THE RELATIONSHIP BETWEEN CONTINGENCY FACTORS AND ACCOUNTING INFORMATION SYSTEM, AND ITS SUBSEQUENT IMPACT ON INFORMATION TECHNOLOGY BENEFITS: A SURVEY ON JORDANIAN LISTED COMPANIES

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THE RELATIONSHIP BETWEEN CONTINGENCY FACTORS AND ACCOUNTING INFORMATION SYSTEM, AND ITS SUBSEQUENT IMPACT ON INFORMATION TECHNOLOGY BENEFITS:
A SURVEY ON JORDANIAN LISTED COMPANIES

By

MAHMOUD MOHMAD AHMAD AL-EQAB

Thesis Submitted to the College of Business in Fulfillment of the Requirement for the Degree of Doctor of Philosophy Universiti Utara Malaysia
DEDICATION

I dedicate this effort to the soul of my father Mohmad, who is my wise teacher in this life, my kindhearted mother Mohsenah, my eldest brother Marwan, my beloved wife Elham Alta’ani, my dear brothers Yousef, Motafa, Ala, Sakor, and my dear sisters Nawal, Suad, Na’elah, and Amani.
أهداى ألى:
روح والدي الغالي رحمه الله واسكنه فضيحته
و أمي الحبيبة، أنعم بها من حلوته والحديث عن فضيلتها يطول
و أخى الأكبر مروان، من ضحي براحته ووقته من أجل أسد العيش لمن حوله
و زوجتي الحبيبة الهام: شريكة حياتي ومن تحملت الصعاب من أجل
و أخواتي ألى أعزاء: يوسف ومصطفى وعلاء وصخر
و أخواتي الغاليات: نوال و سعاد و نانى و أماني
اليكم جميعاً أهداً هذا الجهد المواقف
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ABSTRACT

