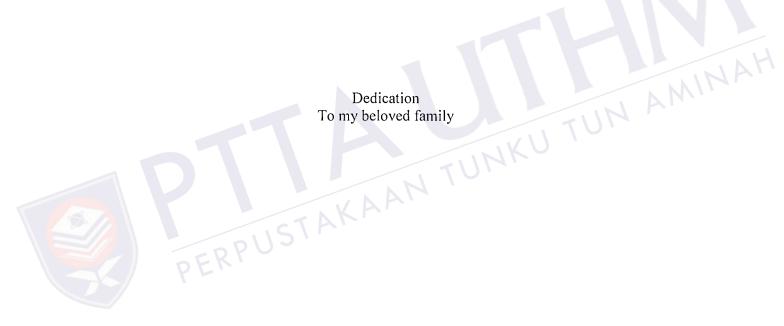
THE DEVELOPMENT OF PERFORMANCE MEASUREMENT FRAMEWORK IN THE MANAGEMENT OF PUBLIC OFFICE BUILDINGS IN MALAYSIA

ZAILAN BINTI MOHD ISA

A thesis submitted in fulfilment of the requirement for the award of the Degree of **Doctor of Philosophy**

Fakulti Pengurusan Teknologi

Kolej Universiti Teknologi Tun Hussein Onn



ACKNOWLEDGEMENTS

The completion of this thesis has been a teamwork effort. There are too many people to thank and too little space to do so. Hence, I would like to express my profound gratitude to all who have helped along the way especially to my close friends for their moral supports and encouragement.

Appreciation is particularly expressed to the Department of Valuation and Property Services and the Department of Public Service for the provision of financial support throughout this PhD programme. Special thanks are due to the former Director General of the Department of Valuation and Property Services, Datuk Sahari Mahadi for his enquiring my progress and providing constant encouragement, and senior management for having trust in me to pursue this programme.

I gratefully acknowledge the supervision, support, encouragement, and patience of my supervisor Professor Dr. Maziah Ismail. The quality of supervision provided the clear direction that I need to sustain the work through the various stages of the three and half years work. I am grateful to Professor Dr. Hinks of Glasgow Caledonian University and Dilanthi, Marjan, and David of Salford University for providing critical advice on my theoretical framework.

The participation and co-operation of the Ministry of Works, Ministry of Land and Cooperative Development, and the Department of Survey and Mapping, who have provided information and feedback at data collection stage, are appreciated.

Finally, I dedicate this work to my family. I would like to thank my mother, Abby Rosli, Abe Rahmat, Kakcik Hamidah, and Adik Fatimah, for the love, sacrifice, patience, and endless encouragement towards the success of my study.

ABSTRACT

The research is an exploratory study on operational property management. It seeks to explore the concept of performance measurement in the management of public office buildings in Kuala Lumpur. In this study, a conceptual framework based on the balanced scorecard approach is presented to explore and understand the performance measurement system in property management of operational property in the public sector. It is argued that property management have been a neglected area among practitioners particularly the public property. Hence, this research started as a result of realising the importance of efficient and effective public property management to extract the best value of public investment. In this study, there are two problems: Firstly, it is to develop a conceptual framework for performance measurement in the management of public office buildings. Secondly, it is to determine critical success factors (CSFs) and identify key performance indicators (KPIs) based on the conceptual framework. This research adopts a case study approach as the research strategy in a multiple-case design. Three public office buildings in Kuala Lumpur are identified as the case studies. It is concluded that, in general, the performance measurement system in the case studies can be categorised as mix measurable performance approach of both financial and nonfinancial performance measures. However, the findings show that the case studies ignore the importance of property objectives in monitoring property performance and their management to achieve effective and efficient management. The approach is not well structured as a management tool and lacking in specification of critical factors to be considered as performance indicators. The study identifies 28 CSFs and their corresponding 120 KPIs within the four perspectives of financial, customer satisfaction, internal processes, and innovation and continuous improvement as laid in the balanced scorecard approach of performance measurement.

ABSTRAK

Penyelidikan ini merupakan kajian ekplorasi ke atas pengurusan harta tanah operasi bagi mengkaji konsep pengukuran prestasi dalam pengurusan bangunan pejabat milik kerajaan di Malaysia. Dalam kajian ini, kerangka konsep yang dibina berdasarkan pendekatan "balanced scorecard" diketengahkan bagi mengkaji dan memahami sistem pengukuran prestasi dalam pengurusan harta operasi milik kerajaan. Adalah dibahaskan bahawa pengurusan harta merupakan satu bidang yang pinggirkan di kalangan profesional dalam bidang harta tanah terutama sekali harta tanah awam. Oleh itu, penyelidikan ini dicetuskan hasil dari kesedaran tentang kepentingan pengurusan harta kerajaan yang efektif dan berkesan bagi mendapatkan nilai yang terbaik dari pelaburan kerajaan. Dua permasalahan diketengahkan: Pertama, ianya adalah untuk menghasilkan kerangka konsep bagi pengukuran prestasi dalam pengurusan bangunan pejabat milik kerajaan. Kedua, ianya adalah untuk menentukan faktor-faktor kejayaan kritikal dan mengenalpasti indikator-indikator prestasi utama, berdasarkan kerangka konsep tersebut. Penyelidikan ini menggunakan kajian kes sebagai strategi penyelidikan. Tiga buah bangunan pejabat milik kerajaan dijadikan kajian kes. Pada amnya dapat dirumuskan bahawa sistem pengukuran prestasi dalam kajian kes ini dikategorikan sebagai pendekatan bercampur melibatkan pengukur kewangan dengan bukan kewangan. Bagaimanapun penemuan kajian menunjukkan bahawa kajian kes ini tidak mempertimbangkan kepentingan objektif harta tanah dalam memantau pengukuran harta dan pengurusannya bagi mencapai pengurusan yang efektif dan berkesan. Pendekatan tersebut tidak distrukturkan sebagai kaedah pengurusan dan kekurangan dalam menentukan spesifikasi faktur kritikal yang perlu dipertimbangkan dalam menentukan pengukuran indikator. Penyelidikan ini mengenalpasti 28 faktur-faktur kejayaan kritikal dan 120 indikator-indikator prestasi utama dalam empat perspektif kewangan. pelanggan, proses kerja dalaman dan inovasi serta pembangunan yang berterusan sebagaimana ditentukan dalam pendekatan "balanced scorecard".

TABLE OF CONTENTS

CHAPTER	101	PIC	PAGE
	TIT	LE	i
	DE	CLARATION	ii
	DEI	DICATION	iii
	ACI	KNOWLEDGEMENTS	iv
	ABS	STRACT	v
	ABS	STRAK	vi
	TAI	BLE OF CONTENTS	vii
	LIS	T OF TABLES	xvii
	LIS	T OF FIGURES	xxii
	LIS	T OF APPENDICES	xxiv
	GL	OSSARY	xxvi
1 ?	INT	RODUCTION: THE RESEARCH SCOPE	
	ANI	D PURPOSE	
	1.1	Introduction	1
	1.2	Background of the Study - General Needs for	2
		Performance Measurement in Property	
		Management	
	1.3	The Objectives of the Study	7
	1.4	Research Questions	7
	1.5	Scope of the Research	8
	1.6	Significance of the Study	9
		1.6.1. Extension of Knowledge	9

viii 1.6.2. The Importance of Property to 10 Organisations 1.6.3. The Significance of Property Management 11 Process to Public Organisations 1.6.4. The Need for a Performance Measurement 12 for the Management of Public Property 1.7 Research Design and Methodology 13 Definition 1.8 14 1.8.1. Public Property Management 14 1.8.2. Operational Property 15 1.8.3. Public Office Buildings 16 1.8.4. Property Management Units/Departments 17 1.8.5. Performance Measurement 18 1.8.6. Critical Success Factors (CSFs) 1.8.7. Key Performance Indicators (KPIs) 18 1.9 Thesis Structure 19 LITERATURE REVIEW 2.1 Introduction 21 Part One: Research Framework 2.2 Context of Operational Property Management 23 2.2.1 Role of Property in an Organisation 23 24 2.2.2 Property Management Activities 2.2.3 Property Management Approaches 26 28 2.3 Property Management Research Framework 2.3.1. Conclusion on Property Management 32 Research Framework 33 Part Two: Theoretical Background - Review on Performance Measurement in Property Management 33 2.4 Concept of Performance Measurement

H

	2.4.1. General Concept of Performance	33
	Measurement	
	2.4.2. Concept of Performance Measurement in	34
	Public Sector	
	2.4.3. Concept of Performance Measurement in	35
	Property Management Subject	
2.5	Studies on Performance Measurement in Property	36
	Management	
2.6	Performance Measurement Studies in Property	37
	Management from Organisation Perspective	
2.7	Performance Measurement Studies in Property	49
	Management from Property Perspective	
2.8	Performance Measurement Studies in Property	57
	Management from Organisation and Property	
	Perspective	
2.9	Performance Measurement Approaches in Property	79
	Management	
	2.9.1. Financial Measures as Performance	82
	Measurement Technique	
	2.9.2. Mix Measurable of Financial and Non-	83
	financial Measures Technique	
	2.9.3. Property Performance Indicator Metrics	85
	2.9.4. Management-by-Variance Technique	86
	2.9.5. The EFQM Business Excellence and	87
	SERVQUAL Models	
	2.9.6. The Balanced Scorecard Approach	89
2.10	Strength and Weakness of the Performance	90
	Measurement Approaches	
2.11	Gaps in the Literature	96
	2.11.1 Geographical Gap - Malaysian Perspective	96

