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

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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

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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.