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

AMMAR MOHAMMED HUSSEIN

OTHMAN YEOP ABDULLAH GRADUATE SCHOOL OF BUSINESS UNIVERSITI UTARA MALAYSIA JUNE 2011

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



A Thesis Submitted to the College of Business in Partial Fulfillment of the Requirements for the Degree Master of Science (International Accounting)

University Utara Malaysia

2011

 $\mathbf{B}\mathbf{y}$

Ammar Mohammed Hussein: 803854

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.

Ammar Mohammed Hussein

803854

College of Business

University Utara Malaysia

06010 Sintok

Kedah

June 2011

I

PERMISSION TO USE

In presenting this thesis as a part of fulfillment the requirement for a postgraduate degree from

Universiti Utara Malaysia, I hereby agree that the Universiti Library may make it unreservedly

available for inspection. I further agree that permission for copy of this thesis in any manner, in

whole or in part, for scholarly purposes may be granted by my supervisor Dr. Haim Hilman

Abdullah or, in his absence, by the Dean of College of Business. It is understood that any

copying or publication or use of this thesis or parts thereof for financial gain shall not be allowed

without my permission. It is also understood that due recognition shall be given to me and to

Universiti Utara Malaysia for any scholarly use which may be made of any material from my

thesis.

Request for permission to copy or to take other use of materials in this thesis, in whole or in part,

should be addressed to:

Dean of the Postgraduate Studies of College of Business

Universiti Utara Malaysia

06010 UUM Sintok

Kedah Darul Aman

Malaysia

II

ACKNOWLEDGEMENT

I wish to acknowledge the help of several individual because without their assistance, guidance, and understanding this research would not have been possible. In the first place I would like to record my gratitude to **Dr. Haim Hilman Abdullah** for his supervision, advice, and guidance from the very early stage of this research as well as giving me extraordinary experiences throughout the work. Above all and the most needed, he provided me unflinching encouragement and support in various ways. I would like to thank to all MSc (International Accounting) **lecturers**, for their great effort throughout my study.

Special thanks to my adorable **parents**. My parents deserve special mention for their inseparable support and prayers. I wish to give my sincerest and deepest gratitude to my **brothers** for their encouragement and great support. Finally, my demonstrative appreciations to all my **friends** and, everyone who has helped either directly or indirectly for the completion of this project.

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.

TABLE OF CONTENTS

DEC	LARATIONI
PER	MISSION TO USEII
ACK	NOWLEDGEMENTIII
ABS'	TRACTIV
TAE	BLE OF CONTENTSV
LIST	OF TABLESIX
LIST	Γ OF FIGURESX
LIST	OF ABREVIATIONSXI
СНА	PTER ONE
INTI	RODUCTION
1.1	Introduction1
1.2	Problem Statement
1.3	Research Questions4
1.4	Research Objectives5
1.5	Significant of The Study5
1.6	Scope of The Study6
1.7	Limitations6
1.8	Organization of The Study6
1.9	Conclusion7

CHAPTER TWO

LITERATURE REVIEW

2.1	Introduction	8
2.2	Information System and Accounting Information System	8
2.3	The important of Small and medium enterprises.	.11
2.4	Factors That Effect on Adoption of AIS in SMEs in Manufacturing Firms	14
2.5	Data Quality within AIS and Performance	16
2.6	The Relationship Between AIS, Strategy, and Performance	21
2.7	Organizational Performance	23
2.8	Conclusion.	.25
	PTER THREE EARCH METHODOLOGY	
3.1	Introduction	.26
3.2	Research Framework.	26
3.3	Research Hypothesis	.28
3.4	Research Design	.29
3.5	Sampling and Data Collection	.29
3.5	.1 Population and Sample	.29
3.5	.2 Sampling Technique	.29
3 5	3 Data Collection	30

3.5	5.4	Unit of Analysis	30
3.5	5.5	Research Instrument	30
3.6	Me	ethod of Data Analysis	31
3.0	5.1	Reliability Analysis	31
3.0	5.2	Descriptive Analysis	31
3.0	5.3	Correlation Analysis	31
3.7	Cor	nclusion	32
CII	DOE	ED EQUID	
CHA	APIE	ER FOUR	
DAT	TA AN	NALYSIS AND RESEARCH FINDINGS	
4.1	Intr	roduction	33
4.2	Ove	verview of Collected Data	33
4.3	Res	spondents' Profile	34
4.4	Ana	alysis	37
4.4	4.1	Reliability Analysis	37
4.4	4.2	Descriptive Analysis	38
4.4	4.3	Correlation Analysis	40
4.4	4.4	Regression Analysis	46
4.5	Cor	nclusion	48

CHAPTER FIVE

DISCUSSIONS, RECOMMENDATION AND CONCLUSION

5.1	Introduction	49
5.2	Results Discussion	49
5.3	Managerial Implications of AIS	50
5.4	Recommendations and Future Suggestions	52
5.5	Conclusion	53
REF	ERENCES	55
APP]	ENDIXS	. 60

LIST OF TABLES

Table 4.1: Responses Rate	34
Table 4.2: Gender	35
Table 4.3: Work Experience.	35
Table 4.4: Job Title	36
Table 4.5: Type of AIS	36
Table 4.6: total number employees	37
Table 4.7: Reliability Analysis	38
Table 4.8: Descriptive Statistics	39
Table 4.9: Descriptive Correlations Statistics	4
Table 4.10: Correlations	4
Table 4.11: Inter Correlation among the Factors	43
Table 4.12: Results of regression analysis	47

LIST OF FIGURES

Figure 2.1: summarized AIS process	10
Figure 2.2: factors that influence DQ of AIS	20
Figure 3.1: theoretical framework model	27

LIST OF ABREVIATIONS

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).

The contents of the thesis is for internal user only

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, ستراتيجية تطوير الصناعات الصغيرة والمتوسطة في العراق 2008.