The adoption and diffusion of internet-electronic data interchange (I-EDI) by Jordanian SMEs

Anas A. Al-Bakri
University of Wollongong

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THE ADOPTION AND DIFFUSION OF INTERNET-ELECTRONIC DATA INTERCHANGE (I-EDI) BY JORDANIAN SMES

* A thesis submitted in partial fulfilment of the requirements for the award of the degree

(DEGREE OF MASTER BY RESEARCH)

From

UNIVERSITY OF WOLLONGONG

By

ANAS A. AL-BAKRI

B.Sc. of Business Administration (coursework)
Master of Banking and Financial Sciences (coursework)
Master of Applied Finance (coursework)
CERTIFICATION:

I, Anas A. Al-bakri, declare that this thesis, submitted in partial fulfilment of the requirements for the award of Master Degree, in the Department of Information Systems, University of Wollongong, is wholly my own work unless otherwise referenced or acknowledged. The document has not been submitted for qualifications at other academic institution.

Anas A. Al-bakri

10 August 2007
CONTENTS OF RESEARCH:
LIST OF TABLES & FIGURES:
ACKNOWLEDGEMENT:
ABSTRACT:

CHAPTER ONE: INTRODUCTION

1.1. INTRODUCTION AND BACKGROUND OF STUDY:
1.2. PURPOSE AND OBJECTIVES OF THE STUDY:
1.3. IMPORTANCE OF THE STUDY:
1.4. STATEMENT OF THE PROBLEMS:
1.5. RESEARCH APPROACHES:
(1) Theoretical Analysis:
(2) Case Study Analysis:
(3) Data Analysis Approach
1.6. OVERVIEW OF THE STUDY:

CHAPTER TWO: LITERATURE REVIEW

2.1 INTRODUCTION:
2.2 BACKGROUND OF STUDY:
2.3 SMALL AND MEDIUM ENTERPRISES (SMEs):
   - SMEs Definition
   - Nature of SMEs
   - Features of SMEs
   - IT Adoption in SMEs
   - Factors Affecting Adoption
2.4 SMEs IN JORDAN:
   - SMEs Definition
   - IT Adoption in SMEs in Jordan
   - Overview of Internet technology in Jordan
     - Internet ADSL in Jordan
     - Internet Dialup in Jordan
     - Internet Leased Line in Jordan
I-EDI Adoption by Jordanian SMEs

- Web Hosting & E-mail Server Hosting in Jordan 26
  - Factors affecting adoption in Jordan 26

2.5 ELECTRONIC DATA INTERCHANGE (EDI):
  2.5.1 Definition of EDI 29
  2.5.2 Structure and Process of EDI system 32
  2.5.3 Factors Motivating of EDI 33
  2.5.4 Usage of EDI 34
  2.5.5 Benefits of EDI 36
  2.5.6 Risks and Barriers of EDI 42

2.6 VALUE ADDED NETWORK (VAN):
  2.6.1 Benefits of VAN 45

2.7 EDI ADOPTION BY SMEs:
  2.7.1 Factors affecting SMEs adoption of EDI 52

2.8 EDI ADOPTION IN JORDAN:

2.9 INTERNET-ELECTRONIC DATA INTERCHANGE (I-EDI):
  2.9.1 EDI and the Internet 54
  2.9.2 Origin and Definition of I-EDI 55
  2.9.3 Benefits of I-EDI Adoption 56
  2.9.4 Strategies of I-EDI 59

2.10 INTERNET-EDI ADOPTION BY DEVELOPED COUNTRIES:

2.11 INTERNET-EDI ADOPTION BY SMEs:
  2.11.1 I-EDI System Adoption’s Model and Factors 67
  2.11.2 I-EDI Drivers in SMEs 73
  2.11.3 Advantages and Disadvantages of I-EDI adoption by SMEs 74

2.12 INTERNET-EDI ADOPTION IN DEVELOPING COUNTRIES (JORDAN):

CHAPTER THREE: METHODOLOGY

3.1 PURPOSE OF STUDY: 84

3.2 PURPOSE OF CHAPTER: 84

3.3 RESEARCH METHODS AND TECHNIQUES:
  - Sampling Techniques 85
CHAPTER FOUR: RESULTS OF STAGE TWO

4.1 PURPOSE OF STUDY:
4.2 OVERVIEW AND DISCUSSION:

CHAPTER FIVE: ANALYSIS OF RESULTS OF STAGE THREE

5.1 INTRODUCTION
5.2 ANALYSIS RESULTS
  5.2.1 Perceived Benefits
  5.2.2 Organizational Factors
  5.2.3 Barriers and Risks
  5.2.4 Cultural Factors
  5.2.5 Governmental Factors and Policies
5.3 DISCUSSION OF RESULTS

CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS:

6.1 BACKGROUND AND PURPOSE OF STUDY:
  6.1.1 Major Findings in Literature
  6.1.2 Overall findings
6.2 LIMITATIONS AND CONTRIBUTION:
6.3 CONCLUSION:
6.4 RECOMMENDATIONS:
6.5 FUTURE RESEARCH:

REFERENCES LIST:

APPENDIX:

A - GLOSSARY: DEFINITION OF TERMS:
B - INTERVIEWS’ QUESTIONS & POINTS:
LIST OF TABLES & FIGURES:

**TABLES:**

Table (2.1) Summary of ISPs services in Jordan: 23

Table (2.2) Internet ADSL service providers and rates in Jordan: 24

Table (2.3) Internet Dialup services providers and rates in Jordan: 25

Table (2.4) Attributes and sources of reference for the measures of E-commerce (B2B, I-EDI) adoption in developed countries 80

Table (5.1) Summaries of Findings Results from Research’s Interviews: 118

**FIGURES:**

Figure: (2.1) The relationships of factors that influence Adoption and impact of EDI on small business: 48

Figure (2.2): Web-Based exchange: 60

Figure (2.3): EDI adoption model’s factors. 72
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ABSTRACT

Electronic Data Interchange (EDI) is a protocol that enables businesses to exchange information and business transactions via proprietary networks. The early application of traditional EDI was quickly supplanted by an Internet-based (Internet-EDI) version, as this is much cheaper and more flexible.

This research explores both the factors influencing adoption as well as barriers preventing adoption of I-EDI by Jordanian companies, particularly those in the SME sector. These factors include Organizational, Inter-organizational, Technical, Cultural factors, Governmental factors, Perceived benefits, Triggers and Barriers. The research design was an explorative case study of Jordanian SMEs with data collected via interviews. The sample (participants) included a diverse range of companies, employing between 2 and 120 people. The participants of the research interviews came from six Jordanian companies (SME sector). The research was comprised of three stages: Theoretical Analysis (Stage One), Qualitative Data Collection (Stage Two) and Data Analysis and Interpretation (Stage Three).

The analysis of primary data (phone interviews) revealed that many salient factors impacted I-EDI adoption. Benefits of I-EDI, Barriers to I-EDI, Organizational, Inter-organizational Factors, Cultural (Environmental), and Governmental Factors were presented as important issues for I-EDI adoption by the Jordanian SME sector, particularly Cultural and Governmental Factors.

The research also shows that the global competitiveness of Jordanian SME may depend on how quickly they move forward to embrace I-EDI.

Further research is necessary to better understand the status of the I-EDI adoption and diffusion among SMEs in Jordan and the impact of the factors identified here on performance and efficiency.