

**USE ACCOUNTING INFORMATION SYSTEM AS STRATEGIC
TOOL TO IMPROVE SMEs' PERFORMANCE IN IRAQ
MANUFACTURING FIRMS**

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**Use accounting information system as strategic tool to improve SMEs'
performance in Iraq manufacturing firms**



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Requirements for the Degree Master of Science (International Accounting)**

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By

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June 2011

DECLARATION

I declare that this thesis entitled “Use accounting information system as strategic tool to improve SMEs’ performance in Iraq manufacturing firms” is a result of my own research excepted as cited in the references. The thesis has not been accepted for any degree and is not concurrently submitted as a candidate of any other degree.

I certify that any help had received in preparing this thesis and all the sources that used have been acknowledged.

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ABSTRACT

These days organizations are operating and competing in an information age. Information systems (IS) are widely use by many organizations to automate existing operation and to improve performance activities efficiency, and most the researches shown that information system adoption did increase firms' performances and operations efficiency. Accounting information system (AIS) is one of an important component of modern information system. On the other hand, the growing importance of small and medium enterprises (SMEs) in the production sector is undeniable, whether among industrialized countries or developing countries. But there is very limited research has been prevailed by Iraq SME's to improve their performance through AIS. So the main aim of this thesis is to explore the determinants of influence accounting information system on SMEs among Iraq manufacturing firms. This study would add value by providing a significant contribution towards use of AIS practices among SMEs in Iraq manufacturing firms. The research method used was primary data collection technique. The sampling was done on 118 owners and managers at the Industrial Area of Baghdad. The findings of this study reflect the findings of previous studies that there is a positive relationship between use AIS and improve the performance. This shows that Iraqi SMEs can improve their performance through use AIS.

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LIST OF ABBREVIATIONS

AIS: Accounting Information System

IS: Information System

IT: Information Technology

GDP: Gross domestic product

IQ: Information Quality

DQ: Data Quality

MA: Management Accounting

SME: Small and Medium enterprise

SMEs: Small and medium enterprises

MIS: Management Information System

CHAPTER ONE

INTRODUCTION

1.1 Introduction

These days organizations are operating and competing in an information age. Information has become a major resource of most organizations, economies, and also societies (Xu, 2003). Today information systems are widely use by many organizations to automate existing operation and to improve performance activities efficiency (Kharuddin, Ashhari & Nassir, 2010).

Accounting information system (AIS) is one of an important component of modern information system (IS). Developments in the areas of accounting, information technology (IT) and IS over the last decades of twentieth century have widened the range and roles of AIS (Mitchell, Reid & Smith, 2000).

Information age has changed the way in which traditional accounting systems work traditionally, accounting information system tended to mirror historically developed manual accounting processes. Therefore, traditional AIS were unable to adapt to change, to support critical business processes and models, and to satisfy users' information requirements, which are constantly changing over time. Modern AIS can generate several types of information including accounting and non-accounting information to help management manages short-term problems and integrates operational considerations within long-term strategic plans (Mitchell et al., 2000).

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References

- Alrawi, H. A., & Thomas, S. S. (2007). Application of contingency theory of accounting information to the uae banking sector. *Asian Academy of Management Journal* 12(2), 33-55.
- Alves, M. C. G. (2010). Information technology roles in accounting tasks – A multiple-case study. *Trade, Economics and Finance* 1(1), 103-107.
- Atkinson, A. A., et al. (1997). A stakeholder approach to strategic performance measurement. *Sloan Management Review* 38, 25-38.
- Azizi, N. (2009). Accounting information system: education and research agenda. *Malaysian Accounting Review* 8(1), 63-80.
- Beck, T., et al. (2008). "Finance, firm size, and growth. *Journal of Money, Credit and Banking* 40(7), 1379-1405.
- Beke, J. (2010). Review of international accounting information systems. *Accounting and Taxation* 2(2), 25-30.
- Bricker, R., & Chandar, N. (1998). On applying agency theory in historical accounting research. *Business and Economic History* 27(2), 486-499.
- Buonanno, G., et al. (2005). Exploring the role of inter-organizational information Systems within SMEs Aggregations, 6-8.
- Bushman, R. M., & Smith A. J. (2001). "Financial accounting information and corporate governance . *Journal of Accounting and Economics* 32(1-3), 237-333.

