

**THE IMPACT OF INFORMATION AND INFORMATION
SYSTEMS ON MENERGAIL DECISION MAKING: THE CASE
OF TELECOMMUNICATION SECTOR IN JORDAN**

YAZAN EMNAWER QTEESH

UNIVERSITI UTARA MALAYSIA

2011

**The Impact of information and information systems on managerial
decision making: The Case of Telecommunication sector in Jordan**

**A thesis submitted to the Faculty of Management
In partial fulfillment of the requirements for the degree
Master of Science (Management)
Universiti Utara Malaysia**

By

Yazan Emnawer Qteesh Al haraisa

(803994)

January, 2011



KOLEJ PERNIAGAAN
(College of Business)
Universiti Utara Malaysia

PERAKUAN KERJA KERTAS PROJEK
(Certification of Project Paper)

Saya, mengaku bertandatangan, memperakukan bahawa
(I, the undersigned, certified that)

YAZAN EMNAWER QTEESH AL HARAISA (803994)

Calon untuk Ijazah Sarjana
(Candidate for the degree of) **MASTER OF SCIENCE (MANAGEMENT)**

telah mengemukakan kertas projek yang bertajuk
(has presented his/her project paper of the following title)

**THE IMPACT OF INFORMATION AND INFORMATION SYSTEMS ON MANAGERIAL DECISION
MAKING: THE CASE OF TELECOMMUNICATION SECTOR IN JORDAN**

Seperti yang tercatat di muka surat tajuk dan kulit kertas projek
(as it appears on the title page and front cover of the project paper)

Bahawa kertas projek tersebut boleh diterima dari segi bentuk serta kandungan dan meliputi bidang ilmu dengan memuaskan.

(that the project paper acceptable in the form and content and that a satisfactory knowledge of the field is covered by the project paper).

Nama Penyelia : **MR. ABDUL MANAF BIN BOHARI**

(Name of Supervisor)

Tandatangan : _____
(Signature)

Tarikh : **24 JANUARY 2011**
(Date)

ABDUL MANAF BOHARI
SENIOR LECTURER
COLLEGE OF BUSINESS
NO. 315, MAIN BUILDING
UNIVERSITI UTARA MALAYSIA
06010 UUM SINTOK, KEDAH DARUL AMAN
TEL: 04-9285277 (OFFICE), 019-4243648 (HP)

PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for the postgraduate degree of Master of Science (Management) from the Universiti Utara Malaysia, I agree that the University's library may take it freely available for inspection. I further agree that the permission for copying of this thesis in any manner, in whole or in part, for scholarly purpose may be granted by my supervisor or, in his absence, by the Dean of the College of Business. It is understood that any copy or publication or use of this thesis or parts thereof for financial gain shall not be allowed without my written permission. It is also understood that due recognition shall be given to me and to the Universiti Utara Malaysia for any scholarly use which may be made of any material from my thesis.

Request for permission to copy or make other use of material in this thesis in whole or in part should be addressed to:

**Dean (Research and Post-Graduate)
College of Business
Universiti Utara Malaysia
06010 UUM Sintok
Kedah DarulAman
Malaysia**

ABSTRACT

The study investigates relationship between management information systems, information technology systems and managerial decision making in the telecommunication sector in Jordan. A survey questionnaire was sent to IS managers, IS directors, IS professionals and staff in private company based in Jordan. The findings of the study reveal that there is a positive relationship between management information systems and managerial decision making. The study also found that there is a positive relationship between information technology systems and managerial decision making. On other hand in this study there are two types of statistical analyses that were carried out on the data obtained from the respondent. First, descriptive analysis was used to analyze the background of the respondent and the private companies; second, correlation analysis was used to analyze the relationship between management information systems, Information Technology systems and managerial decision making. And the Data were collected through questionnaires from the respondents of telecommunication sector in Jordan and the data were collected from the respondent by using structured questionnaires. A total 150 questionnaires for the study were distributed to the respondents by e-mail and also by hand. Out of 150 the questionnaires distributed, 135 were returned on 8 January 2010. The data of 150 participants are potentially available for analysis. Analyses were conducted using descriptive statistics and correlation analysis.