1
٠.١

		2.11.2	From Property Management Subject	96
		2.11.3	From Public Sector Perspective –	97
			Organisation and Property Aspects	
		2.11.4	Research Design	97
	2.12	Conclu	usion	97
III			ICAL FRAMEWORK	99
	3.1	Introdu		99
	3.2		onceptual Framework for Performance	101
		Measu	rement Framework in the Management of	
		Public	Office Buildings	
		3.2.1.	Phase One: Property Objectives, Strategies	102
			and Performance Setting	
			3.2.1.1 Organisation Vision	103
			3.2.1.2 Property Objectives and Property	104
			Management Strategy	
			3.2.1.3 Performance Measurement Setting	107
		3.2.2.	Phase Two: Balanced Of Key Performance	108
			Indicators	
			3.2.2.1 Financial Perspective	108
			3.2.2.2 Customer Perspective	114
			3.2.2.3 Internal Process Perspective	116
		3.2.3.	Phase Three: Innovation and Continuous	121
			Improvement	
			3.2.3.1 Innovation and Continuous	121
			Improvement Perspective	
		3.2.4	Feedback	124
			3.2.4.1 To Achieve Customer and Property	125
			Management Issues	
			3.2.4.2 To Achieve Organisational Issues	126
	2.2	Concl	usion	126

IV	RES	EARC	H DESIGN AND METHODOLOGY	
	4.1	Introdu	action	127
	4.2	Resear	rch Approach	128
	4.3	Resear	rch Design	129
		4.3.1.	The Research Planning Stage	131
		4.3.2.	Data Collection and Analysis Stage	132
		4.3.3.	Analysis and Conclusion Stage	132
		4.3.4.	Study setting	133
		4.3.5.	Time Horizon	133
		4.3.6.	Case Study as Research Strategy and	133
			Multiple-Cases Design	
	4.4	Identif	ication of Case Studies	135
	4.5	Data C	Collection	137
	4.6	Sampl	ing Frame	141
		4.6.1.	Public Office Buildings	142
		4.6.2.	Public Organisation	143
		4.6.3.	Property Management Teams	144
		4.6.4.	Customers of the Public Office Buildings	144
		4.6.5.	Data Collection Instruments	144
			4.6.5.1.Documentations	145
			4.6.5.2.Archival Records	145
			4.6.5.3.Direct Observations	146
			4.6.5.4.Field Survey – Interviews	146
			4.6.5.5.Field Survey – Questionnaires	156
	4.7	Pilot T	est	159
		4.7.1.	Interviews Questionnaire	160
		4.7.2.	Survey Questionnaire	161
	4.8	Data A	Analysis Procedures	162
		4.8.1	Reliability Analysis	163
		4.8.2	Descriptive Statistics	164
		4.8.3	Factor Analysis	165

					xii			
		4.8.4	Content .	Analysis	165			
			4.8.4.1	Interview Questionnaires	166			
			4.8.4.2	Documentation	166			
			4.8.4.3	Archival Records	166			
v	PRO	PERTY	Z DEVE	LOPMENT AND PUBLIC				
	PRO	PROPERTY MANAGEMENT IN MALAYSIA						
	5.1	Introdu	ction		167			
	5.2	Kuala I	Lumpur: (General Background	168			
	5.3	Propert	y Develo	pment	169			
		5.3.1	Office Pr	operty Market and Development	170			
		5.3.2	Public O	ffice Property in Kuala Lumpur	173			
	5.4	Custod	ian of Pu	blic Property	174			
	5.5	Propert	y Manag	ement Approach	176			
		5.5.1	Centralise	d Property Management Approach	176			
		5.5.2 I	n-house I	Property Management Approach	177			
		5.5.3	Outsource	ed Property Management Approach	177			
	5.6	Propert	y Manago	ement Activities	178			
		5.6.1	Physical	Asset Management	180			
		5.6.2	Organisa	tional Use Management – Space	185			
			Manager	ment				
		5.6.3	Financia	l Property Management	187			
	5.7	Conclu	sion		190			
VI	INT	RODUC	CTION T	O CASE STUDIES				
	6.1	Introdu	ction		196			
	6.2	Locatio	on of Case	e Studies	197			
	6.3	Descrip	otion of C	Case Studies	199			
		6.3.1	CS1 – Wi	sma Tanah	199			
		6	5.3.1.1 T	he Building	200			
		6	5.3.1.2 O	occupier Agencies of the Building	200			

xiii 6.3.1.3 Users of the Building 201 6.3.1.4 Property Management of the Building 202 6.3.1.5 Property Management Process 207 6.3.2 CS2 – The Office Building of JUPEM 210 Headquarters 6.3.2.1 The Building 210 6.3.2.2 Occupier Agencies of the Building 211 6.3.2.3 Users of the Building 212 6.3.2.4 Property Management of the Building 213 6.3.2.5 Property Management Process 218 6.3.3 CS3 – The Office Building of JKR 221 Headquarters 6.3.3.1 The Building 221 6.3.3.2 Occupier Agencies of the Building 222 6.3.3.3 Users of the Building 223 6.3.3.4 Property Management of the Building 223 6.3.3.5 Property Management Process 229 Conclusion 231 **DATA ANALYSIS: PERFORMANCE** MEASUREMENT DEVELOPMENT 7.1 Introduction 235 236 7.2 Policy, Strategy and Performance Setting 7.2.1 Vision 236 7.2.2 Property Objectives and Property 238 Management Strategies 7.2.3 Setting of Performance Measures 240 7.2.4 Conclusion on Policy, Strategy and 241 Performance Setting The Balance of Performance Indicators 242 7.3 243 7.3.1. Financial Perspective

VII

			xiv
		7.3.1.1 Cost Reduction and Cost Control	246
		7.3.1.2 Productivity Improvement	247
		7.3.1.3 Management of Working Capital	248
		7.3.1.4 Asset Utilisation	249
		7.3.1.5 Conclusion on Financial	250
		Perspective	
	7.3.2.	Customer Perspective	250
		7.3.2.1 The Internal Users	250
		7.3.2.2 The External users	268
		7.3.2.3 Conclusion on Customer	281
		Perspective	
	7.3.3.	Internal Processes Perspective	283
		7.3.3.1 Property Management Team –	284
		Teamwork and Coordination	
		7.3.3.2 Employee Involvement	287
		7.3.3.3 Employee Competence	289
		7.3.3.4 Technology Capability	291
		7.3.3.5 Service Excellence	293
		7.3.3.6 Process Efficiency	295
		7.3.3.7 Conclusion on Internal Processes	298
		Perspective	
7.4	Innov	ation and Continuous Improvement	300
	7.4.1	Innovation and Continuous Improvement	300
		Perspective	
		7.4.1.1 Employee Capabilities	302
		7.4.1.2 Technology Infrastructure	307
		7.4.1.3 Organisation Alignment	309
	7.4.2	Conclusion on Innovation and Continuous	310
		Improvement Perspective	
7.5	Feedb	ack	312

v	٦.
$^{\Lambda}$	·v

		7.5.1 Feedback – To Achieve Organisational Issues	312
		7.5.2 Feedback – To Achieve Property	313
		Management and Customer Satisfaction	
		Issues	
	7.6	Conclusion	314
VIII	FIN	DINGS	
	8.1	Introduction	319
	8.2	Performance Measurement Framework in the	320
		Management of Public Office Buildings	
		8.2.1 Organisation Vision, Property Objectives,	321
		and Strategies	
		8.2.2 Setting of Performance Measurement	323
		8.2.3 Feedback at Strategic and Operational Levels	324
	8.3	Critical Success Factors and Key Performance	325
		Indicators in the Management of Public Office	
		Buildings	
		8.3.1 Financial Perspective	326
		8.3.2 Customer Perspective	329
		8.3.3 Internal Processes Perspective	333
		8.3.4 Innovation and Continuous improvement	336
		Perspective	
	8.4	Conclusion	337
X	COI	NCLUSION AND RECOMMENDATION	
	9.1	Introduction	339
	9.2	Summary of the Chapters' Findings	340
	9.3	Conclusion of the Study	344
	9.4	Limitation of the Study	351

		xvi
	9.4.1 Limitation of the Research Methodology	352
9.5	Recommendations	354
9.6	Generalisation of the Findings	357
REFERENCES		359
APPENDICES		