The relationships between contingency factors and information technology (IT) or between contingency factors and accounting information systems (AIS) have been discussed in the literature, both in accounting and information systems disciplines. However, very little is known about the relationship between IT sophistication and AIS design, and the impact of AIS design on IT benefits. Most prior studies also treated IT as a unidimensional variable and focuses on the technological sophistication only. Researchers also measured IT differently. To fill this gap, this study first examines the relationships between three dominant contingency factors found in the literature (IT sophistication, environmental conditions, and business strategy) and the sophistication of AIS design. Second, it examines the impact of AIS design on IT benefits. Importantly, this study focuses on four dimensions of IT sophistication, i.e. technological, informational, functional, and managerial to measure the impact of IT on AIS design. This study also focuses on two dimensions of business strategy, i.e. cost leadership strategy and innovation differentiation strategy. To achieve the objectives of this study, data were collected from 182 companies listed in Jordanian Stock Exchange, which represents about 83% response rate. Initial tests show that the assumptions of reliability, multicollinearity, normality, linearity, and homoscedasticity were met. Multiple regression analysis was then conducted to examine the relationship between contingency factors and AIS design. The results reveal significant and positive relationships between four dimensions of
IT sophistication and AIS design, and between two business strategies and AIS design. While most organizations focus on the technical aspect in information systems project, findings from this study suggest managerial, informational, and functional IT sophistication are more important than the technological aspect in influencing AIS design. Furthermore, cost leadership strategy was found to be more important than innovation differentiation strategy in influencing AIS design. Overall, cost leadership strategy is the most important factor that influence the sophistication of AIS design, followed by, in descending order of importance, managerial IT sophistication, informational IT sophistication, functional IT sophistication, innovative differentiation strategy, and technological IT sophistication. Furthermore, no significant relationship was found between environmental conditions and sophistication of AIS design. Finally, results from linear regression indicate a significant and positive relationship between AIS design and IT benefits. Findings of this study imply that organizations need to have a sophisticated AIS design in order to achieve greater IT benefits. On the other hand, the sophistication of AIS design can be achieved by investing not only in the technological IT sophistication but more importantly the managerial, informational, functional sophistication. Furthermore, business strategies especially cost leadership strategy adopted by organizations would also determined the sophistication of AIS design. In summary, this study has deepened current understanding of AIS design and its influence factors, and has provided useful insights into the sophistication of IT development in Jordan. More
importantly, it opens up possibilities for further studies of AIS in Jordan and other Middle East countries, and on a global basis.
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thesis title</td>
<td>II</td>
</tr>
<tr>
<td>Dedication</td>
<td>III</td>
</tr>
<tr>
<td>Admission</td>
<td>V</td>
</tr>
<tr>
<td>Permission to Use</td>
<td>VII</td>
</tr>
<tr>
<td>Abstract</td>
<td>VIII</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>X</td>
</tr>
<tr>
<td>Table of Contents</td>
<td>XII</td>
</tr>
<tr>
<td>List of Tables</td>
<td>XX</td>
</tr>
<tr>
<td>List of Figures</td>
<td>XXIII</td>
</tr>
<tr>
<td>List of Appendixes</td>
<td>XXIVI</td>
</tr>
<tr>
<td>List of Abbreviation</td>
<td>XXVI</td>
</tr>
<tr>
<td>CHAPTER ONE - INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>1.1 Introduction</td>
<td>1</td>
</tr>
<tr>
<td>1.2 Background of Research Problem</td>
<td>1</td>
</tr>
<tr>
<td>1.3 Research Questions</td>
<td>7</td>
</tr>
<tr>
<td>1.4 Research Objectives</td>
<td>8</td>
</tr>
<tr>
<td>1.5 The Context of the Study</td>
<td>9</td>
</tr>
<tr>
<td>1.6 Significance of the Study</td>
<td>11</td>
</tr>
<tr>
<td>1.7 The Organization of the Remaining Chapters</td>
<td>13</td>
</tr>
<tr>
<td>2.1</td>
<td>Introduction</td>
</tr>
<tr>
<td>2.2</td>
<td>General Information about Jordan</td>
</tr>
<tr>
<td>2.3</td>
<td>Accounting Profession in Jordan</td>
</tr>
<tr>
<td>2.4</td>
<td>Information Technology in Jordan</td>
</tr>
<tr>
<td>2.4.1</td>
<td>Information Technology Development in Jordan</td>
</tr>
<tr>
<td>2.4.2</td>
<td>Obstacles Facing Information Technology Development in Jordan</td>
</tr>
<tr>
<td>2.4.3</td>
<td>The Role of Jordanian Government in Developing Information Technology Sector</td>
</tr>
<tr>
<td>2.5</td>
<td>Literature Related to Accounting Information Systems</td>
</tr>
<tr>
<td>2.5.1</td>
<td>The History of Accounting Information System</td>
</tr>
<tr>
<td>2.5.2</td>
<td>Overview of Information System, Management Information System and Accounting Information System</td>
</tr>
<tr>
<td>2.5.3</td>
<td>Definition of Accounting Information System Research</td>
</tr>
<tr>
<td>2.5.4</td>
<td>Categories of Accounting Information System Research</td>
</tr>
<tr>
<td>2.6</td>
<td>Focus of Accounting Information System Research</td>
</tr>
<tr>
<td>2.6.1</td>
<td>Financial accounting system</td>
</tr>
<tr>
<td>2.6.2</td>
<td>Management accounting systems</td>
</tr>
</tbody>
</table>
2.7 Accounting And Information Technology 48
2.8 Accounting Information System Design 52
2.9 Literature Related to Information Technology 56
2.10 Information Technology Benefits 61
2.11 Contingency Theory 72
2.12 Summary 74

CHAPTER THREE – RESEARCH FRAMEWORK AND METHODOLOGY 75
3.1 Introduction 75
3.2 Research Framework 75
3.3 Major Variables 82
  3.3.1 IT sophistication 82
  3.3.2 Accounting information system design 84
  3.3.3 Perceived information technology benefits 90
  3.3.4 Other contingency factors 93
    3.3.4.1 Environmental Condition 93
    3.3.4.2 Business Strategy 95
3.4 Hypotheses Development 99
  3.4.1 Information technology sophistication and accounting information system design 100
    3.4.1.1 Technological Sophistication and AIS Design 101
    3.4.1.2 Informational Sophistication and AIS Design 102
    3.4.1.3 Functional Sophistication and AIS Design 103
3.4.1.4 Managerial Sophistication and AIS Design 104