Key words: Decisions making, Information Technology, Management Information Systems

ACKNOWLEDGEMENT

I would begin by praise and gratitude to Almighty Allah for given me the strength and knowledge He gave me to carry out the academic work.

Also, my deeply thankful to my supervisor, Mr. Abdul Manaf Bohari for the unyielding support she gave to me in order to produce this write-up. I appreciate his efforts because he offered me all the necessary guidelines i needed in order to achieve this academic task.

My heartfelt thanks to my father who has always been there for me, my mother, my family, and friends for all the encouragements they gave to me during this study.

Finally, Special thanks to all our respondents for giving us answers to our questionnaires and those who gave extra support in making my work have a better quality.

TABLE OF CONTENT

PERMISION TO USE.....	I
ABSTRACT.....	II
AKNOWLEDGEMENT.....	III
TABLE OF CONTENT.....	IV
LISTE OF TABLES.....	VIII
LIST OF FIGURES.....	IX
LIST OF ABBREVIATIONS.....	X

CHAPTER ONE

INTRODUCTION

1.1	Introduction.....	1
1.2	Problem statement.....	3
1.3	Research question.....	4
1.4	Research objective.....	4
1.5	Significance of the study.....	4
1.6	Scope of study.....	5
1.7	Definition of term.....	5
1.8	Study Structure.....	7
1.9	conclusion	7

CHAPTER TWO
LITERATURE REVIEW

2.1	Introduction	8
2.2	The Concept of Decision.....	8
2.2.1	Stages of Decision-Making Process	10
2.2.2	Characteristics of Decision-Making Process.....	14
2.3	Managerial Decision Making.....	16
2.3.1	Type of Decision	17
2.4	Concept of Information.....	18
2.4.1	Characteristics of Information Necessary for Decision-Making Process.....	19
2.4.2	Sources of Information for Decision-Making.....	21
2.5	Information System.....	23
2.6	Management Information Systems.....	27
2.6.1	Types of Management Information Systems.....	29
2.7	Information Technology.....	31
2.8	Research Framework.....	34
2.9	The Hypotheses.....	35
2.10	Conclusion.....	35

CHAPTER THREE
RESEARCH METHODOLOGY

3.1	Introduction.....	36
3.2	Research Design.....	36
3.3	Sample of the Study.....	37
3.4	Data Collection.....	37
3.5	Survey Instrument.....	37
3.6	Method of Analysis.....	39
3.7	Techniques of Data Analysis.....	39
3.8	Conclusions.....	39

CHAPTER FOUR
RESULTS OF THE STUDY

4.1	Introduction.....	40
4.2	Demographic analysis.....	41
4.2.1	Gender.....	42
4.2.2	Age.....	42
4.2.3	Level of education.....	42

4.2.4	Job level.....	44
4.2.5	Location of the departments.....	45
4.2.6	Years of experience.....	46
4.3	Descriptive analysis.....	47
4.4	Correlation analysis and hypothesis testing.....	50
4.4.1	Hypothesis (H1).....	50
4.4.2	Hypothesis (H2).....	51
4.5	Conclusion.....	53

CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.1	Introduction.....	54
5.2	Discussion	54
5.3	Implication of the study.....	55
5.4	Limitation of the study.....	56
5.5	Recommendation for future research.....	57
5.6	Conclusion.....	57

LISTE OF TABLES

4.1 Gender.....	41
4.2 Age.....	42
4.3: Level of education.....	43
4.4: Job Level	44
4.5: Location of Departments.....	45
4.6: Years of experience.....	46
4.7 Descriptive Statistics (Mean and Std. Deviation) for Management Information Systems.....	47
4.8 Descriptive Statistics (Mean And Std. Deviation) For Information Technology Systems.....	48
4.9 Descriptive Statistics (Mean and Std. Deviation) Managerial Decision Making.	49
4.10: correlation between management information systems and managerial decision making	51
4.11: correlation between information technology systems and managerial decision making.....	51
4.12: summary of hypothesis testing.....	52