LIST OF TABLES

N	O. O	F TABLES TOPIC	PAGE
2.	1	Developments Underlying Property Management Research	29
		Framework	
2.	2	A Summary of Property Management Studies in	36
		Performance Measurement (Appendix 2 –A)	
2.	3	A Qualitative Model of Corporate Property Management	42
		Effectiveness – Critical Factors and Key Indicators	
2.	4	Public Property Management – A Summary of Critical	49
		Factors and Key Indicators	
2.	5	Property Performance Measurement for Strategic Goals	52
2.	6	Key Estate Ratio Subject Areas	54
2.	7	Criteria for Performance Measurements and Indicators	55
2.	8	Property Performance Indicator Metrics	59
2.	9	Property Performance Measurement Criteria	61
2.	10	Property Performance Measurement	63
2.	11	Key Performance Indicators – Management-By-Variance	64
		Tool	
2.	12	Performance Measurement Metrics	67
2.	13	Performance Indicators for Higher Education Property	69
2.	14	Users Expectations in Teaching Spaces of Higher Education	73
		Property	
2.	15	Strategies and Performance Criteria within Balanced	75

		xviii
	Scorecard	
2.16	Strategic Objectives and Measures from the Four	77
	Perspectives of Balanced Scorecard	
2.17	The Property Performance Indicators By Performance Focus	79
2.18	Performance Measurement Approaches In Property	81
	Management Studies	
2.19	A Summary of Financial and Non-Financial Measures	84
2.20	Quality Service Criteria For Professional Process Service	88
2.21	Summary of Strength and Weakness of Performance	91
	Measurement Approaches in Property Management	
3.1	Definitions Of Economy, Efficiency, and Effectiveness	110
	Concepts	
3.2	Critical Success Factors and Key Performance Indicators	112
	from Financial Perspective	
3.3	Critical Success Factors and Key Performance Indicators	115
	from Customer Perspective	
3.4	Critical Success Factors and Key Performance Indicators	118
	from Internal Processes Perspective	
3.5	Critical Success Factors And Key Performance Indicators	123
	from Innovation and Learning Perspective	
4.1	Areas of Inquiry on Public Sector Property Management	128
	Studies (Appendix 4 – A)	
4.2	Practitioners and Researchers in the Focused Interviews	131
	(Appendix 4 – B)	
4.3	The Four Design Tests	134
4.4	Case Study Tactics for Four Design Tests	134
4.5	Supply of Purpose Built Office in Malaysia 2002 (Appendix	135
	4 – C)	
4.6	Public Organisations that Managed the Office Buildings and	137
	the Total Office Space in Kuala Lumpur	
4.7	Source of Evidences	139

		xix
4.8	The Respondents for Part One of the Interview Questionnaires	150
4.9	The Respondents for Part Two Interview Questionnaires	156
4.10	Respondent Rates for the Survey Questionnaires	158
4.11	Types of Data Collection Instruments and Respondents for	159
	Pilot Test	
4.12	Respondent Rates for Survey Questionnaires at Pilot Test	161
4.13	Source of Evidences and Modes of Analysis	163
5.1	Employment Rates (1993 – 2002) in Kuala Lumpur (Appendix	168
	5 – A)	
5.2	Property Stock - Housing, Shop, Commercial Complex,	169
	Industrial, and Office Space in Malaysia, and Kuala Lumpur	
	(1993 – 2002) (Appendix 5 B)	
5.3	Purpose-Built Office Space: Total Stock and Number of	171 AMINAH
	buildings for Malaysia, and Kuala Lumpur (1993 – 2002)	
5.4	Occupancy Rates for Purpose-Built Office Buildings in	172
	Malaysia and Kuala Lumpur and Its Five Zones (1993 – 2003)	
5.5	Supply of Public Office Buildings in Kuala Lumpur, and	174
	Malaysia in 2002	
5.6	The Central Government Land Titles According to Ministry in	175
	Malaysia	
6.1.	The Location of the Building in the Case Studies – From the	197
	Customer Perspective	
6.2.	A Summary of the Case Studies Background (Appendix 6 – B)	198
6.3.	CS1 – Office Space Usage (as at September 2002)	200
6.4.	CS2 – Office Space Usage (as at September 2002)	211
6.5.	CS3 – Office Space Usage (as at March 2003)	222
6.6.	Summary of Occupier Agencies and Controlling Organisation	232
	of the Case Studies	
7.1.	The Organisational Visions and Organisation Objectives, and	237
	the Property Management Approaches of the Case Studies	

7.2.	The Variables in the Internal Users Questionnaire, their Code	252	
	for, and Mode of Analysis		
7.3.	The Values from Kaiser-Meyer-Olkin (KMO) and Bartlett's	254	
	Test Of Sphericity for the Case Studies from Internal Users		
	Surveys		
7.4.	The Value of MSA of Individual Variable from Internal Users	255	
	Survey		
7.5.	CS1 – Rotated Factor Matrix (Loading) for KPIs from Internal	257	
	Users Perspective		
7.6.	CS2 – Rotated Factor Matrix (Loading) for KPIs from Internal	258	
	Users Perspective		
7.7.	CS3 – Rotated Factor Matrix (Loading) for KPIs from Internal	259	
	Users Perspective		
7.8.	CSFs for the Internal Users in the Case Studies	261	
7.9.	CS1 - Factor Analysis Grouping using Varimax Orthogonal	263	
	Rotation Method for KPIs from Internal Users Perspective		
7.10.	CS2 - Factor Analysis Grouping using Varimax Orthogonal	264	
	Rotation Method for KPIs from Internal Users Perspective		
7.11.	CS3 - Factor Analysis Grouping using Varimax Orthogonal	265	
	Rotation Method for KPIs from Internal Users Perspective		
7.12.	The Variables in the External Users Questionnaire, their Code	269	
	for, and Mode of Analysis		
7.13.	The Values from Kaiser-Meyer-Olkin (KMO) and Bartlett's	269	
	Test for the Case Studies from External Users Surveys		
7.14.	The Values of MSA for Individual Variables from External	271	
	Users Survey For Each Of The Case Studies		
7.15.	CS1 – Rotated Factor Matrix (Loading) for KPIs from	272	
	External Users Perspective		
7.16.	CS2 – Rotated Factor Matrix (Loading) for KPIs From	273	
	External Users Perspective		

		xxi
7.17.	CS3 – Rotated Factor Matrix (Loading) for KPIs from	274
	External Users Perspective	
7.18.	CSFs for the External Users in the Case Studies	275
7.19.	CS1 – Factor Analysis Grouping using Varimax Orthogonal	277
	Rotation Method for KPIs from External Users Perspective	
7.20.	CS2 – Factor Analysis Grouping using Varimax Orthogonal	278
	Rotation Method for KPIs from External Users Perspective	
7.21.	CS3 – Factor Analysis Grouping using Varimax Orthogonal	279
	Rotation Method for KPIs from External Users Perspective	
7.22.	The Respondents for Employee Satisfaction Factor in the Case	303
	Studies	
7.23.	Data Analysis - Mean Scores For KPIs In the Employee	304
	Satisfaction Factor (Appendix 7 – A)	
8.1.	Findings on the CSFs and KPIs from Financial Perspective as	328
	Identified by the Case Studies	
8.2.	Findings from Cross-Case Analysis of the Case Studies –	331
	Determining CSFs and Identifying KPIs from Internal Users	
	Perspective	
8.3.	Findings from Cross-Case Analysis of the Case Studies –	332
	Determining CSFs and Identifying KPIs from External Users	
	Perspective	
8.4.	Findings on the CSFs and KPIs from Internal Processes	335
	Perspective as Identified in the Case Studies	
8.5.	Findings on the CSFs and KPIs from Innovation and	337
	Continuous Improvement Perspective as Identified in the Case	
	Studies	

LIST OF FIGURES

NO. O	F FIGURES TOPIC	PAGE
2.1	Public Property Management and Research Framework	31
2.2	A Strategic Framework for Property Management	42
2.3	Conceptual Framework Of Corporate Property Asset	43
	Management	
2.4	Feedback Loop Between Managerial Action and Property	62
	Performance	
2.5	The Management-By-Variance Cycle	65
2.6	Hierarchical Relationship of Indicators	68
2.7	Post Occupancy Evaluation as a Facility Management Tool	70
2.8	The Performance Perspective Linked to the Scorecard	71
2.9	An overview of the Framework Based on Balanced	76
	Scorecard to Measure Performance	
3.1	Conceptual Framework for Performance Measurement in	101
	the Management of Public Office Buildings	
4.1	An Outline of Research Design	130
4.2	Relationship Of Public Organisations and Key Players in	141
	Property Management in the Sampling Frame of the Study	
4.3	The Relationship of the Public Organisations, the Property	143
	Management Functions, the Office Buildings, and their	
	Users in the Management of Public Office Buildings in the	
	Multiple Case Studies Setting (Appendix 4 – D)	

		xxiii
5.1.	Property Management Activities in the Public Sector	179
6.1.	Location Map of the Case Studies (Appendix 6 – A)	197
6.2.	CS1 – The Position of Building Management Tasks Within	203
	the Organisation Structure	
6.3.	Property Management Processes in CS1	209
6.4.	CS2 - The Position of Property Management Tasks within	214
	the Organisation Structure	
6.5.	Property Management Processes in CS2	220
6.6.	Property Management Services of the Maintenance Unit	224
6.7.	CS3 - The Position of Property Management Tasks within	225
	the Organisation Structure	
6.8.	Property Management Processes in CS3	230
	PERPUSTAKAAN TUNKU	TUN AMINAH