3.4.2 Environmental condition and accounting information system design 105

3.4.3 Business strategy and accounting information system design 106

3.4.3.1 Cost Leadership and AIS Design 107

3.4.3.2 Innovative Differentiation and AIS Design 109

3.4.4 Accounting information system design and information technology benefits 110

3.5 Methodology of The Study 112

3.5.1 Research strategies 112

3.5.2 Selection of research strategy 116

3.5.3 The sampling process 118

3.6 Measurement and Questionnaire Design 120

3.6.1 The design of measurements scale 120

3.6.2 The design of the questionnaire 121

3.6.3 The structure of the questionnaire 122

3.6.3.1 Company Profile Questions 126

3.6.3.2 IT sophistication 126

3.6.3.3 Business Strategy Questions 129

3.6.3.4 Perceived Environmental Uncertainty Questions 130

3.6.3.5 AIS Design Questions 131

3.6.3.6 IT Benefits Questions 133
3.7 Instrument Validation

3.7.1 Instrument validity

3.7.2 Instrument reliability

3.8 Summary

CHAPTER FOUR – DATA ANALYSIS AND FINDINGS

4.1 Introduction

4.2 Response Rate

4.3 Test of Non-Response Bias

4.4 Profile of Companies

4.4.1 Industry type

4.4.2 Company age

4.4.4 Use of computers

4.5 Profile of Respondents

4.5.1 Gender

4.5.2 Age

4.5.3 Education level

4.5.4 Length of employment

4.5.5 Length in current position

4.6 IT Sophistication

4.6.1 Number of years using computer-based system

4.6.2 Technological sophistication

4.6.3 Informational dimension of IT sophistication
5.2 Summary and Contribution of Research Findings

5.2.1 Information Technology Sophistication and AIS Design (H1)

5.2.1.1 Technological Sophistication and AIS Design (H1a)

5.2.1.2 Informational Sophistication and AIS Design (H1b)

5.2.1.3 Functional Sophistication and AIS Design (H1c)

5.2.1.4 Managerial Sophistication and AIS Design (H1d)

5.2.2 Environmental Conditions and AIS Design (H2)

5.2.3 Business Strategy and AIS Design (H3)

5.2.3.1 Cost Leadership Strategy and AIS Design (H3a)

5.2.3.2 Innovative Differentiation and AIS Design (H3b)

5.2.4 AIS Design and IT Benefits (H4)

5.3 Implications for Research

5.3.1 Methodological Issues

5.3.1.1 Validation of the Measurement of IT Sophistication

5.3.1.2 Validation of the Measurement of Environmental Condition

5.3.1.3 Validation of the Measurement of Business Strategies

5.3.1.4 Validation of the Measurement of AIS Design

5.3.1.5 Validation of the Measurement of IT Benefits

5.3.2 Theoretical Contribution

5.3.2.1 Contingency Theory and AIS Design

5.3.2.2 AIS Design and IT Benefits
5.4 Implication for Practice 225

5.4.1 The Importance of IT Sophistication 225

5.4.2 The Importance of Certainty Environmental Conditions 225

5.4.3 The Importance of Advantageous Business Strategies 226

5.4.4 The Importance of Sophistication in AIS Design 226