LIST OF FIGUER

Figure 1.1: Conversion of data into information for decision-making process	19
Figure1.2: Scheme between the channels to move information.....	22
	34
Figure 1.3: Research Framework.....	
Figure 4.1: Gender	41
Figure 4.2: age	42
Figure 4.3: Level of education	43
Figure 4.4: Job Level	44
Figure 4.5: Location of Departments	45
Figure 4.6: Years of experience	46

CHAPTER ONE

1.1 Introduction

This century is different from the previous centuries because rapid and development in various fields of life and work within different economic sectors, the last of these developments, the so-called information revolution, which resulted as one of the important resources in different organizations. And management information systems are systems by which access to information, organization and processed as required and maintained. However, information technology is the reliable mean in information systems and its function. Information systems have become vital and important to all organizations, public and private sectors. This importance in information systems have recently increased as a result of the increasing complexity in the tasks of management organizations, and this complexity in the tasks refers to the affected organizations by environmental variables, whether economic, political or social, in which it operates, not only within the community, but also across communities and different state. And the successive, continuous and rapid methods and tools in the production of technological developments and transferring of information have increased the severity of complexity. Furthermore, the emergence of organizational forms like new giant corporations, international organizations, and multinational companies, have intensified competition and gravity, which may be necessary to take decisions quickly and effectively to enable the organization to continue in the competition and maintain its distinctive in the market.

The exploitation of opportunities and avoidance of threats and solving problems often begin through the decision-making processes, it has made efforts to improve the decision-making process and required for the collection, sorting, tabulating and analyzing the data,

The contents of
the thesis is for
internal user
only

References

- Ajayi, I.A. and F.F. Omirin, (2007). The use of Information Systems (MIS) in decision making in the South-West Nigerian Universities. *Educ. Res. Rev. J.*, 2: 109-116.
- Alhusniah, salim. (1998) management information system basics. First publisher. Waraq.
- Aqil, amil. (1996). Using information systems as a competition tool in Jordanian banking: case study. Al yarmouk university, irbid, Jordan.
- Al Bakri. Surya, Musalam. Abdul Hadi. (1998) introduction to MIS. Al shuaa publisher. Al iskandriah. EGYPT.
- Alsabagh, imad abdul wahab, (1996) computer within bussines administration: system, application, management. Library of dar althaqafah for publish, amman, Jordan.
- Alshamaa, khalil mohamad Hassan(1991). Management prencipilse with concentration on bussines admistration. Firt print, alkhulud publisher. Baghdad, Iraq.
- Alkilany, Othman and byati and hlal (2000). Approach to information system, first editin, dar almanahij for publishing, amman, Jordan.
- Ayoub, Nadia habib. (2000) the efficiency of technical information by perspective of beneficiary in Saudi small industries . *sience managemt.* 27(1): 161-185.
- Alkharabsheh, omar mohamad, (2002) youngers and the arts of decision making. Amman. Jordan
- Alsalmi. Alla abdul razzaq. (2000) information technology, second edition. Almanahij publisher, amman, Jordan.
- Alsultan, Ibrahim (2000) management information system (system approach), aldar aljamiyah, iskandaryah, Egypt
- Alsalmi, ali (1997) management of human behavior, dar gharib publisher, kahira, Egypt.
- Abdul fatah, nabil abdul hafith, (1995) the effect of organizing improvements on effective of decisions ability in service sector. Oman, value 4.

