

University of Technology, Sydney

Information Technology Management Program

# A Study of the Effectiveness of IT Outsourcing

#### Anya Piotrowski

MBus Information Technology Management

July 2001

# The University of Technology, Sydney School of Computing Sciences

MBus (Information Technology Management [MC85])

### **CERTIFICATE OF ORIGINALITY**

## Of Project Work

I certify that this work has not already been submitted for any degree and is not being submitted as part of any other degree.

I also certify that this thesis has been written duly by me, and that any assistance, and all sources used have been acknowledged.

Signature of Candidate

Production Note:

Signature removed prior to publication.

#### Acknowledgments

I acknowledge, the assistance rendered by the following people and thank them for supporting this thesis with enthusiasm, readiness to help and share their knowledge, and experience notwithstanding their busy time schedules:

- ➤ Bernard Wong for his continued support and understanding during the stressful times, enthusiasm and belief in me.
- My husband for his faith in me and my sons for their constant family support.
- To the following industry experts who consented to allowing me to interview them and their help with this research:
- Mary Ann Maxwell, Chief Information Officer, WBC
- Tony Carson, IT Outsourcing Programme Director, WBC
- ♦ Chris Stevens, IT Outsourcing Service Delivery Senior Manager, WBC
- Paul Hartigan, Chief Manager, Group Technology, CBA
- ◆ Mark Pigott, Head of IT, AMP
- Julian Narborough, Director Delivery Sales Support, EDS
- Paul McDonald, Delivery Manager Distribution, MLC
- Eric Janssens, Information Technology Manager, Credit Data Advantage
- Wendy Anderson, IT Outsourcing Consultant, Technology Partners International
- Jeff Klinge, Executive Account Manager, IBM
- To the UTS staff and classmates for their support and guidance.

#### Organisation of the document

This document is organised in Seven Sections and Appendix (A&B) as follows:

Abstract – provides an overview of the Study.

The Research Problem – describes the research problem, states research hypothesis and defines the research approach.

Methodology – Describes the process used for the Study.

Literature Review – reports the literature review research findings, explores other authors' views on the IT outsourcing effectiveness and formulates the foundation for conducting the research study.

Discussion and Analysis of Results – Describes the detail research findings, research analysis and documents lessons learned.

Conclusion and Summary – documents recommendations on the future research and conclusions drawn from the research performed

Bibliography – documents research study bibliography

Appendix A – Contains Questions prepared for conducting interviews with Senior IT Leaders.

Appendix B – Contains Questions prepared for conducting interviews with IT Outsourcing Vendor Executives.