LIST OF APPENDICES

APPENDIX	TOPIC	PAGE
2 – A	Table 2.2: A Summary of Property Management	36
	Studies in Performance Measurement	
4 – A	Table 4.1: Areas of Inquiry on Public Sector Property	128
	Management Studies	
4 - B	Table 4.2: Practitioners and Researchers in the	131
	Focused Interviews	
4 – C	Table 4.5: Supply of Purpose Built Office in Malaysia	135
	2002	
4 – D	Figure 4.3: The Relationship of the Public	143
	Organisations, the Property Management Functions,	
	Their Office Buildings, and Their Users in the	
	Management of Public Office Buildings in the	
	Multiple Case Studies Setting	
4 - E(1)	Structure Interview Questionnaire - Part 1	145
4 - E(2)	Structure Interview Questionnaire - Part 11 (A)	145
4 - E(3)	Structure Interview Questionnaire - Part 11 (B)	145
4 - E(4)	Structure Interview Questionnaire - Part 11 (C)	145
4 - E(5)	Survey Questionnaire – Internal Users	145
4 - E(6)	Survey Questionnaire – External Users	145
4 - E(7)	Survey Questionnaire - Employee Satisfaction	145

		XXV
5– A	Table 5.1: Employment Rates (1993 – 2002) in Kuala	168
	Lumpur	
5 – B	Table 5.2: Property Stock – Housing, Shop,	169
	Commercial Complex, Industrial, and Office Space in	
	Malaysia, and Kuala Lumpur (1993 – 2002)	
6 – A	Figure 6.1: Location Map of the Case Studies	197
7 – A	Table 7.23A: Data Analysis - Mean Scores for KPIs	304
	in the Employee Satisfaction Factor	



LIST OF REFERENCES

- Abdullah Thalith Mohd Thani. (2001). "NAPIC: National Property Information Centre" Paper presented at the International Valuation Forum 2001, Bangkok.
- Abidah Othman. (1996). "Facilities Management in the Changing Role of the Property Maintenance Manager". *The Surveyors, 2nd Quarterly*, 10.
- Acoba, F. J., & Foster, S. P. (2003). "Aligning corporate real estate with evolving corporate missions: Process-based management models". *Journal of Corporate Real Estate*, 5(2), 143-64.
- Ahmad, P. K., & Rafiq, M. (1998). "Integrated Benchmarking: A Holistic Examination of select techniques for benchmarking analysis". *Benchmarking for Quality Management & Technology*, 5(3,), 225-242.
- Ahmad, P. K. (1998). "Benchmarking Innovation Best Practices". *Benchmarking for Quality Management & Technology*, 15(.3), 21-26.
- Ahuvia, A. (2001). "Traditional, interpretive, and reception based content analyses: improving the ability of content analysis to address issues of pragmatic and theoretical concern". *Social Indicators Research*. *54*(2), 139-172.

- Akel, N., Ahley, D., Tsai, C.C., Teichoiz, P., & Kok, B. G. (1996). "General performance modelling: decisions, drivers, processes and outcomes". Paper presented at the RICS Conference COBRA.
- Akintoye, A. (2000). "Analysis of factors influencing project cost estimating practice". *Construction Management and Economics*, 18, 77-89.
- Al-Athari, A., & Zairi, M. (2001). "Building Benchmarking competence through knowledge management capacity: An empirical study of the Kuwaiti context". Benchmarking: An International Journal, 8(1), 70-80.
- Alani, A. M., Peterson, A. K., & Chapman, K. S. (2001). "Application of a developed quantitative model in building repair and maintenance case study". *Facilities*, 19(5/6), 215-221.
- Alani, A. M., Tattersall, R. P., & Okoroh, M. I. (2002). "Quantitative models for building repair and maintenance: a comparative study". *Facilities*, 20(5/6), 176-189.
- Alexander, K. (1996). "Facilities Management: Theory and Practice". London: E & FN Spon.
- Amaratunga, D., & Baldry, D. (1998). "Appraising The Total Performance Of HE Buildings: A Participatory Approach Towards A Knowledge-Base System".

 Paper presented at the RICS Conference COBRA
- Amaratunga, D., Sarshar, M., Baldry, D., Stokes, E., Haigh, R. & Nelson, M. (1998). "Process improvement in FM: the SPICE approach". University of Salford.

- Amaratunga, D., & Baldry, D. (1998a). "Post -Occupancy Evaluation Of HE Teaching Space A Methodology Approach". Salford: Research Centre For The Built & Human Environment, University Of Salford.
- Amaratunga, D., & Baldry, D. (1999). "Building Performance Evaluation In Higher Education Properties: Towards A Process Mode". Paper presented at the RICS Conference COBRA.
- Amaratunga, D., Baldry, D. & Sarshar, M. (2000). "Assessment of FM Performance What Next?" *Facilities, 18*(1/2), 66-75.
- Amaratunga, D. (2000a). "Assessment of FM performance". *Property Management*, 18(4), 258 266.
- Amaratunga, D. (2000b). "Performance Measurement of Higher Education Facilities:

 The Balanced Scorecard Approach" (RICS Research Foundation Paper Series).

 London:
- Amaratunga, D., & Baldry, D. (2000c). "Assessment of FM Performance in Higher Education Properties". *Facilities*, *18*(7/8), 293-301.
- Amaratunga, D., & Baldry, D. (2000d). "Effective process management in FM through performance measurement". Paper presented at the Second International Conference on Performance Measurement: Performance Measurement 2000 Past, Present and Future, University of Cambridge.
- Amaratunga, D., Baldry, D., & Sarshar, M. (2001). "Process improvement through performance measurement: The BSC methodology". *Work Study*, *50*(5), 179-188.

- Amaratunga, D., & Baldry, D. (2001). "Case study methodology as a means of theory building: performance measurement in FM organisations". *Work study*, 50(3), 95-104.
- Amaratunga, D., & Baldry, D. (2001a). "The debate about quantitative and qualitative research in the built environment: a question of method or epistemology?" Paper presented at the First International Conference of Postgraduate Research, University of Salford.
- Amaratunga, D., (2001b). "Theory Building in FM performance measurement:

 Application of some core performance measurement & management principles".

 Unpublished PhD. Thesis, University of Salford,
- Amaratunga, D., & Baldry, D. (2002). "Balanced scorecard A universal solution to facilities management?" Paper presented at the International Research Symposium in FM, University of Salford.
- Amaratunga, D., Haigh, R., Sarshar, M. & Daldry, D. (2002). "Application of the balanced scorecard concept to develop a conceptual framework to measure FM performance within NHS facilities". *International Journal of Health Care Quality Assurance*, 15(4), 141-151.
- Amaratunga, D., & Baldry, D. (2002a). "Moving from performance measurement to performance management". *Facilities, 20*(5/6), 217-223.
- Amaratunga, D., Baldry, D., Sarshar, M. & Newton, R. (2002a). "Quantitative and qualitative research in the built environment: application of mixed research approach". *Work study*, *51*(1), 17-31.

- Amaratunga, D., & Baldry, D. (2002b)." Sample view of current performance measurement practices in Facilities Management". Paper presented at the 2nd International Postgraduate Conference in Built and Human Environment. University of Salford,
- Andriopoulos, C. (2001). "Determinates of organisational creativity: a literature review". *Management Decision, 39*(10), 834-840.
- Apgar, M. (1995). "Managing Real Estate To Build Value". *Harvard Business Review* (Nov/Dec).
- Apgar, M. (2002). "Deconcentration: A strategic imperative in corporate real estate". *Journal of Real Estate Portfolio Management*, 8(4), 50-60.
- APQC. (1993). "The Benchmarking Management Guide" Portland: Productivity Press.
- Audit Commission. (2000). "Management Paper On Target The practice of performance indicators". London: The Audit Commission.
- Avis, M., Gibson, V. A., & Watts, (1989). "Managing Operational Property Assets".

 Reading: Department of Land Management, University of Reading.
- Avis, M., Braham, R., Crosby, N., Gane, D., Temple, M., Whitman, A., French, N. & Gibson, V. (1993). "Property Management Performance Monitoring". Reading: School of Estate Management Oxford Brookes University & Department of Land Management and Development, University of Reading.
- Avis, M., & Gibson, V. A. (1995). "Real Estate Resource Management". Paper presented at the RICS Research Conference The Cutting Edge.

- Balch, W. F. (1994). "An Integrated Approach to Property and Facilities Management". *Facilities, 12*(1).
- Baldry, D. (1994). "The client function in respect of FM service". Paper presented at the CIB W70 Tokyo Symposium, Tokyo,
- Baldry, D. (1995). "Strategic Property Management in Not-For-Profit Organizations".

 Paper presented at the RICS COBRA.
- Baldry, D. (1996). "Client Benchmarking of contractor performance". Paper presented at the International Symposium for the organisational and management of Construction.
- Baldry, D. (1996a). "The management of projects for not-for-profit organisations".

 Paper presented at the IPMA '96 World Congress on Project Management,

 CNIT, *Paris la Defense* France.
- Baldry, D. (1998). "The evaluation of risk management in public sector capital projects". *International Journal of Project Management*, 16(1), 35-41.
- Baldwin, G. (1994). "Property Management In Hong Kong: An Overview". *Property Management*, 12(4), 18-23.
- Ball, A., Bowerman, M., & Hawksworth, S. (2000). "Benchmarking In Local Government Under A Central Government Agenda". *Benchmarking: An International Journal*, 7(1), 20-34.
- Baraldi, E., & Bacconcelli, R. (2001). "The quantitative journey in a qualitative landscape: developing a data collection model and a quantitative methodology in business network studies". *Management Decision*, 39(7), 564-577.

