# AN INVESTIGATION OF INFORMATION SYSTEM UTILIZATION IN SMALL SIZED HOTELS IN KEDAH

A Thesis Submitted to College Business in Partial Fulfillment of the Requirement for the Degree Master Science of Management Universiti Utara Malaysia

By

# ASHRAF M.A. RIYANI (800430)

ASHRAF M.A. RIYANI

All Rights Reserved 2008.



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) ASHRAF M.A. RIYANI (800430)

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)

:

### AN INVESTIGATION OF INFORMATION SYSTEM UTILIZATION IN SMALL SIZED HOTELS IN KEDAH

Seperti yang tercatat di muka surat tajuk dan kulit kertas project (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 (Name of Supervisor)

## MR. ABDUL MANAF BOHARI

Tandatangan (Signature)

Tarikh (Date) 16 OCTOBER 2008

# **PERMISSION TO USE**

In presenting this thesis of the requirements for a Master of Science (Management) from Universiti Utara Malaysia, I agree that the University library may make it freely available for inspection. I further agree that permission for copying of this thesis in any manner, in whole or in part, for scholarly purposes may be granted by my supervisor or in their absence, by the Dean (Research and Post Graduate). It is understood that any copying 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 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 materials in this thesis, in whole or in part, should be addressed to:

> Dean (Research and Post Graduate) College of Business Universiti Utara Malaysia 06010 Sintok Kedah Darul Aman

# ABSTRACT

The rapid growth with the using of the IS becomes more necessary in the various fields. Utilizes the Information System in Small Sized Hotels in Kedah, these hotels will be able to make integrates and utilize the information system during the hotel progress which support the manager with the appropriate facilities, the research illustrated the main problems that facing these hotels, most of these hotels require to integrate and utilize some features to keep the hotel progress. Utilizes the Information System in Small Sized Hotels in Kedah obtained easy way to access the enquire information about the strategy of the small hotels that need to follow. Finally, this research suggested to the small hotels to enhancing there IS capabilities of in future.

# ACKNOWLEDGEMENT

My gratefulness to my supportive and helpful supervisor, Mr. Abdul Manaf Bohari for assisting and guiding me in the completion of this research. With all truthfulness, without her, the project would not have been a complete one. He has always been my source of motivation and guidance. I am truly grateful for her continual support and cooperation in assisting me all the way through the semester. I am grateful to my engagement Deema for her help and support.

I would like to present my thanks to my father, my mother and all my family who has always been there for me. Finally, I would like to express my appreciations to all my friends, colleagues, FPP staff, and everyone who has helped me in this journey.

# TABLE OF CONTENTS

PERMISSION TO USE	Ι
ABSTRACT	П
ACKNOWLEDGEMEN	III
TABLE OF CONTENTS	IV
CHAPTER ONE	
INTRODUCTION	1
1.1 INTRODUCTION	1
1.2 PROBLEM STATEMENT	2
1.3 OBJECTIVE OF RESEARCH	3
1.4 RESEARCH SCOPE	4
1.5 SIGNIFICANCE OF THE STUDY	4
1.6 ORGANIZATION OF THE THESIS	5
1.7 SUMMARY	6
CHAPTER TWO	
LITERATURE REVIEW	7
2.1 INTRODUCTION	7
2.2 DEFINITION OF IS	10
2.3 INFORMATION SYSTEMS USERS	10
2.4 THE INFORMATION SYSTEM MODEL OVERVIEW	10
2.5 OVERVIEW OF INFORMATION SYSTEM TYPES	12
2.6 RELATED WORKS	14
2.7 CONCLUSION	33

# **CHAPTER THREE**

RESEARCH METHOD	OLOGY 34
3.1 INTRODUCTION	34
3.2 RESEARCH FRAMEWORK	. 35
3.3 SAMPLING	35
3.4 QUESTIONNAIRE DEVELOPMENT	36
3.5 PILOT TEST RESULT	38
3.6 STATISTICAL METHOD	39
3.7 SUMMARY	39

# **CHAPTER FOUR**

<b>RESEARCH FINDINGS</b>	40
4.1 INTRODUCTION	40
4.2 RESPONDENTS BACKGROUND	41
4.3 UTILIZATION OF INFORMATION SYSTEM IN SMALL HOTELS IN	43
KEDAH	
4.4 DISCUSSION	55
4.5 CONCLUSION	60

# **CHAPTER FIVE**

<b>RECOMMENDATIONS AND CONCLUSION</b>	61
5.1 INTRODUCTION	61
5.2 RECOMMENDATIONS	61
5.3 RESEARCH SUMMARY	63
5.4 DISCUSSION	64
5.5 CONCLUSION	65

