A STUDY OF IT FACILITIES AND E-BUSINESS SYSTEM ADOPTION IN LIBYAN MANUFACTURING COMPANIES

ANWAR AHMED MOHAMMED

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ANWAR AHMED MOHAMMED

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ABSTRACT

It is generally believed that larger manufacturing organizations respond more swiftly to changes in the global market place because they have better resources at their disposal. These companies are therefore able to remain competitive by formulating the appropriate corporate strategies and making investments which enable them to maintain their strategic position. An opinion based on the activities of such organizations might be misleading in validating a country's manufacturing strategy.

This research gives an account to Libyan Manufacturing Companies and their adoption of IT facilities and E-business within the Industry. A sample of hundred questionnaires was sent to Libya, only sixty were returned. The results demonstrate that LMCs do not only require the usability of IT facility to enhance their workforce activities; but also some interests into Managerial, leadership, and technical skills as well.

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GLOSSARY OF TERMS

B2B	Business-To- Business
B2C	Business-To-Commerce
DfES	Department for Education and Skills
DTI	Department for Trade and Industry
E-	Electronic
ICT	Information and Communication Technology
IT	Information Technology
LD	Libyan Dinnar
LMCs	Libyan Manufacturing Companies
MC	Manufacturing Company
MENA	Middle-East and North-Africa
OECD	Organization for Economic Co-operation and Development
R&D	Research and Development
SCM	Supply Chain Management
SPSS	Statistical Package for Social Sciences
UK	United Kingdom
US	United States

CHAPTER ONE
INTRODUCTION

1.0 Introduction

The world market for manufactured goods is growing, and will continue to grow but manufacturing globally is undergoing rapid change. The industrial countries of big nations such as Western Europe and North America face increasing competition from lower cost but increasingly sophisticated producers around the world. Moreover, as competition escalates in the world market place, an extraordinary economic shift with rapid growth and development across China, India and the former Eastern bloc can be witnessed. All this is due to the fact the reduction of tariff barriers and transport costs, easier communications and increased capital flows have allowed low wage countries to compete more effectively, shifting production away from advanced industrialized nations such as Britain, the US and mainland Europe (DTI, 2004).

Manufacturing companies' workforce flexibility has its inherent advantage in developing a multi-skilled, team-based workforce. According to McCreery et, al. (2004), workforce flexibility in manufacturing sector is centered on cross-training the workforce using appropriate operational guidelines to determine the expected skill sets in each team and how many skills each member of the team should be trained for in order for the team to deliver optimal performance.

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The supporting infrastructure of adopting IT facility is adequate for developing a highly skilled workforce which would bring about the desired high value added workplaces. However, there is a need for review of some of the initiatives in place as discussed in this chapter which would result in improving the effectiveness of implementation of the new technology.

References

Baldwin, J. R. Gray, T. and Johnson, J. (1995). Technology Use, Training and Plant- Specific Knowledge in Manufacturing Establishments, *Statistics Canada*, No. 86

Bradley, S. and Taylor, J. (1996). Human Capital Formation and Local Economic Performance, *Regional studies*, 30 (1), p. 1

Caroli, E. Greenan, N. and Guellec, D. (2001). Organisational Change and Skill Accumulation, *Industrial corporatecChange*, 10 (2), p. 481

Chen, K. (2000). Designing-in of High Value for Manufacturers in the New Millennium, *Integrated manufacturing systems*, 11 (6), p. 417

Corvers, F. (1997). The Impact of Human Capital on Labour Productivity in Manufacturing Sectors of the European Union, *Applied economics*, 29, p. 975

Department for Education and Skills, (2003). *The Future of Higher Education*, HMSO, Norwich

Department for Trade and Industry, (2002). *The Government's Manufacturing Strategy,* HMSO, UK

Department for Trade and Industry, (2004). *Review of the Government's Manufacturing Strategy, Competing in the Global Economy – The Manufacturing Strategy Two Years On*, HMSO, UK.

Geroski, P. Machin, S. and Van Reenan, J. (1993). The Profitability of Innovating Firms, *The rand journal of economics*, 24 (2), p. 198

Hajji N. (2001). "*Stratégie e-Maroc: Les 10 chantiers de la Stratégie e-Maroc 2001–2002.*" Presented at the Symposium e-Maroc, Casablanca, October 8, 2001.

Livesey, F. (2006), *Defining High Value Manufacturing*, Institute for Manufacturing, University of Cambridge, UK.

McCreery, J.K. Krajewski, L. Leong, G.K. and Ward, P.T. (2004). Performance implications of assembly work teams, *Journal of operations management*, 22, p. 387

Petry, C. (2002). TIMET Institutes Supply Chain Improvements, *Metal center news*, 42 (8), p. 38

Roy, S. (1989). Creating Innovative Corporate Cultures, *Innovation*, 49, p. 40

Ryan, N. (1996). Technology Strategy and Corporate Planning in Australian High-Value-Added Manufacturing Firms, *Technovation*, 16 (4), p. 195

Tether, B. Mina, A. Consoli, D. and Gagliardi, D. (2005). *A Literature Review on Skills and Innovation, ESRC Centre for Research on Innovation and Competition*, University of Manchester, Manchester

Uma Sekaran (1999) *Research Methods for Business: A Skills-Building Approach (Third edition).* Toronto: John Wiley.

Watson, M. and Vandervell, N. (2006). *Meeting Our Energy Needs: The Future of UK Oil Refining*, United Kingdom Petroleum Industry Association Limited, London

Wilson, R. Homenidou, K. and Dickerson, A. (2006). *Working Futures 2004-2014 National Report*, Institute for Employmenr, Research, University of Warwick,
Coventry

Zahlan, A. (1999). *Arabs and the Challenges of Science and Technology*: Progress Without Change. Beirut: Centre for Arab Unity Studies (CAUS).