- Barrett, P. (1995). "Facilities Management Towards Best Practice. Cambridge": Blackwell Science.
- Baum, A. (1994). "Quality and property performance". *Journal of Property Valuation and Investment, 12*(1), 31-46.
- Beaverstock, J. V., Taylor, P. J. & Smith, R. G. (1999). "A roster of world cities". In S. Moshidi (Ed.), "Globalisation Kuala Lumpur and the strategic role of the producer services sector": Urban studies November 2000, Vol. 37, No. 12.
- Belcher, R. C. (1997). "Corporate Objectives, Facilities, Performance Measurement & Use: A University Case Study". Paper presented at the RICS Conference COBRA
- Bhutta, K. S., & Huq, F. (1999). "Benchmarking Best Practice an Integrated Approach". *Benchmarking: An International Journal*, 6(3), 254 -268.
- BIFM. (2000). "Facilities Introduction", (on-line serial), Web page: http://bifm.org.uk: British Institute of Facilities Management.
- Bititci, U., & Turner, T. (2000). "Dynamics of performance measurement systems".

 International Journal of Operations & Production Management, 20(6), 692-704.
- Boland, T., & Fowler, A. (2000). "A Systems Perspective Of Performance Management In Public Sector Organisations"; *International Journal of Public Sector Management*; 13(5), 417-446.
- Bon, R. (1989). "Building as an economic process: an introduction to building economics": Englewood Cliffs, NJ: Prentice Hall.

- Bon, R. (1994). "Ten Principles of Corporate Real Estate Management". *Facilities*. *12*(5).
- Bon, R. (1994a). "Corporate Real Estate Management in Europe and the USA". *Facilities, 12*(3).
- Bon, R. (1995). "Corporate Real Estate Management practices in Europe and the USA: 1993 and 1994 surveys". *Facilities 13*(7).
- Bon, R., McMahan, J. F. & Careler, P. (1998). "Property Performance Measurement from Theory to Management Practices". *Facilities*, *16*(7/8).
- Bon, R. (2000). "Corporate Real Estate Management" In B. Nutt & P. McLennan (Eds.), FM risks and opportunities. Oxford: Blackwell Science.
- Bon, R., & Luck, R. (2001). "Annual CREMRU_JCI Survey of Corporate Real Estate Practices in Europe and North America 1993 –2000" *Facilities*, 19(11/12), 386-395.
- Bon, R., Gibson, V., & Luck, R. (2003). "Annual CREMRU-JCI Survey of corporate real estate practices in Europe and North America: 1993-2001". *Facilities*, 20(11/12), 357-373.
- Bond, S. (1996). "The Valuation of Local Authority Assets Identifying the Appropriate Methodology". New Zealand Valuer's Journal, November.
- Bond, S., & Dent, P. (1998). "Efficient Management of Public Sector Asset, The Call for Correct Evaluation Criteria and Techniques". *Journal of Property Valuation and Investment*, 16(4).

- Bond, S. (1998). "Key Factors in Effective Asset Management". New Zealand Valuer's Journal November
- Bowman, C. (1990). "The Essence of Strategic Management": Prentice Hall Europe.
- Boxwell, R. J. (1994). "Benchmarking for Competitive Advantage": McGraw-Hill.
- Brackertz, N., & Kenley, R. (2002). "A service delivery approach to measuring facility performance in local government". *Facilities*, 20(3/4), 127-135.
- Brat, J. M. (1996). "Developments in the Management of Facilities at Large Corporations". *Facilities*, 14(5).
- Bridge, A., & Baldry, D. (1996). "A strategic approach to the procurement of facilities services:. Paper presented at the COBRA, University of the West of England.
- Britton, W., Connellan, O., & Crofts, M. (1989). "The Economic, Efficient, and Effective Management of Public Authority Landed Estate". Kingston: Surrey County Council and Kingston Polytechnic.
- Brown, R. K., Arnold, A. L., Rabianski, J. S., Carn, N. G., Lapides, P. D., Blanchard, S. B., & Rondeau, E. P. (1993). "Managing Corporate Real Estate" John Wiley & Sons, USA.
- Brown, & Laverick. (1994). "Measuring Corporate Performance". In D. Amaratunga (Ed.), Performance Measurement of Higher Education Facilities: The Balanced Scorecard Approach (pp. 89 -90). London: RICS Research Foundation Paper Series.

- Brown, K., & Ryan, N. (2000). "New modes of service delivery in the public sector: commercialising government service". *The International Journal of Public Sector Management*, 13(3), 206 221.
- Brown, A., Hinks, J., & Sneddon, J. (2001). "The facilities management role in the new building procurement". *Facilities*, 19(3/4), 119-130.
- Bruder, K. A., & Gray, E. M. (1994). "Public Sector Benchmarking: A Practical Approach". *Public Management, September*.
- Bullivant, J. R. N. (1994). "Benchmarking for Continuous Improvement in the Public Sector": Longman Group Ltd. 1994 UK.
- Burrell, W. G., & Morgon, G. (1993). "Sociological Paradigms and Organizational Analysis, elements of sociology of corporate life", Athenaum Press Newcastle upon Tyne.
- Buyukozkan, G., & Maine, J. L. (1998). "Benchmarking process formation and a case study". *Benchmarking For Quality Management and Technology*, 5(2), 101-125.
- Byrne, P. (1994). "The Review Of Local Government, The Effects On The Management Of Property Asset". *Property Management*, 12(3), 5-8.
- Camp, R. C. (1989). "Benchmarking: The Search for Industry Best Practices that Lead to Superior Performance". New York: Quality Resource.
- Carder, P. (1995). "Knowledge-based FM: managing performance at the workplace interface". *Facilities*, *13*(12), 7-11.

- Carn, N. G., Black, R. T. & Rabianski, J. S. (1999). "Operational and Organizational Issues Facing Corporate Real Estate Executives and Managers". *Journal of Real Estate Research*, 17(3).
- Carter, N., Black, R. T. & Rabianski, J. S. (1995). *How organisations measure success:* the use of performance indicators in government. London: Routledge.
- Chakravarthy, B. S. (1995). "Measuring strategic performance". In J. Holloway, J. Lewis, & Mallory (Eds.), Performance measurement and evaluation (pp. 253-279). London: Sage.
- Chan, K. T., Lee, R. H. K., & Burnett, J. (2001). "Maintenance performance: a case study of hospitality engineering systems". *Facilities*, 19(13/14), 494-503.
- Chilton, J. J., & Baldry, D. (1997). "The effects of integrated workplace strategies on commercial office space". *Facilities*, 15(7/8), 187-194.
- Chin, L., & Law, K. P. (1999). "Implementing Quality in Property Management The Case of Singapore". *Property Management*, 17(4).
- Clark, L., & Price, I. (1999). "Bassetflaw NHS Trust: FM call centre service project Customer Satisfaction survey". Sheffield: FMGC Sheffield Hallam University.
- Clark, L., & Rees, D. (2000). "Professional Facilities Management in Public Sector Organization:. *Facilities*, 18(10/11/12).
- Cooper, B. J., Philomena, L., &Mathews, C. M. H. (1996). "Benchmarking a comparison of internal audit in Australia, Malaysia and Hong Kong". *Managerial Auditing Journal*, 11(1), 23 -29.
- Cowling, P. (1995). "Precise Monitoring of Public Buildings". Facilities. 18(1).

- Cowper, J., & Samuels, M. (1997). "Performance Benchmarking in the Public Sector: the United Kingdom Experience, Benchmarking Evaluation & Strategic Management in the Public Sector". Paper presented at OECD web page http://www.oecd.org//puma/mgmtres/pac/benchmarking/inndex.htm.
- Creswell, J. W. (1994). "Research Design Qualitative & Quantitative Approaches". California: Sage.
- Dahlberg, L., & Isaksson, C. (1997). "The Implementation of Benchmarking from A Swedish Perspective". Paper presented at the Conference International Benchmarking, Copenhagen.
- Davis, G., & Szigeti, F. (1982). "Planning and programming offices determining user requirements". *Environment and Behavior*, 14(3), 302--4.
- Davis, P. (1998). "The Burgeoning Of Benchmarking In British Local Government". Benchmarking: An International Journal, 5(4), 260 -270.
- de Weerd-Nederhof, P. C. (2001). "Qualitative case study research. The case of a Phd. research project on organising and managing new product development systems". *Management Decision*, 39(7), 513-538.
- Deakin, M. (1996). "The Property Management Division For Kiev City". *Property Management*, 14(4), 15-20.
- Deakin, M. (1998). "The Development Of Local Authority Property Management": RICS Research.
- Deakin, M. (1998a). "The Development of Computer Based Information Systems For Local Authority Property Management". *Property Management*, 16(2), 51-82.