## REFERENCES

# LIST OF FIGURES

Figure 2.1: The Marketing Information's System Model	11
Figure 2.2: Influential Relationships Among Factors at H-Bank	17
Figure 2.3: Executive Information System Constituencies	21

# LIST OF TABLES

Table 4.1: Questionnaire Criteria	41
Table 4.2: Descriptive Analysis	42
Table 4.3: Frequency Analysis for Question 1	43
Table 4.4: Frequency Analysis for Question 2	43
Table 4.5: Frequency Analysis for Question 3	44
Table 4.6: Frequency Analysis for Question 4	45
Table 4.7: Frequency Analysis for Question 5	45
Table 4.8: Frequency Analysis for Question 6	46
Table 4.9: Frequency Analysis for Question 7	47
Table 4.10: Frequency Analysis for Question 8	47
Table 4.11: Frequency Analysis for Question 9	48
Table 4.12: Frequency Analysis for Question 10	49
Table 4.13: Frequency Analysis for Question 11	49
Table 4.14: Frequency Analysis for Question 12	50
Table 4.15: Frequency Analysis for Question 13	51
Table 4.16: Frequency Analysis for Question 14	51
Table 4.17: Frequency Analysis for Question 15	52
Table 4.18: Frequency Analysis for Question 16	53
Table 4.19: Frequency Analysis for Question 17	53
Table 4.20: Frequency Analysis for Question 18	54

 Table 4.21: The Descriptive analysis

Table 4.22: One sample test

55 58

### **CHAPTER ONE**

### **INTRODUCTION**

### **1.1 INTRODUCTION**

The new integration of the information system that could appear in the large and small hotels, with the additional business applications and other components, the epitome integration provides a powerful for the management to control ad support the single and multi-property for the other enterprises fields. In another hand the corporate consolidation and on-property management solutions enable hoteliers to focus on relationships, support sales and marketing goals, and implement decisions in a rapid change environment. That in many times makes it more successful in the leader optimization.

This research will describes the abilities for the information system to optimize in the small hotels, the study will be locates for the small hotels in Kedah. Many large hotels in Malaysia appear to have a partnership with many of different companies like airlines, rent car, credit-card companies except dependent suppliers as sports and leisure facilities.

# The contents of the thesis is for internal user only

### REFERENCE

- Alpar, P& Ein-Dor, P. (1991). "Major I S Concerns of Entrepreneurial Organizations," Information and Management, Vol. 20, pp. 1-11.
- Averweg, U.R.F. & Erwin, G.J., 2000. Executive Information Systems in South Africa: A Research Synthesis for the Future. Proceedings of the South African Institute of Computer Scientists and Information Technologists Conference (SAICSIT-2000). Cape Town, South Africa, 1-3 November.
- Abbott, A. (1990). "A primer on sequence methods," Organization Science, Vol.1, No.4, pp. 375-392.
- Alavi, M (1982), "An assessment of the concept of decision support systems as viewed by senior-level executives", MIS Quarterly, Vol. 6 No.4, pp.1-10.
- Belcher, L.W, Watson, H.J (1993), "Assessing the value of Conoco's EIS", MIS Quarterly, Vol. 17 No.3, pp.239-53.
- Banville, C. & Landry, M. (1989). "Can the Field of MIS Be Disciplined," Communications of the ACM, Vol. 32, No. 1, January, pp. 48-60.
- Boyer, G. L. & Carlson, G. (1989). "Characteristic s of Periodical Literature for the Potential Reade r or Author in Information Management," MIS Quarterly, Vol. 3, No. 2, June, pp. 221-229.
- Business Week, (1990). "Is Research in the IvoryTower Fuzzy, Irrelevant, Pretentious?," Octobe r 29, pp . 62.
- Brancheau, J. C. and Wetherbe, J. C. (1987). "Ke y Issues in Information Systems Management, " MIS Quarterly, Vol. 1, No. 1, March, pp. 23-44.
- Clarke, T.D. (1992). "Corporate Systems Management: An Overview and Research Perspective," Communications of the ACM, Vol. 35, No. 2, Feb., pp. 61-75.
- Cooper, D. R. & Emory, C.W. 1995. Business Research Methods. Richard D. Irwin, Inc, USA.
- Desai, C., Wright, G., & Fletcher, K. (1998). "Barriers to successful implementation of database marketing: a cross-industry study," International Journal of Information Management, Vol.18, No.4, pp. 265-276.
- Dickson, G. W. & Nechis, M. (1984). "Key Information Systems Issues for the 1980's," MIS Quarterly, Vol. 8, No. 3, September, pp. 135-159.