- Abdul hadi, mohamad fathi (1995), the information rule in decision making process and risk management, information Arabic magazine, 16 (2): 29-5.
- Abdul wahab, mohamad rifaat, Othman (2000) essentials of public management, dar almatbuaat. Iskandariah, Egypt.
- Alalawneh, ali ahmad. (2001) the effect of using computing information system: case study. Yarmouk university, irbid, Jordan.
- Alomary, (2001) analizing the reasons of defect in decision making process within Jordanian public sector, explorative study, alyarmouk university, irbid, Jordan.
- Al mashriqy, Hassan ali. (1997), the theory of decision making, dar almasirah publisher, amman.
- Ashill. N.J. and Jobber, D. (2001). Defining the Information Needs of Senior Marketing Executives: an Exploratory Study. *Qualitative Market Research: An International Journal*. 4(1): 52-61. Jordan.
- Al masri, ahmad (2000). Modern management, communication, information and decisions, youngers institution, qahira, Egypt.
- Al mouwsawy, minim zamzir (1998) management decision making, first edition, dar al yazoury publisher, amman, Jordan.
- Al- Gamdi, S.M.(1998). Obstacles to Successful Implementation of Strategic Decision: the British Experience. *European Business Review*, 98(6) 322-327.
- Burhan, Mohamad Nour, Waraq, Ghazi Ibrahim. (1998) information system computing. First publisher. Dar al manahij publisher. Amman. Jordan.
- Basi, R.S. (1998). Administrative Decision-Making: A Contextual Analysis. *Management Decisions*, Vol. 36, No. 4, PP. 232- 240.
- Bridge, J. (1989). *Managerial Decisions with the Micro computers*. Philip Allan, Oxford
- Cheney, H. and Dickson, W. (1982). Organizational Characteristic and Information Systems: An Exploratory Investigation. *Academy of Management Journal*. 25(1): 170-1284.

- Chen, Q. and cheng, H (2008). Research on resource –Based management information system competencies and strategy.
- Daft, R.L. & Sormunen, J. and Parks, D. (1988). Chief Executivescanning Environmental characteristics and Company Performance: Empirical study. *Strategic Management Journal*, Vol. 9, No. 1, PP.123-139.
- Daft, R.L. (1989). *Organization Theory and Design*. Third Ed., West Publishing Co. St.Paul.
- Daft. R. (1992). *Organization theory and Design*. N.Y. West Publishing Co.
- Dean, J.W. and Sharman, M.P. (1996). Dos Decision- Process Matters? A Study of Strategic Decision - Making Effectiveness, *Academy of Management Journal*. 39(2): 368-396.
- Delbecq, A.L. (1967). The management of Decision - Making within the Firm: Three strategies for three types of Decision - Making. *Academy of Management Journal*, December, PP. 329- 339, in Harrison, E.F. the Managerial Decision Making process, third Edition Houghton Mifflin, Co. 1987.
- Drucker, P. F.(1967). *The Effective Executive*. Harper and Row Publisher, New York.
- .Farid, osamah, aljoundy, hasan, (1991) *management decisions making*, ain shams university, Egypt.
- Gallen, T. (1997). The Cognitive style and strategic Decisions of Managers. *Management Decision*, Vol. 35, No. 7, PP. 541-551.
- Goodman, S.K. (1993). Information Needs for Management Decision - Making. *Records Management Quarterly*, 27(4): 12. Gordon, G. & Pressman, I .1978. *Quantitative Decision Making*. Prentice- Hall, Englewood Cliffs, N J.
- Gore, WJ. and Mitchel. T.R. and Wright, B. (1992). *Decision-Making, Research: some Prospects and Limitations*, In Harrison, E.F. *The Managerial Decision Making Process*, third Edition, Houghton Mifflin, Co. 1987.
- Grieves, M. (1998). The Impact of Information use on Decision -Making: Studies in Five Sectors. *Library Management*, 19(2): 78-85.