- Deakin, M. (1998b). "The Financial Aspects of Property Management; The case of Kiev City". *Journal of Property Finance*, 8(1), 52-82.
- Deakin, M. (1999). "The underlying issues, model, and task ahead for local authority property management". Paper presented at the RICS Cutting Edge
- Department of Statistic Malaysia. (2001). "Preliminary Count Report Population and Housing Census 2000". Kuala Lumpur: Government of Malaysia.
- Dinesh, D., & Palmer, E. (1998). "Management by objectives and the Balanced Scorecard: will Rome fall again?" *Management Decision*, 36(6).
- Dorsh, J. J., & Yasin, M. M. (1998). "A Framework for Benchmarking in the Public Sector; Literature Review & Directions for Future Research". *International Journal of Public Sector Management*, 11(2/3), 91-115.
- Douglas, J. (1996). "Building Performance and Its Relevance to FM". *Facilities*, 14(3/4), 23-32.
- Duckworth, S. L. (1993). "Realizing the Strategic Dimension of Corporate Real Estate property through improved planning & control system". *Journal of Real Estate Research*, 8(4).
- Duckworth, S. L. (1992). "Performance Implications of Corporate Real Estate Strategic Orientation". Unpublished doctoral thesis, Massachusetts Institute of Technology November.
- Eccles, R. C. (1991). "The Performance Measurement Manifesto". *Harvard Business Review* (Jan-Feb), 131-137.

- Edwards, V., & Seabrooke, W. (1990). "Proactive Property Management". *Property Management*, 9(4).
- Epley, D. R. (2003). "New ranking of decision-making subject areas for corporate real estate executives". *Journal of Real Estate Research, forthcoming*.
- Featherstone, P., & Baldry, D. (2000). "Public Sector Facilities Management Strategy"

 Paper presented at the RICS Conference COBRA,
- Fernandez, E. (2000). "The future business environment". *New Zealand Valuers' Journal*(July), 31-35.
- Fernandez, P., McCarthy, I. P. & Rabotobe-Joel, T. (2001). "An evolutionary approach to benchmarking". *Benchmarking: An International Journal*, 8(4), 281-305.
- Feurer, R., & Chaharbaghi, K. (1995). "Performance Measurement in Strategic Change". Benchmarking For Quality Management and Technology, 2(2), 64 - 83.
- Fine, T., & Snyder, L. (1999). "What is the difference between performance measurement and benchmarking?" *Public Management (US)*, 81(1), 24.
- Finnemore, M., & Sarshar, M. (1999). "Standardised Process Improvement for Construction Enterprises (SPICE)" (Research Report). Salford: University of Salford.
- Fisher, R. J. (1994). "An Overview of Performance Measurement". *Public Management* (US), 76(9).
- Fleming, D., & Storr, J. (2000). "Applied benchmarking and performance indicators for Facilities Managers of educational buildings". Paper presented at the Pacific Rim Real Estate Society (PRRES) Conference, Sydney.

- Flynn, N. (1997). "Public Sector Management". London: Prentice-Hall/Harvester Wheatsheaf.
- Fong, S. W., Cheng, E. W. L. & Ho, D. C. K. (1998). "Benchmarking: A General Reading For Management Practitioners". *Management Decisions*, 36(6).
- Fong, P. S.W., Shen, Q., & Cheng, E. W. L. (2001). "A framework for benchmarking the value management process". *Benchmarking: An International Journal*, 8(4), 306 316.
- French, N. (1994). "Asset registers and asset rent for local authority A viable property management tool". *Property Management*, 12(3), 15-23.
- Gale, J., & Case, F. (1989). "A Study Of Corporate Real Estate Resource Management".

 Journal Of Real Estate Research, 4(3), 23-44.
- Gibler, K. M., Black, R. T., & Moon, K. P. (2002). "Time, place, space, technology, & corporate real estate strategy". *Journal of Real Estate Research*, 24(3), 235-262.
- Gibson, V. A. (1994). "Strategic Property Management: How can Local Authorities

 Develop a Property Management Strategy?" *Property Management*, 12(3), 9-14.
- Gibson, V. A. (1998). "Scope in Portfolio Management". Paper presented at the Seminar Property Management: Scope, Problem and Future Change, Kuala Lumpur.
- Gibson, V. A., & Hedley, C. (1999). "Information And Performance Measurement: A Study Of Current Practice In Corporate Property Management". Paper presented at the RICS Research Conference The Cutting Edge.

- Gibson, V. A. (1999a). "Corporate Real Estate in the Retail Sector": University of Reading, American Real Estate Society Annual Meeting 1999.
- Gibson, V. A. (2000). "Property Portfolio Dynamics: The Flexible Management of Inflexible Assets". Facilities, 18(3/4), 150-154.
- Gibson, V. A., & Lizieri, C. M. (2000). "Friction and Inertia: business Change, Corporate Real Estate Portfolios and the UK office market". Journal of Real Estate Research, 22(1/2).
- Gibson, V. A. (2000a). The cost of choice: How corporate real estate managers evaluate Gibson, V. A. (2000b). "Evaluating office space needs & choice". Department of land management & development, University of Reading. business space options (04/00)". Department of Land Management &
- Gibson, V. A. (2003). "Flexible working needs flexible space? Towards an alternative workplace strategy". Journal of Property Investment & Finance, 21(1), 12-22.
- Gilbert, G. R., & Parhazgari, A. M. (2000). "Organisational effectiveness indicators to support service quality". Managing Service Quality, 10(1), 46-51.
- Gilleard, J. D., & Tam, K. S. N. (2002). "Appropriate workplace strategies in Hong Kong". Facilities, 20(3/4), 113-118.
- Government of Malaysia. (1996). "Seventh Malaysian Plan 1996 2000". Kuala Lumpur: Percetakan National Berhad.
- Gupta, A. (1995). "Productivity measurement in service operations: a case study from the health-care environment". Managing Service Quality, 5(5), 31-35.

- Gurjit Singh. (1992a). "Property Management: Adopting A Holistic Approach in the Malaysian Context". The Surveyor, 1992, Vol. 27 No. 1 p.37, 27(1), 37.
- Gurjit Singh. (1992b). "The Property Management of Commercial Office Buildings (Part 1)" The Surveyor, 1991, Vol. 26 No. 2 p.51
- Gurjit Singh. (1992c). "The Property Management of Commercial Office Buildings (Part 11)" The Surveyor, 1991, Vol. 26 No. 3 p.46,
- Gurjit Singh. (1994). "Re-Engineering Property Management: Sustaining Asset Value Through Effective Property Management". Paper presented at the Conference On Property Maintenance & Management In The 90's, 30 -31 May 1994, Kuala Lumpur.
- AMINA Gurjit Singh. (1999). "The evolving of IT in Property and Facilities Management". Paper presented at the 1999 Malaysian Survey Congress, Kuala Lumpur., Kuala Lumpur.
- Hadi, M. (2002). "Measuring Performance by reference to the customer". Paper presented at the International Research Symposium in FM, University of Salford.
- Haigh, R. (1999). "Standardised Process Improvement for Construction enterprises (SPICE): Research Methodology and Approach". Paper presented at the RICS Conference COBRA, Salford.
- Haigh, R., & Sarshar, M. (1999). "The SPICE Project: Managing Client requirements". Salford: University of Salford.
- Halachmi, A. (2002). "Performance measurement and government productivity". Work Study, 51(2), 63-73.

- Halachmi, A. (2002a). "Performance measurement: A look at some possible dysfunctions". *Work Study, 51*(5), 230-239.
- Hanson, H. (1995). "The management & control of mechanism needed for effective maintenance system". Paper presented at the RICS Conference COBRA.
- Heavisides, B., & Price, I. (2001). "Input versus output based performance measurement in the NHS the current situation". *Facilities*, *19*(10), 344-356.
- Heavisides, R. (2001a). "Output based FM specifications in the NHS: Literature review and directional outcomes" (Working Paper 1 http://www.occupier.org/working_papers/working_paper1.pdf). Sheffield: Occupier.org.
- Hedley, C., Rushforth, J. & Whelan, J. (1999). "Estate Management Performance Measures For Higher Education Sector". Paper presented at the RICS Conference Cutting Edge.
- Herriott, R. E., & Firemore, W. A. (1983). "Multisite qualitative policy research:

 Optimizing description and generalizability". *Educational Researcher*, 12, 14-19.
- Hinks, J. (1998). "A conceptual model for the relationship between information technology and FM process capability". *Facilities*, *16*(9/10), 233-245.
- Hinks, J., & McNay, P. (1999). "The creation of a management-by-variance tool for FM performance assessment". *Facilities, 17*(1/2), 31 -53.
- Hinks, J., & McNay, P. (1999a). "Management-by-variance as a FM performance assessment technique". *Facilities*, 17(1/2), 31-53.

- Hinks, J., & McNay, P. (1999b). "A strategic review of FM performance indicators". *Facilities, 17*(1/2).
- Hinks, J. (2000). "Measuring the value of FM to differing business scenarios". Glasgow: CABER the Centre for Advance Built Environment Research.
- Hinks, J. (2000a). "FM performance and accountability". In B. Nutt & P. McLennan (Eds.), *FM risks and opportunities*. Oxford: Blackwell Science.
- Hinks, J. (2002). "Lies, damned lies, and KPIs Moving towards more meaningful performance measurement in FM". Paper presented at the EuroFM International Research Symposium in FM, University of Salford.
- Hinton, W., Graham, F & Holloway J. (2000). "Best Practice Benchmarking in the UK". .Benchmarking: International Journal, 7(1), 51-66.
- Ho, D. C. W., Chan, E.H.W., Wong, N.Y. & Chan, M. (2000). "Significant Metrics For Facilities Management Benchmarking in the Asia Pacific Region": *Facilities*, 18(13/14), 545-555.
- Holloway, J., Francis, G. & Hinton, M. (1999,). "A Vehicle for Change? A Case Study of Performance Improvement in the "New" Public Sector". *The International Journal of Public Sector Management*, 12(4), 351-365.
- Hoque, Z., & James, W. (2000). "Linking Balanced Scorecard Measures to Sizes and Market Factors: Impact on Organisational Performance". *Journal of Management Accounting Research*, 12, 1-17.
- Housley, J. (1997). "Managing the estate in higher education establishments". *Facilities*, 15(3/4), 72-83.