- Davids, M. (1999). "How to avoid the 10 biggest mistakes in CRM," Journal of Business Strategy, Vol.20, No.6, pp. 22-11.
- Deans, C., Karwan, K. R., Goslar, M. D., Ricks, D. A. and Toyne, B. (1991). "Identification of Key International Information Systems Issues in U. S. – Based Multinational Corporations," Journal of Management Information Systems, Vol. 7, No. 4, Spring, pp. 27-50.
- Huber, G. (1990). "A Theory of the Effects of Advanced Information Technologies on Organizational Design, Intelligence, and Decision - Making," Academy of Management Review, Vol. 15, No. 1, pp. 47-71.
- Ives, B. (1992). "Bridging Research and Practice, " MIS Quarterly, Vol. 16, No. 1, March, pp. iii-vi.
- Giddens, A. (1979). Central problems in social theory: Action, structure and contradiction in social analysis, Berkley, CA: University of California Press.
- Ginzberg, M.J., (1978). "Steps towards more effective implementation of MS and MIS," Interfaces, Vol.8, No.3, pp. 57-63.
- Galliers, R. D. & Land, F. F. (1987). "Choosing Appropriate Information Systems Research Methodologies," Communications of the ACM, Vol. 30, No. 11, November, pp. 900-902.
- Guimares, T., Igabaria, M., & Lu, M. (1992). "The determinants of DSS success: an integrated Model," Decision Sciences, Vol.23, pp. 409-430.
- Gorge, R. Ellis. (1993) "Application of experiment design in an activity-based Environment," M.S. Thesis, VPI&SU, Blacksburg, February, 1993.
- Glover, H. et al., 1992. 20 Ways to Waste an EIS Investment. Information Strategy: The Executive's Journal, Vol. 8, No. 2, pp. 11-17.
- Keen, P. G. W. (1987). "MIS Research: Current Status, Trends and Needs," in Information Systems Education: Recommendations and Implementation, R. A. Buckingham, R. A. Hirschheim, F. F. Land and C. J. Tully, (eds.), Cambridge University Press, Cambridge, England, pp. 1-13.
- Kumar, K. & Van Hillegersberg, J. (2004) New Architectures For financial services. Communications of the ACM, 47 (5): 27-30.
- Kumar, K. & Van Hillegersberg, J. (2000) ERP Experiences and evolution. Communications of the ACM, 43 (4): 22-26.
- Kochen, M. (1985/86). "Are MIS Frameworks Premature?," Journal of Management Information Systems, Vol. 2, No. 3, Winter, pp. 92-100.

- Klein, H. & Myers, M. (1999). "A Set of Principles for Conducting and Evaluating Interpretive Field Studies in Information Systems," MIS Quarterly, Vol.23, No.1, pp. 67-94.
- Khan, S. J. 1996. The Benefits and Capabilities of Executive Information Systems. MBA dissertation, University of Witwatersrand, Johannesburg, South Africa.
- Lucas, H.C. (1981). Implementation, the key to successful information systems, New York: Columbia University Press.
- Liang, T.P, Hung, S.Y (1997), "DSS and EIS applications in Taiwan", Information Technology and People, Vol. 10 No.4, pp.303-15.
- Lie, J., & Chen, J. (1990). Understanding Information: An Introduction, Basingstoke: Macmillan Education.
- Mallach, E. G. 1994. Understanding Decision Support Systems and Expert Systems. Irwin McGraw-Hill, Boston, Massachusetts, USA.
- Markus, L. & Robey, D. (1988). "Information technology and organizational change: Causal structure in theory and research," Management Science, Vol.34, No.5, pp. 583-598.
- Myers, M.D. (1995). "Dialectical hermeneutics: A theoretical framework for the implementation of information system," Information Systems Journal, Vol.5, No.1, pp. 51-70.
- Markus, L. & Tanis, C. (2000). "The Enterprise System Experience From adoption to success," in Zmud, R. (Ed.), Framing the domain of IT management, Pinnaflex Education Resources, Inc., pp. 173-207.
- Niederman, F., Brancheau, J. C., & Wetherbe, J. C. (1991). "Information Systems Management Issues for the 1990s," MIS Quarterly, Vol. 15, No. 4, December, pp. 475-500.
- Oviatt, B. M. and Miller, W. D. (1989). "Irrelevance, Intransigence, and Business Professors," The Academy of Management Executive, Vol. 3, No. 4, pp. 304-312.
- Orlikowski, W.J. & Robey, D. (1991). "Information technology and the structuring of organizations," Information Systems Research, Vol.2, No.2, pp. 143-169.
- Orlikowski, W.J. & Baroudi, J.J. (1991). "Studyin g Information Technology in Organizations : Research Approaches and Assumptions," Information Systems Research, Vol. 2, No. 1, March, pp. 1-28.