5.5 Limitations and Suggestions for Future Research 227

5.6 Concluding Remarks 231

6. REFERENCES 233
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table:</th>
<th>Description</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2.1</td>
<td>IT benefits updated model constructs</td>
<td>68</td>
</tr>
<tr>
<td>Table 2.2</td>
<td>Summary of literature on IT benefits</td>
<td>69</td>
</tr>
<tr>
<td>Table 3.1</td>
<td>Criterion variables of IT sophistication</td>
<td>84</td>
</tr>
<tr>
<td>Table 3.2</td>
<td>Dimensions of AIS design</td>
<td>85</td>
</tr>
<tr>
<td>Table 3.3</td>
<td>Information characteristics</td>
<td>87</td>
</tr>
<tr>
<td>Table 3.4</td>
<td>IT benefits variables</td>
<td>91</td>
</tr>
<tr>
<td>Table 3.5</td>
<td>Sections of the questionnaire</td>
<td>125</td>
</tr>
<tr>
<td>Table 3.6</td>
<td>IT sophistication items</td>
<td>127</td>
</tr>
<tr>
<td>Table 3.7</td>
<td>AIS design items</td>
<td>131</td>
</tr>
<tr>
<td>Table 3.8</td>
<td>IT benefits items</td>
<td>134</td>
</tr>
<tr>
<td>Table 3.9</td>
<td>Reliability analysis</td>
<td>136</td>
</tr>
<tr>
<td>Table 4.1</td>
<td>Response rate of the questionnaire</td>
<td>139</td>
</tr>
<tr>
<td>Table 4.2</td>
<td>Test of non-response bias</td>
<td>141</td>
</tr>
<tr>
<td>Table 4.3</td>
<td>Industry type</td>
<td>142</td>
</tr>
<tr>
<td>Table 4.4</td>
<td>Company age</td>
<td>143</td>
</tr>
<tr>
<td>Table 4.5</td>
<td>Number of companies using computers</td>
<td>144</td>
</tr>
<tr>
<td>Table 4.6</td>
<td>Gender of respondents</td>
<td>144</td>
</tr>
<tr>
<td>Table 4.7</td>
<td>Age of respondents</td>
<td>145</td>
</tr>
<tr>
<td>Table 4.8</td>
<td>Education level of respondents</td>
<td>146</td>
</tr>
</tbody>
</table>
Table 4.9  Length of employment 146
Table 4.10 Length in current position 147
Table 4.11 Number of years using computer-based systems 148
Table 4.12 Type of technologies 149
Table 4.13 Distribution of total number of information technology adopted 150
Table 4.14 Computer applications 151
Table 4.15 Distribution of total number of applications adopted 153
Table 4.16 Functional sophistication 155
Table 4.17 Managerial sophistication 156
Table 4.18 Cost-leadership strategy 157
Table 4.19 Innovative differentiation strategy 158
Table 4.20 Environmental conditions 159
Table 4.21 AIS design 160
Table 4.22 IT benefits 162
Table 4.23 Factor analysis for functional sophistication 166
Table 4.24 Factor analysis for managerial sophistication 169
Table 4.25 Factor analysis for cost leadership strategy 171
Table 4.26 Factor analysis for environmental conditions 173
Table 4.27 Factor analysis for AIS design 175
Table 4.28 Factor analysis for IT benefits 178
Table 4.29 Pearson correlations for independent variables and 181
dependent variables