- Huffman, F. E. (2002). "Corporate real estate risk management and assessment". *Journal of Corporate Real Estate*, 5(1), 31-41.
- Iskandar Ismail. (1996). "The operational Property Management Process in Large Non-Property Organisation (LNPO) in Malaysia: An Organisational Perspective". Unpublished doctoral thesis, University of Reading, Reading.
- Iskandar Ismail. (1998). "A Critique of Current Research Method in Corporate Property Literature", *Journal of Valuation and Property Service*, 1(1).
- Jack, J. (1994). "Strategic facilities management". Property Management, 12(4), 40-43.
- Jarrar, Y. F., & Zairi, M. (2000). "Best Practice Transfer For Future Competitiveness: A Study of Best Practices". *Total Quality Management*, 11(4-6), 734.
- Jarrar, Y. F., & Zairi, M. (2000a). "Internal Transfer of Best Practice for Performance Excellence: A Global Survey". *Benchmarking: An International Journal*. 7(2). 239 246.
- Jensen, J. J. & Sage, A. P. (2000). "A system management approach for improvement of organisational performance measurement". *Information knowledge systems management*, 2, 33-61.
- Johnson, H. T., & Kaplan. (1991). "Relevance Lost: The Rise and Fall of Management Accounting". In R. McAdam & R. Saulters (Eds.). *Quality Measurement Frameworks In The Public Sector* (Vol. 11) New York: Total Quality Management.
- Kaplan, R. S., & Norton, D. P. (1992). "The Balanced Scorecard measure that drive performance". *Harvard Business Review, Jan-Feb.* 171-79.

- Kaplan, R. S., & Norton, D. P. (1996). "The Balanced Scorecard: Translating Strategy into Action". Boston: Harvard Business School Press.
- Kaplan, R. S., & Norton, D. P. (1996a). "Using the Balanced Scorecard as a Strategic Management System". *Harvard Business Review, Jan-Feb*.
- Kaplan, R. S. (1998). "Innovation action research: Creating new management theory and practice". *Journal of Management Accounting Research*, 10, (89).
- Keehley, P., et al. (1997). "Benchmarking for Best Practice in the Public Sector". San Francisco: Jossey_Bass Publishers.
- Kelley, J., Bowles, G. Male, S. & Gronquist, M. (1996). "The International Benchmarking of Value Management". Paper presented at the RICS Conference COBRA.
- Kelley, J. (2000). "The measurement of best value". Paper presented at the RICS Conference COBRA.
- Kelley, J., & Hunter, K. (2001). "The three wheels of best value: A service focussed approach to the measurement of best value: (Research report). Glasgow: Glasgow Caledonian University.
- Khim, L. S., & K., H. C. (2001). "Balanced Scorecard: A rising trend in strategic performance measurement". *Measuring Business Excellence*, 5(4), 18-27.
- Kimbler, L., & Rutherford, R. C. (1993). "Corporate real estate outsourcing: A survey of the Issues". *Journal of Real Estate Research*, 1993, 525-540.
- Kincaid, D. (1994). "A starting point for measuring physical performance". *Facilities*, 12(3), 24-27.

- Kincaid, D. (1994). "Measuring Performance in Facilities Management". Facilities 12(6) 17 20.
- Kloot, L. (1999). "Performance measurement & accountability in Victoria local government". *International Journal of Public Sector Management*, 12(7).
- Kooymans, R. (2000). "The outsourcing of corporate real estate management How do corporate real estate units and outsource service providers view each other and the management issues". Paper presented at the Sixth Annual Pacific-Rim Real Estate Society Conference, Sydney.
- Kouzmin, A., Loffler, E. Klages, H. & Korac-Kakabadse, N. (1999). "Benchmarking and performance measurement in public sectors: Towards learning for agency effectiveness". *International Journal of Public Sector Management, 12*(2), 121-144.
- Krippendorff, K. (1980). "Content Analysis An Introduction to Its Methodology". London: Sage Publication.
- Krumm, P. J. M. M., Dewulf, G. & de Jonge, H. (1998). "Managing key resource and capabilities: pinpointing the added value of corporate real estate management". *Facilities*, *16*(12/13), 372-379.
- Krumm, P. J. M. M. (2001). "History of real estate management from a corporate perspective". *Facilities, 19*(7/8), 276-286.
- Krumm, P. J. M. M., & de Varies, J. (2003). "Value creation through the management of corporate real estate". *Journal of Property Investment & Finance*, 21(1), 61-72.

- Kueng, P. (2000). "Process performance measurement system: a tool to support process-based organisations". *Total Quality Management, 11*(1), 67-85.
- Kyle, & Baird. (1995). "Property Management". (5th ed.): Deerborn Financial Publishing Inc.
- Leaman, A. (1995). "Dissatisfaction and office productivity". Facilities, 13(2), 13-19.
- Leifer, D. (1998). "Evaluating user satisfaction: case studies in Australasia". *Facilties*, 16(5/6), 138-142.
- Linariza Haron. (2001). "Space-time management analysis of facility spaces using three case studies". Paper presented at the International Postgraduate Research In The Built And Human Environment, University of Salford.
- Lipe, M. G., & Salterio, S. (2000). "The balanced scorecard: judgemental effects of common and unique performance measures". *The Accounting Review, 75*(3), 283.
- Loh, J. S. C. (1991). "Property Management: An Overview". Paper presented at the Conference on Property Management Practical Aspects, Kuala Lumpur.
- Longbottom, D. (2000). "Benchmarking In The UK: An Empirical Study Of Practitioners & Academics". *Benchmarking: An International Journal*, 7(2), 98 117.
- Loosemore, M., & Hsin, Y. Y. (2001). "Customer-focused benchmarking for FM." Facilities, 19(13/14), 464-475.
- Losekoot, E., et al. (2001). "Conceptualising and operationalising the research interface between FM and hospitality management". *Facilities*, *19*(7/8), 296-303.

- Lundstrom, S., & Lind, H. (1996). "Valuation of public real estate: context and concept". Journal of Property Valuation and Investment, 14(4), 31-40.
- Malina, M. A., & H., S. F. (2000). "Communicating and controlling strategy: an empirical study of the effectiveness of the balanced scorecard": web site: BetterManagement.com
- Manning, C. A., & Roulac, S. (1996). "Structuring the corporate real property function for greater bottom line impact". The Journal Of Real Estate Research, 12(3), 383-396.
- Manning, C., & Roulac, S. E. (1999). "Corporate Real Estate Research within the Academy". Journal of Real Estate Research, 17(3), 301-320.
- AMINA Manning, C., & Roulac, S. E. (2000). "Lessons from the Past and Future Direction for Corporate Real Estate Research" Journal of Real Estate Research, 22(1/2).
- Manoochehri, G. (1999). "Overcoming obstacles to developing effective performance measures". Work Study, 48(6), 223-229.
- Marbeck, A. B. (1988). "The Management of Public Building: The Need to Privatise". Paper presented at the Seminar Property Management: Scope, Problems and Future Challenge, Kuala Lumpur.
- Martinsuo, M. (2001). "Balancing large scope and project manageability in a qualitative research design". Management Decision, 39(7), 539-550.
- Massheder, K., & Finch, E. (1998). "Benchmarking metric used in UK FM". Facilities, *16*(5/6), 123-7.

- Massheder, K., & Finch, E. (1998a). "Benchmarking methodologies applied to UK FM". *Facilities, 16*(3/4), 99-106.
- Matheson, A., Scanlan, G. Tanner, R. (1997). "Strategic Management in Government: Extending the reform model in New Zealand". Paper presented at the International Benchmarking: OCED-PUMA, Copenhegan.
- Maxim, P. S. (1999). "Quantitative Research Methods in the Social Science". New York, Oxford: Oxford University Press New York.
- Maziah Ismail. (2001). "FM Practice In Malaysia: Where Are We Heading?" Paper presented at the FM KL 2001 Seminar, Kuala Lumpur.
- Maziah Ismail. (2001a). "Organisational property needs in operational property management". *Geoinformation Science Journal*, 1(2), 67-75.
- McAdam, R., & Saulters, R. (2000). "Quality measurement framework in public sector".

 Total Quality Management, 11(4, 5 & 6), 652-656.
- McColl-Kennedy, J., & Schneider, U. (2000). "Measuring customer satisfaction: why. what and how". *Total Quality Management*. 11(7), 882.
- McDonagh, J. (2002). "The use of MIS systems for corporate real estate asset management". Paper presented at the ERES 2002, Glasgow.
- McDougall, G., & Hinks, J. (2000). "Identifying priority issues in FM benchmarking". Facilities, 18(10/11/12), 427-243.
- Miles, M., & Pringle, J. W., B. (1989). "Modelling the corporate real estate decision". Journal of Real Estate Research, Fall 1989, 47-66.