#### **Table of Contents**

ACKNOWLEDGMENT	CERTIFICATE OF ORIGINALITY					
TABLE OF CONTENTS	A	CKN	OWLEDGMENT	n		
TABLE OF FIGURES	o	RGA	NISATION OF DOCUMENT	111		
TABLE OF TABLES	T	ABLI	E OF CONTENTS	IV		
THE RESEARCH PROBLEM	T	ABLI	E OF FIGURES	V		
1 THE RESEARCH PROBLEM.         10           1.1 INTRODUCTION.         10           1.2 DEFINITION OF IT OUTSOURCING.         11           1.3 RESEARCH PROBLEM DEFINITION.         12           1.4 STATEMENT OF HYPOTHESIS.         13           1.5 CONCLUSION.         14           2 RESEARCH METHODOLOGY.         15           2.1 REVIEW OF RESEARCH MEHTODOOGY ON CONDUCTING IT OUTSOURICING STUDY.         15           2.2 SELECTING RESEARCH APPROACH.         16           2.3 SELECTINGA RESEARCH PROACH.         16           2.3 SELECTINGA RESEARCH PROACH.         19           2.4 INTERPRETATIVE RESEARCH         19           2.5 INTERPRETATIVE CASE STUDIES & REASONS FOR QUALITATIVE RESEARCH.         20           2.6 ALTERNATIVE RESEARCH METHODS.         21           2.6.1 POSITIVEISTIC OR TRADITIONAL CASE STUDY.         21           2.6.2 QUANTATIVE SURVEY.         22           2.6.3 ACTION RESEARCH.         22           2.6.4 ENTHNOGRAPHY.         23           2.6.5 CONCLUSION.         23           3 REVIEW OF RELATED LITERATURE.         24           3.1 OBJECTIVES OF IT OUTSOURCING.         25           3.3 IT OUTSOURCING DECISION MAKERS.         28           3.4 IT OUTSOURCING MANAGEMENT SKILLS.         29 <tr< th=""><th>T</th><th>ABL</th><th>E OF TABLES</th><th>VI</th></tr<>	T	ABL	E OF TABLES	VI		
1.1       INTRODUCTION       10         1.2       DEFINITION OF IT OUTSOURCING       11         1.3       RESEARCH PROBLEM DEFINITION       12         1.4       STATEMENT OF HYPOTHESIS       13         1.5       CONCLUSION       14         2       RESEARCH METHODOLOGY       15         2.1       REVIEW OF RESEARCH MEHTODOOGY ON CONDUCTING IT OUTSOURICING STUDY       15         2.2       SELECTING RESEARCH APPROACH       16         2.3       SELECTINGA RESEARCH PARADIGM       18         2.4       INTERPRETATIVE RESEARCH       19         2.5       INTERPRETATIVE CASE STUDIES & REASONS FOR QUALITATIVE RESEARCH       20         2.6       ALTERNATIVE RESEARCH METHODS       21         2.6.1       POSITIVEISTIC OR TRADITIONAL CASE STUDY       21         2.6.2       QUANTATIVE SURVEY       22         2.6.3       ACTION RESEARCH       22         2.6.4       ENTHNOGRAPHY       23         2.6.5       CONCLUSION       23         3       REVIEW OF RELATED LITERATURE       24         3.1       OBJECTIVES OF IT OUTSOURCING       24         3.2       REASONS FOR IT OUTSOURCING       25         3.3       IT OUTSOURCING MANAGEM	A	BSTI	RACT	VIII		
1.2       DEFINITION OF IT OUTSOURCING       11         1.3       RESEARCH PROBLEM DEFINITION       12         1.4       STATEMENT OF HYPOTHESIS       13         1.5       CONCLUSION       14         2       RESEARCH METHODOLOGY       15         2.1       REVIEW OF RESEARCH MEHTODOOGY ON CONDUCTING IT OUTSOURICNG STUDY       15         2.2       SELECTING RESEARCH APPROACH       16         2.3       SELECTINGA RESEARCH PARADIGM       18         2.4       INTERPRETATIVE RESEARCH       19         2.5       INTERPRETATIVE RESEARCH       19         2.5       INTERPRETATIVE RESEARCH METHODS       21         2.6.1       POSITIVEISTIC OR TRADITIONAL CASE STUDY       21         2.6.2       QUANTATIVE SURVEY       22         2.6.3       ACTION RESEARCH       22         2.6.4       ENTHNOGRAPHY       23         2.6.5       CONCLUSION       23         3       REVIEW OF RELATED LITERATURE       24         3.1       OBJECTIVES OF IT OUTSOURCING       25         3.3       IT OUTSOURCING MANAGEMENT SKILLS       29         3.4       IT OUTSOURCING MANAGEMENT SKILLS       29         3.5       FRAMEWORK FO THE OUTSOURCING DECI	1	TH	IE RESEARCH PROBLEM	10		
1.2       DEFINITION OF IT OUTSOURCING       11         1.3       RESEARCH PROBLEM DEFINITION       12         1.4       STATEMENT OF HYPOTHESIS       13         1.5       CONCLUSION       14         2       RESEARCH METHODOLOGY       15         2.1       REVIEW OF RESEARCH MEHTODOOGY ON CONDUCTING IT OUTSOURICNG STUDY       15         2.2       SELECTING RESEARCH APPROACH       16         2.3       SELECTINGA RESEARCH PARADIGM       18         2.4       INTERPRETATIVE RESEARCH       19         2.5       INTERPRETATIVE RESEARCH       19         2.5       INTERPRETATIVE RESEARCH METHODS       21         2.6.1       POSITIVEISTIC OR TRADITIONAL CASE STUDY       21         2.6.2       QUANTATIVE SURVEY       22         2.6.3       ACTION RESEARCH       22         2.6.4       ENTHNOGRAPHY       23         2.6.5       CONCLUSION       23         3       REVIEW OF RELATED LITERATURE       24         3.1       OBJECTIVES OF IT OUTSOURCING       25         3.3       IT OUTSOURCING MANAGEMENT SKILLS       29         3.4       IT OUTSOURCING MANAGEMENT SKILLS       29         3.5       FRAMEWORK FO THE OUTSOURCING DECI		1.1	INTRODUCTION	10		
1.3       RESEARCH PROBLEM DEFINITION       12         1.4       STATEMENT OF HYPOTHESIS       13         1.5       CONCLUSION       14         2       RESEARCH METHODOLOGY       15         2.1       REVIEW OF RESEARCH MEHTODOOGY ON CONDUCTING IT OUTSOURICNG STUDY       15         2.2       SELECTINGA RESEARCH APPROACH       16         2.3       SELECTINGA RESEARCH APPROACH       16         2.3       SELECTINGA RESEARCH PARADIGM       18         2.4       INTERPRETATIVE RESEARCH       19         2.5       INTERPRETATIVE CASE STUDIES & REASONS FOR QUALITATIVE RESEARCH       20         2.6       ALTERNATIVE RESEARCH METHODS       21         2.6.1       POSITIVEISTIC OR TRADITIONAL CASE STUDY       21         2.6.2       QUANTATIVE SURVEY       22         2.6.3       ACTION RESEARCH       22         2.6.4       ENTHNOGRAPHY       23         2.6.5       CONCLUSION       23         3       REVIEW OF RELATED LITERATURE       24         3.1       OBJECTIVES OF IT OUTSOURCING       25         3.3       IT OUTSOURCING MANAGEMENT SKILLS       29         3.4       IT OUTSOURCING MANAGEMENT SKILLS       29         3.5		1.2				
1.4 STATEMENT OF HYPOTHESIS		1.3				
1.5 CONCLUSION		1.4				
2.1 REVIEW OF RESEARCH MEHTODOOGY ON CONDUCTING IT OUTSOURICNG STUDY		1.5				
OUTSOURICNG STUDY	2	RF	SEARCH METHODOLOGY	15		
2.2 SELECTING RESEARCH APPROACH		2.1	REVIEW OF RESEARCH MEHTODOOGY ON CONDUCTING IT			
2.3 SELECTINGA RESEARCH PARADIGM			OUTSOURICNG STUDY	15		
2.3 SELECTINGA RESEARCH PARADIGM		2.2	SELECTING RESEARCH APPROACH	16		
2.5 INTERPRETATIVE CASE STUDIES & REASONS FOR QUALITATIVE RESEARCH		2.3				
RESEARCH		2.4	INTERPRETATIVE RESEARCH	19		
2.6       ALTERNATIVE RESEARCH METHODS		2.5	INTERPRETATIVE CASE STUDIES & REASONS FOR QUALITATIVE			
2.6.1 POSITIVEISTIC OR TRADITIONAL CASE STUDY						
2.6.2 QUANTATIVE SURVEY       22         2.6.3 ACTION RESEARCH       22         2.6.4 ENTHNOGRAPHY       23         2.6.5 CONCLUSION       23         3 REVIEW OF RELATED LITERATURE       24         3.1 OBJECTIVES OF IT OUTSOURCING       24         3.2 REASONS FOR IT OUTSOURCING       25         3.3 IT OUTSOURCING DECISION MAKERS       28         3.4 IT OUTSOURCING MANAGEMENT SKILLS       29         3.5 FRAMEWORK FO THE OUTSOURCING DECISION       30         3.6 IT OUTSOURCING FRAMEWORK       30         3.7 IT OUTSOURCING KEY SUCCESS FACTORS       32         3.8 THE REALTIONSHIP BETWEEN STRATEGIC ARCHETY AND PROPENSITY TO OUTSOURCE       33         3.9 SELECTIVE OUTSOURCING VS ENTIRE IT OUTSOURCING       33         3.10 BRITISH PETROLEUM EXPLORATION RELATIONSHP WITH IT		2.6	ALTERNATIVE RESEARCH METHODS	21		
2.6.3 ACTION RESEARCH		2.6.1	POSITIVEISTIC OR TRADITIONAL CASE STUDY	21		
2.6.3 ACTION RESEARCH		2.6.2	QUANTATIVE SURVEY	22		
2.6.5 CONCLUSION						
3 REVIEW OF RELATED LITERATURE		2.6.4	ENTHNOGRAPHY	23		
3.1 OBJECTIVES OF IT OUTSOURCING		2.6.5	CONCLUSION	23		
3.2 REASONS FOR IT OUTSOURCING	3	RE	VIEW OF RELATED LITERATURE	24		
3.3 IT OUTSOURCING DECISION MAKERS		3.1	OBJECTIVES OF IT OUTSOURCING	24		
3.4 IT OUTSOURCING MANAGEMENT SKILLS		3.2	REASONS FOR IT OUTSOURCING	25		
3.5 FRAMEWORK FO THE OUTSOURCING DECISION		3.3	IT OUTSOURCING DECISION MAKERS	28		
3.6 IT OUTSOURCING FRAMEWORK		3.4	IT OUTSOURCING MANAGEMENT SKILLS	29		
3.7 IT OUTSOURCING KEY SUCCESS FACTORS		3.5	FRAMEWORK FO THE OUTSOURCING DECISION	30		
3.8 THE REALTIONSHIP BETWEEN STRATEGIC ARCHETY AND PROPENSITY TO OUTSOURCE		3.6	IT OUTSOURCING FRAMEWORK	30		
3.8 THE REALTIONSHIP BETWEEN STRATEGIC ARCHETY AND PROPENSITY TO OUTSOURCE		3.7	IT OUTSOURCING KEY SUCCESS FACTORS	32		
PROPENSITY TO OUTSOURCE		3.8				
3.9 SELECTIVE OUTSOURCING vs ENTIRE IT OUTSOURCING33 3.10 BRITISH PETROLEUM EXPLORATION RELATIONSHP WITH IT				33		
3.10 BRITISH PETROLEUM EXPLORATION RELATIONSHP WITH IT		3.9				
				34		