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.30</td>
<td>Tolerance value and the variance inflation factor</td>
<td>182</td>
</tr>
<tr>
<td>4.31</td>
<td>Reliability analysis</td>
<td>183</td>
</tr>
<tr>
<td>4.32</td>
<td>Statistic values of skewness and kurtosis ratios (descriptive statistics)</td>
<td>187</td>
</tr>
<tr>
<td></td>
<td>(n = 180)</td>
<td></td>
</tr>
<tr>
<td>4.33</td>
<td>Cohen’s guideline of correlation strength</td>
<td>192</td>
</tr>
<tr>
<td>4.34</td>
<td>Summary of correlations of variables</td>
<td>192</td>
</tr>
<tr>
<td>4.35</td>
<td>Results of multiple regression between contingency factors and AIS design</td>
<td>196</td>
</tr>
<tr>
<td>4.36</td>
<td>Results of multiple regression between AIS design and IT benefits</td>
<td>197</td>
</tr>
<tr>
<td>4.37</td>
<td>Summary of results</td>
<td>203</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 2.1</td>
<td>Literature mapping model.</td>
<td>16</td>
</tr>
<tr>
<td>Figure 2.2</td>
<td>The Delone and McLean Model (1992)</td>
<td>64</td>
</tr>
<tr>
<td>Figure 2.3</td>
<td>The DeLone and McLean updated model (2003)</td>
<td>67</td>
</tr>
<tr>
<td>Figure 3.1</td>
<td>The outline of research model</td>
<td>81</td>
</tr>
<tr>
<td>Figure 3.2</td>
<td>The enhanced research model</td>
<td>99</td>
</tr>
<tr>
<td>Figure 4.1</td>
<td>Scree plot of functional sophistication</td>
<td>168</td>
</tr>
<tr>
<td>Figure 4.2</td>
<td>Scree plot of managerial sophistication</td>
<td>170</td>
</tr>
<tr>
<td>Figure 4.3</td>
<td>Scree plot of cost leadership strategy</td>
<td>172</td>
</tr>
<tr>
<td>Figure 4.4</td>
<td>Scree plot of environmental conditions</td>
<td>174</td>
</tr>
<tr>
<td>Figure 4.5</td>
<td>Scree plot of AIS design</td>
<td>177</td>
</tr>
<tr>
<td>Figure 4.6</td>
<td>Scree plot of IT benefits</td>
<td>179</td>
</tr>
<tr>
<td>Figure 4.7</td>
<td>Linearity test for AIS design</td>
<td>185</td>
</tr>
<tr>
<td>Figure 4.8</td>
<td>Homoscedasticity test for AIS design</td>
<td>186</td>
</tr>
<tr>
<td>Figure 4.9</td>
<td>Normality test for AIS design</td>
<td>188</td>
</tr>
<tr>
<td>Figure 4.10</td>
<td>Linearity test for IT benefits</td>
<td>189</td>
</tr>
<tr>
<td>Figure 4.11</td>
<td>Homoscedasticity test for IT benefits</td>
<td>190</td>
</tr>
<tr>
<td>Figure 4.12</td>
<td>Normality test for IT benefits</td>
<td>191</td>
</tr>
</tbody>
</table>
### LIST OF APPENDIXES

<table>
<thead>
<tr>
<th>Appendix</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix A: Questionnaire distributed to accountants of Jordanian listed companies</td>
<td>276</td>
</tr>
<tr>
<td>Appendix B: Test of Non-response Bias</td>
<td>287</td>
</tr>
<tr>
<td>Appendix C: Factor analysis results</td>
<td>289</td>
</tr>
<tr>
<td>Appendix D: Reliability Results</td>
<td>307</td>
</tr>
<tr>
<td>Appendix E: Regression Analysis Results</td>
<td>315</td>
</tr>
</tbody>
</table>
LIST OF ABBREVIATION

IT = Information Technology
AIS = Accounting Information System
IS = Information System
MIS = Management Information System
MAS = Management Accounting System
FAS = Financial Accounting System
CHAPTER ONE

INTRODUCTION

1.1 INTRODUCTION

This chapter introduces the chapter agenda of this study. It outlines the background of the research problem, research questions, research objectives, the context of the study, the significance of the study, and the organization of the remaining chapters.

1.2 BACKGROUND OF RESEARCH PROBLEM

Accounting information system (AIS) is an important component of modern information system (IS) (Mitchell, Reid, & Smith, 2000). Developments in the areas of accounting, information technology (IT) and IS over the last three decades have widened the scope and roles of AIS. For example, the introduction of new accounting model such as Resources-Events-Agents (REA) and the emergence of new technology such as relational and object-oriented database have transformed the way business people view AIS (Ismail & King, 2005). The REA accounting model which is based on economic changes rather than debits and credits as in traditional accounting model (McCarthy, 1982) has made it possible for modern AIS to capture not only historical and financial-related data but also non-financial and future-oriented data (Mauldin & Ruchala, 1999). Furthermore, the evolution of client-server
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6. REFERENCES