- Osterhout, M.P.A. van, Waarts, E., Hillegersberg, J. (2006) Change factors requiring agility and implications for IT, European Journal of Information Systems, 15 (2), 132-145.
- Pan, S.L. & Lee, J.N. (2003). "Using e-CRM for a Unified View of the Customer," Communications of ACM, Vol.6, No.1, pp. 95-99.
- Reich, B.H. & Benbasat, I. (1990). "An empirical investigation of factors influencing the success of customer-oriented strategic systems," Information Systems Research, Vol.1, No.3, pp. 325-347.
- Roldán, J. L. & Leal, A. 2003. Executive Information Systems in Spain: A Study of Current Practices and Comparative Analysis. In M Mora, G A Forgionne And J N D Gupta Eds Decision Making Support Systems: Achievements and Challenges for the New Decade, Chapter 18, 287-304, Idea Group Publishing, Hershey, PA, USA.
- Rathwell, M.A. & Burns, A. (1985) 'Information systems support for group planning and decision making Activities', MIS Quarterly 9 (3): 254–71. (This study presents the concept and case studies of distributed decision-making systems.)
- Statistics South Africa. (2001). Census 2001 Digital Census Atlas. Available from World Wide Web at http://gis-data.durban.gov.za/census/index.html.
- Simon, H.A. (1960). The New Science of Management Decision, New York: Harper & Row. (This book provides foundational concepts of decision making and lays the groundwork for further development of DSS.).
- Sabherwal, R. & Robey, D. (1993). "An empirical taxonomy of implementation processes basedon sequences of events in information system development," Organization Science, Vol.4, No.4, pp. 548-576.
- Sprague, R.H., J (1980) 'A framework for the development of decision support systems', MIS Quarterly 4 (4): 1-26. (The most frequently cited article in the DSS literature).
- Swanson, E.B. (1988). Information Systems Implementation: Bridging the gap between design and utilization, Homewood, IL. Irwin.
- Targowski, Andrew., Rienzo, Thomas. (2004). Enterprise Information Infrastructure, Fourth Edition. Pp107 – 110.
- Turban, E., mclean, E. And wetherbe, J. 1999. Information Technology for Management. John Wiley & Sons, Inc, New York, USA.

- Van Hillegersberg, J. & Kumar, K. (1999) Using metamodeling to integrate objectoriented analysis, design and programming concepts. Information Systems, 24 (2): 113-129.
- Wallace, Michael. (1989, November). Brave new workplace: Technology and the work in the new economy. Work and Occupations, 16 (4), 363-392.
- Watkins, Edward. (1990, December). Technology at your service. Lodging Hospitality, 141-143.
- Weick, Karl E. (1979). The social psychology of organizing (2nd ed.). Reading, MA: Addison-Wesley.
- Weick, Karl E. (1989). Theory construction as disciplined imagination. Academy of Management Review, 14 (4), 516-531.
- Weick, Karl E. (1995, September). What theory is not, theorizing is. Administrative Science Quarterly, 40 (3), 385-390.
- Weill, Peter. (1991). The information technology payoff: Implications for investment appraisal. Australian Accounting Review, 2-11.
- Weill, Peter & Broadbent, Marianne. (1998). Leveraging the new infrastructure: How market leaders capitalize on information technology. Boston: Harvard Business School
- Weick, Karl E. (1995, September). What theory is not, theorizing is. Administrative Science Quarterly, 40 (3), 385-390.
- Williamson, Miryam (1997). Weighing the nos and cons. CIO [On-line]. Available: http://www.cio.com/archive/041597\_need\_content.html.
- Wixom, B.H. & Watson, H.J. (2001). "An empirical investigation of the factors affecting data warehousing success," MIS Quarterly, Vol.25, No.1, pp. 17-41.
- Watson, H. J., houdeshel, G. & rainer, R. K. J. 1997. Building Executive Information Systems and other Decision Support Applications. John Wiley & Sons, Inc, New York, USA.
- Watson, H. J., Rainer, R. K. & Akoh, C. E. 1991. Executive Information Systems: A Framework for development and a Survey of Current Practices. MIS Quarterly, 15(1), 13-30.
- Williams, J. & Ramaprasad, A. (1996). "A taxonomy of critical success factors," European Journal of Information Systems, Vol.5, No.5, pp. 250-260.