Project E	B: A Study of the Effectiveness of IT Outsourcing	
3.11	REASONS FOR IT OUTSOURCING FAILURE	
3.12	MEASURING IT OUTSOURCING CONTRACTS PERFORMANCE	
3.13	COMPARATIVE BENCHMARKING	
3.14	LACK OF AUSTRALIAN BASED LIERATURE	33
3.15	LITERATURE REVIEW CONCLUSIONS	37
4 DI	SCUSSION AND ANALYSIS OF RESULTS	38
4.		
4.2		
4.3		
4.4		
4.5		
4.		
	.6.1 REASONS FOR THE OUTSOURCING DECISION	
	.6.2 STRATEGIC PARTNERSHIP vs IT OUTSOURCING	
-	6.3 CONTRACTURAL ARRANGEMENTS	
	6.4 SCOPE OF IT OUTSOURCING	
	.6.5 IMPACT ON RETAINED IT OUTSOURCING STAFF	
	.6.6 MEASURING "VALUE ADD" FROM OUTSOURCING IT	
	.6.7 REALISING RETURN ON INVESTMENT	_
	.6.8 SERVICE QUALITY	
	.6.9 RETAINING CONTROL OVER IT	
	.6.10 DECISION MAKERS OF THE IT OUTSOURCING	
	.6.11 IT OUTSOURCING CONTRACT NEGOTIATION AND MANAGEMEN' SKILLS	
	1.7 LESSONS LEARNT	
	.8 CONCLUSION	
	JMMARY AND CONCLUSION	
5.1	SUMMARY	
5.2	CONCLUSION	
	LIMITATIONS OF RESEARCH	
5.4	FUTURE RESEARHC DIRECTIONS	69
6 Bl	BLIOGRAPHY	71
7 A	PPENDIX	73
7.1	APPENDIX A - FOCUS QUESTIONS FOR SENIOR IT LEADERS	73
7.2	APPENDIX B - FOCUS QUESTIONS FOR IT OUTSOURCING VENDOR	
	EXECUTIVES	75

