J. A. Ali et al., The Critical Success Factors of Accounting Information System (AIS) and Its Impact on Organisational Performance of Jordanian Commercial Banks, *International Journal of Economics, Commerce and Management*, Vol. IV, Issue 4, April 2016.
- Belal Yousef AL Smirat ,2013, The Use of Accounting Information by Small and Medium Enterprises in South District of Jordan,( An empirical study), *Research journal of Finance and Accounting*, vol 4 journal 6.
- Bhavna P. Patel, (2015), Effects of accounting information system on Organizational Profitability, *IJRAR*, volume 2 i issue 1jan.- March 2015.
- Choe, J.M. 1996. The Relationship Among Performance of Accounting Information System, Influence Factors, and Evolution Level of Information System. *Journal of Management Information System*. 12 (4): 215-239.
- DawHla and Susan Peter Teru, (2015), Efficiency of Accounting Information System and Performance Measures – Literature Review *International Journal of Multidisciplinary and Current Research*, issue 4 vol 2.
- Dr. S. R Dubey (2016) Importance and implication of SMEs in economy, pg 009, March 2016 .
- Haddad, &Atmeh. (2009). *Accounting information system* (1st Ed.). Amman: Al Mareekh.
- Ikhatua, O. J. (2013). Accounting Information and Stock Volatility in the Nigerian Capital Market: A Garch Analysis Approach. *International Review of Management and Business Research*, 2(1), 265–281.
- Jordanian Young Economists Society, *Research Study on Strengthening Small and Medium Enterprises in Jordan*, pg 12, 2013/14.
- Kabiru I. Dandago and Abdullahi Sani Rufai, Information Technology and Accounting Information System In The Nigerian Banking Industry, *Asian Economic and Financial Review*, 2014, 4(5):655-670.
- KhurramShehzad and Aisha Ismail (2014), Value relevance of Accounting Information and its Impact on Stock Prices: Case Study of Listed Banks at Karachi Stock Exchange, *Journal of Economic Info*, 3(1), 40-48, 2014.
- Loay Salem Al-Rahamneh( 2017), The Impact of Computerized Information Systems on the Compliance of Internal Control Requirements According to ISA (315) in Jordanian Companies from the Perspectives of Their Employees, *International Journal of Economics and Finance*; Vol. 8, No. 9; 2016 ISSN 1916-971X E-ISSN 1916-9728.
- Mahmoud Al-Eqab and Noor Azizi Ismail, (2011) Contingency Factors and Accounting Information System Design in Jordanian Companies <https://www.researchgate.net/publication/259297702>.



- Maseko N. and Manyani O. (2011). Accounting practices of SMEs in Zimbabwe. *Journal of Accounting and Taxation accounting systems*, Vol. 3(8), pp. 171-181.
- MuhannadAkram Ahmad, Farah Hanna Zawaideh and Ahmad Bisher, (2014), *The Relation between E-Commerce and AIS in Medium Scale Organizations*, *Oriental Journal Of Computer Science & Technology*.
- Muhindo, A., Mzuza, M. K., & Zhou, J. (2014). *Impact of Accounting Information Systems on Profitability of Small-Scale Businesses: A Case of Kampala City in Uganda*.
- Onaolapo, A. A., & Odetayo, T. A. (2012). *Effect of Accounting Information System on Organizational Effectiveness*, *American Journal of Business and Management* Vol. 1, No. 4, 2012, 183-189.
- Pérez, R., Urquía, E., & Muñoz, C. (2010), *The impact of Accounting Information Systems (AIS) on performance measures: empirical evidence in Spanish SMEs*, *The International Journal of Digital Accounting Research* Vol. 11, 2011 pp. 25 - 43 ISSN: 1577-8517.
- Powell, T. C., & Dent-Micallef, A. (1997). *Information technology as competitive advantage: The role of human, business, and technology resources*. *Strategic management journal*, 18(5), 375-405.
- SitiKurniaRahayu, 2012, *The Factors That Support The Implementation Of Accounting Information System: A Survey In Bandung And Jakarta'S Taxpayer Offices*, [globalresearch.com](http://globalresearch.com).
- VlastaRoska and JasenkaBubic, (2012) *Accounting Information Systems for Management Decisions: Empirical Research in Croatia*, *Journal of Accounting and Management*, Vol. 2 No. 2 1-66.