- Haddad, L. (1996) The Characteristics of Decision Making in a well -functioning Economy. *International Journal of Social Economics*, Vol. 23, No. 4/5/6. PP. 207-220.
- Harrison, E.F. & Pelletier, M.A. (1997). Managerial Attitudes Towards Strategic Decisions: Maximizing Versus Satisfying Outcomes.
- Harrison, E.F. (1987) The Managerial Decision - Making Process. Third Ed. Houghton Mifflin Co.
- Harrison, E.F. (1992). Some Factors Involved in Determining Strategic Decisions Success. *Journal of Management*. 17(3): 72-87.
- Harrison, E.F. (2000). Levels of strategic Decision Success. *Management Decision*, Vol. 38, No. 2.
- Heracleous, L. Th. (1994). Rational Decision- Making: Myth or Reality?, *Management Development Review*. Vol. 7, No. 4, PP. 16-23.
- Hickson, D. J. (1989). Decision and Organization: Processes of Strategic Decision Making. *Public Administration (UK)*, winter, Vol. 67, No. 4. PP. 373-391.
- .Hreim hussain and others. (1998) management principles. First print dar alhamid publisher, Amman, Jordan.
- Kapur, S.K. (1994). *General Management* First Ed. S.K. Publishers. New Delhi.
- Karim, N.S.A., Darus, S.H., and Hussin, R. (2006). Mobile phone applications in academic Library services: a students' feedback survey, *Campus-Wide Information Systems*, 23(1), 35-51.
- Kuoa, Y.K. and K.D. Ye, (2010). How employees' perception of information technology application and their knowledge management capacity influence organizational performance.

- Longenecker, J. G. Pringle, CD. (1984). *Management Sixth Ed.* Charles E. Merrill Publishing Co., Columbus, Ohio.
- Laudon, K. and J. Laudon, (2009). *Management Information Systems. 11th Edn.*, Prentice Hall, Upper Saddle River, New Jersey, ISBN: 13: 978- 0136078463, pp: 627.
- Musalam, ali (1996) *management information system, the center of management sustainable*, iskanadariah university, Egypt.
- Mcleod, R. (1990). *Management Information Systems: A Study of Computer - Based Information Systems. 4th- ed.* N.Y. Macmillan Publishing Co.
- Mintezberg. D.R. & Threat. (1976). *The structure of Unstructured Decision Processes. Administrative science Quarterly*, Vol. 21, No.1, PP. 246-275.
- Moody, P.H. (1988). *Decision-Making: Proven Methods for Better Decisions.* McGraw-Hill Inc., NY.
- Mitton, C., C. Adair, et al. (2007). "Knowledge transfer and exchange: review and synthesis of the literature." *Milbank Quarterly* 85(4): 729-768.
- Moore, C.L. (1982). *Executives in Actions (A Guide to Balanced Decision - Making in Management).* Macdonald & Evans Ltd, London.
- Morton, R. (1978). *Social Theory and Social Structure.* Free Press, New York.
- Pelletier, M.A. (1998). *A Paradigm for strategic Decision Success. Management Decision*, Vol. 33, No. 7, PP. 53-59.
- Rogers, P. and M. Blenko (2006). "Who has the D? How clear decision roles enhance organizational performance." *Harvard business review* 84(1): 52.
- Ross, J. E. (1977). *Decision Traps: the Ten Barriers to Brilliant Decision Making and How to Overcome them*, Simon and Schuster Inc. New York.
- Rauch, E. (1996). *A Guidelines for Participation in Appropriate Decision Making. Management Development Review*, Vol. 9, No. 4, PP. 29-34.
- Rockert, J. and Treacy, M. (1982). *The CEO Goes On- line. Harvard Business Review*, 60: 60-67.

- Reid, C. and Thomason, J. and Wallace - Smith, J. (1998). Impact of Information on Corporate Decision - Making the UK Banking sector. *Library Management*, Vol. 19, No. 2, PP. 86- 109,
- Straub Josef,(1999) successful new manager, maktabat Jerri publisher, first edition, ryad.
- Simon, H.A. (1962). *The New Science of Management Decision*. Harper and Row Publishers Co. New York.
- Sekaran, U. (2000). *research methods' for Business (3rd Edition)*. New York: hermitage publishing Services.
- Wally, S. and Baum, R.J. (1994). Personal and structural Determinants of the Pace of Strategic Decision Making. *Academy of Management Journal*, Vol. 37: No. 4, PP. 932-956.
- Yassine, saed ghalib. (1998) management information system, dar al yazoury publisher, amman, Jordan.
- .Yaghi, mohamad abdul fatah, (1983) the process of decision making, management's Arabic magazine, edition 7, value 2:19-4.