#### **Table of Figures**

- Figure 1: Cutter Consortium 2000 Survey The catalysts for Outsourcing
- Figure 2: Cutter Consortium 2000 Survey IT Skills to manage outsourced activities
- Figure 3: Cutter Consortium 2000 Survey IT team optimisation to exploit inhouse and outside expertise
- Figure 4: Participating Client Organisations IT outsourcing contract size and duration

#### **Table of Tables**

- Table 1: IT Outsourcing Trends (GartnerGroup's Dataquest 1999)
- Table 2: Summary of Outsourcing Framework (Lacity 1996)
- Table 3: Participating Organisations and Interviewees.

#### **ABSTRACT**

The purpose of this study was to identify how effective is IT outsourcing in various organisations in Australia. The research that was undertaken, was two-fold. Firstly, a literature review was conducted that aimed to investigate critical aspects of effectiveness of the IT Outsourcing arrangements. Secondly, by means of semi-structured interviews, data was gathered concerning lessons learned from IT Outsourcing decision with emphasis on the effectiveness of IT Outsourcing contracts.

Interview results produced views expressed by IT Leaders and Vendor Executives within various organisations on the effectiveness of IT Outsourcing contracts in their organisations. A total of nine participants selected from seven research participating organisations were interviewed. Interviewees included: IT senior leaders and vendor account executives involved in managing IT Outsourcing contracts. The research results are presented in the form of lessons learned and provide recommendations, which can be used by individuals facing the Outsourcing decision or future researchers and fellow students.

This research project found that IT Outsourcing is an effective way to manage major change within an organisation, Return on Investment and performance against contracted Service Levels are common measures of IT outsourcing effectiveness. In some cases, improvements in the service levels are observed, especially in large IT Outsourcing contracts. However, in small outsourcing contracts decline in Service Levels is evident.

This research found that IT Outsourcing drivers are moving away from a cost-reduction to a strategic partnership arrangements. Organisations increasingly look to outsourcers for research capabilities, past experience, and a broad set of skills. These factors also contribute to the effectiveness of IT Outsourcing within client organisations.

Based on this study, it is evident that organisations will increasingly use joint ventures and partnerships to realise IT outsourcing business objectives.

It is evident that the trend to outsource IT will continue and that this trend will start to expand to other business process areas as organisations develop maturity in ensuring organisational effectiveness of the outsourcing arrangements.