- Catchpowle, L. & Cooper, C. (2005). Accountants and contradiction: The role of the accounting profession in post war Iraq.
- Chen, D., et al. (2010). Information Systems Strategy: Reconceptualization, measurement, and implications. *Management Information Systems Quarterly* 34(2), 233-259.
- DeLone, W. H., & McLean E. R. (1992). Information systems success: the quest for the dependent variable. *Information systems research* 3(1), 60-95.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *The Academy of Management Review* 14(1), 57-74.
- Ezzamel, M. & Hoskin K. (2002). Retheorizing accounting, writing and money with evidence from Mesopotamia and ancient Egypt. *Critical Perspectives on Accounting* 13(3), 333-367.
- Fadhil, M. (2011). Managing company's financial among small and medium non-manufacturing companies. *Far East Journal of Psychology and Business* 2(2), 17-36.
- Forth, J. & McNabb R. (2008). Workplace performance: A comparison of subjective and objective measures in the 2004 workplace employment relations survey. *Industrial Relations Journal* 39(2), 104-123.
- Gil, N. (2004). The role of sophisticated accounting system in strategy management. *Digital Accounting Research* 4(8), 125-144.
- Hyvönen, J. (2008). Linking management accounting and control systems, strategy, information technology, manufacturing technology and organizational performance of the firm in contingency framework. *Acta Universitatis Ouluensis, Oeconomica*, G 31.

- Ibrahim, S. (1999). An investigation on the relationship between strategic information systems and business strategies in Malaysian organizations.
- Ismail, N. A. (2007). The impact of information technology on performance: The mediating role of management accounting systems." *Jurnal Teknologi* 46, 27-44.
- Ismail, N. A., & King, M. (2007). "Factors influencing the alignment of accounting information systems in small and medium sized Malaysian manufacturing firms. *Journal of Information Systems and Small Business* 1(1-2), 1-20.
- Kling, R., et al. (1992). Information systems in manufacturing coordination: economic and social perspectives, Citeseer.
- Kren, L. (1997). The role of accounting information in organizational control: The state of the art." *Behavioral accounting research: Foundations and frontiers*, 1-48
- Lambert, R. A. (2006). Agency theory and management accounting. *Handbooks of Management Accounting Research*, 247-268.
- McNabb, R., & Whitfield, K. (2003). Varying types of performance related pay and productivity performance. Cardiff University, Cardiff, CF10 3EU, UK.
- Mia, L., & Chenhall R. H. (1994). The usefulness of management accounting systems, functional differentiation and managerial effectiveness. *Accounting, Organizations and Society* 19(1), 1-13.
- Moody, J. (2003). "Making databases relevant in the accounting information systems course: Exercises for the classroom. 1221-1225.

- Phusavat, K. P., et al. (2009). Performance measurement: Roles and challenges. *Industrial Management & Data Systems* 109(5), 646-664.
- Rockart, J. F. (1982). The changing role of the information systems executive: A critical success factors perspective. *Sloan Management Review* 24(1), 3-13.
- Saira, K., et al. (2010). Information system and firms' performance: The case of Malaysian small and medium enterprises. *International Business Research* 3(4), 28.
- Sajady, H., et al. (2008). Evaluation of the effectiveness of accounting information systems. *International Journal of Information* 6(2), 1-11.
- Salleh, M., et al. (2010). Relationship between information systems sophistication and performance measurement. *Industrial Management & Data Systems* 110(7), 993-1017.
- Sori, Z. M. (2009). Accounting information systems (AIS) and knowledge management: A case study." *Scientific Research*(4), 36-44.
- Twati, J. M., & Tripoli, L. (2008). The influence of societal culture on the adoption of information systems: The case of Libya. *Communications of the IIMA* 8(1), 1-12.
- Xu, H. (2003). Critical success factors for accounting information systems data quality.
- Mitchell, F., Reid, G., & Smith, J. (2000). Information system development in the small firm: The use of management accounting, CIMA Publishing.
- Premkumar, G. (2003). A meta-analysis of research on information technology implementation in small business. *Journal of Organizational Computing & Electronic Commerce* 13(2), 91-121.

- Premkumar, G. (2003). A meta-analysis of research on information technology implementation in small business. *Journal of Organizational Computing & Electronic Commerce* 13(2), 91-121.
- Cragg, P. & King, M. (1993). Small-firm computing: Motivators and inhibitors. *MIS Quarterly* 17(1), 47-60
- Redman, T. C. (1992). *Data quality: Management and technology*. Bantam Books, Inc. New York, NY, USA.
- Huang, H. T., Lee, Y. W., & Wang, R. Y. 1999. *Quality Information and Knowledge*. Prentice Hall, New Jersey.
- Xu, H. A., et al. (2003). Managing data quality in accounting information systems. IT-based management: challenges and solutions: 277.
- Kahn, B. K., Strong, D. M., & Wang, R. Y. (2002) Information quality benchmarks: Product and service performance. *Communications of the ACM* 45(4).

د. فلاح خلف الربيعي, سبل النهوض بدور الصناعات الصغيرة والمتوسطة في العراق الحوار المتمدن - العدد: 2221 لسنة 2008 .

د. فلاح خلف الربيعي, الصناعات الصغيرة والمتوسطة في العراق ... الواقع والأفاق العدد 28 لسنة 2006.

راضي محسن داود, استراتيجية تطوير الصناعات الصغيرة والمتوسطة في العراق 2008.