- Miller, D. C. (1977). "Handbook of research design and social measurement". (3rd ed.). New York: Longman.
- Morshidi, S. (2000). "Globalising Kuala Lumpur and the strategic role of the producer services sector". *Urban Studies*, *37*(12), 2217.
- Muller, G. R., & Anderson, R. I. (2002). "The growth and performance of international public real estate markets". *Journal of Real Estate Portfolio Management*, 8(4).
- Murugavarothayan, K. K., & Coffey, M. (2000). "Performance Indicators of Professional Services Used by Clients". Paper presented at the RICS Conference COBRA.
- Mwita, J. I. P. (2000). "Performance management model A systems-based approach to public service quality". *International Journal of Public Sector Management;* 13(1), 19-37.
- National Property Information Centre NAPIC. (2000 2003). "Commercial And Industrial Property Stock Report". Kuala Lumpur: Valuation & Property Services Department, Malaysia.
- Neely, A., Gregory, M. & Platts, (1995). "Performance Measurement System Design: A Literature Review and Research Agenda". *International Journal of Operations and Production Management, 15*(4).
- Neely, A. (1998). "Measuring Business Performanc"e. In R. McAdam & R. Saulters (Eds.), *Quality Management Frameworks in The Public Sector*. London: The Economist Book.
- Neely, A. (1999). "Performance Measurement Revolutions: Why Now And What Next?" International Journal Of Operations And Production Management,

- 19(2).
- Nelson, M. L., & Baldry, D. (2000). "Modelling Process Improvement in FM". Salford: University of Salford.
- Nelson, P. (2002). "Commercial property management in Australia". Australian Property Journal (August), 188-91.
- New, R. M. (1992). "Property management and management corporation". Paper presented at the ISM Seminar On Subsidiary Titles, Kota Kinabalu.
- AMINA New Strait Times. (1998, 18 March). "Explain Benchmarking Principle, NPC urged". New Strait Times.
- New Strait Times. (1999, 16 July). "Follow Good Management Practices, Agencies told". New Strait Times.
- New Strait Times. (1999, 16 July). "Public sector told to use benchmarking measures". New Strait Times, pp. 02.
- Noha, E. A. (1993). "Benchmarking: The Search for Best Practices in Corporate Real Estate". Journal of Real Estate Research, 18(4).
- Nourse. (1990). "Managerial Real Estate: Corporate Real Estate Asset Management" Englewood Cliffs, NJ: Prentice-Hall.
- Nourse, H. O. (1992). "Selecting Administrative Office Space". Journal of Real Estate Research, 7(2).
- Nourse, H. O., & Roulac, S. E. (1993). "Linking Real Estate Decisions To Corporate Strategy". The Journal Of Real Estate Research Vol. 8 No. 4 1993, 8(4).

- Nourse, H. O. (1994). "Measuring Business Real Property Performance". Journal of Real Estate Research, 9(4).
- Oakland, J. S. (1993). "Total Quality Management: the route to improving performance". Oxford: Butterworth-Heinemann.
- Oakland, J. S. (1999). "Total organisational excellence, achieving world class performance". Oxford: Butterworth Heinemann.
- Olve, N. G., Roy, J. & Wtter, M. (1999). "Performance drivers: a practical guide to NAMINAT using the balanced scorecard". Chichester: John Wiley & Sons Ltd.
- Oppenheim, A. N. (1992). "Questionnaire Design, Interview, and Attitude Measurement". (New ed.). London, New York: Printer.
- Ornstein, S. W., Leite, B. C. C. & de Andrade, C. M. (2001). "Occupancy evaluation of offices in financial sector". Facilities, 19(11/12), 404-412.
- Oseland, N., & Willis, S. (2000). "Property performance and productivity". In B. Nutt & P. McLennan (Eds.), FM risks and opportunities. Oxford: Blackwell Science.
- Parasuraman, A., Zeithmal, V. A. & Berry, L. (1988). "SERVQUAL: A Multi-Item Scale For Measuring Customer Perceptions of Service Quality". In Sharifuddin Zainuddin (Ed.), Public Sector Service Quality: An Empirical Study in the Road Transport Department of Malaysia (1999) Kuala Lumpur: National Productivity Corporation.
- Parker, C. (2000). "Performance Measurement". Work Study, 49(2), 63-66.

- Patton, M. Q. (1990). "Qualitative Evaluation and Research Methods". (2nd ed.) Newbury Park, CA: Sage Publishing, Inc.
- Paul, G. A. (1987). "Quality Process Management". Englewood Cliffs. N. J.: Prentice-Hill.
- Pinder, J., & Wilkinson, S. J. (2000). "A behavioural approach to the obsolescence of office property". Paper presented at the RICS Conference COBRA.
- Pinder, J., & Wilkinson, S. (2000a). "Measuring the gap: A user based study of building obsolescence in office property". Paper presented at the Cutting Edge 2000.
- Pitt, M., & Hinks, J. (2001). "Barriers to the operation of the FM: property management interface". *Facilities*, *19*(7/8), 304-307.
- Pittman, R. H., & Parker, J. R. (1989). "A survey of corporate real estate executives on factors influencing corporate real estate performance". *Journal of Real Estate Research*, 4(3), 107-119.
- Preiser, W. F. E. (1995). "Post-occupancy evaluation: how to make buildings work better". *Facilities, 13*(11), 19-28.
- Preiser, W. F. E., & Schraman, U. (2002). "Intelligent office building performance evaluation". *Facilities*, 20(7/8), 279-287.
- Price, I., & Akhlaghi, F. (1999). "New patterns in FM: Industry Best Practice and New Organisational Theory". *Facilities*. 17(5/6). 159-166.
- Robert, P. (2001). "Corporate competence in FM: current problems and issues". *Facilities*, 19(7/8).

- Rodrigues, C. A. (2001). "Fayol's 14 principles of management then and now, a framework for managing today's organisations effectively". *Management Decision*, *39*(10), 880-889.
- Roulac, S., Adair, A., McGreal, S., Berry, J., Brown, L., & Heaney, G. (2003). "Corporate real estate in Ireland: A current perspective on corporate strategic decision-making". *Journal of Property Investment & Finance, 21*(1), 31-44.
- Ryan, L. (2000). "The Asian Economic miracle unmasked the political economy of the reality". *International Journal of Social Economics*, 27(7/8/9/10), 802-815.
- Sahari Mahadi. (1998). "Limited Property Management Is There A Need?" *The Surveyors, 4th Quarterly*, 2.
- Sahari Mahadi. (1999). "Speech at The 1999 Malaysian Survey Congress Annual Dinner Kuala Lumpur on 19 June 1999". *The Surveyors, 2nd Quarter 1*, 7-9.
- Sanger, M. (1998). "Supporting the balanced scorecard". Work study, 47(6), 197-200.
- Sarshar, M., Haigh, R., Finemore, M., Aound, G., & Barrett, P.(1999). "Standardised process improvement for construction enterprise (SPICE) research methodology and approach". Paper presented at the RICS Conference COBRA.
- Sarshar, M., et al. (2000). "Process Modelling in the Facilities Sectors: A Case Study". Salford: University of Salford.
- Scarrett, D. (1983). "Property Management" E & F.N. Spon Ltd.
- Scharitzer, D., & Korunka, C. (2000). "New Public Management: evaluating the success of TQM and change management interventions in public services from the employees' and customers' perspectives". *Total Quality Management*, 11(7).



- Sekaran, U. (1992). "Research methods for business: a skill-building approach. (2nd ed.): John Wiley & Sons.
- Sharifuddin Zainuddin. (1999). "Public Sector Quality: An Empirical Study in the Road Transport Department of Malaysia" (Survey Report). Kuala Lumpur: National Productivity Corporation.
- Shi, N., & Bennet, D. (2001). "Benchmarking for information systems management using issues framework studies content and methodology". *Benchmarking: An Internationla Journal*, 8(5), 358-375.
- Simons, R. A. (1993). "What Public Manager Could Learn from the Private Sector". *Journal of Property Management, January/February 1993*, 48-51.
- Simons, R. A. (1993a). "Public Real Estate Management Adopting Corporate Practice To The Public Sector, The Experience In Cleveland, Ohio". *Journal Of Real Estate Research*, 8(4).
- Simons, R. (2000). "Performance Measurement & Control Systems for Implementing Strategy: Texts & cases". New Jersey: Prentice Hall.
- Sinclair, D., & Zairi, M. (1995). "Benchmarking Best-Practice Performance Measurement Within Companies Using Total Quality Management".

 Benchmarking for Quality Management and Technology, 2(3), 53-71.
- Sinclair, D., & Zairi, M. (1996). "Assessing The Effectiveness of Performance Measurement Systems": A Case Study. *Total Quality Management*, 7(4), 367.
- Smith, N. C., & Dainty, P. (1991). "The Management Research Handbook". London, New York: Routledge.

- Smith, P. (1995). "Outcome-related performance indicators and organizational control in the public sector". In J. Holloway, J. Lewis, & G. Mallory (Eds.), *Performance Measurement and Evaluation*. London: Sage.
- So, A. T. P., Wong, A. C. W. & Wong, K. C. (1999). "A new definition of intelligent buildings for Asia". *Facilities*, *17*(12/13), 485-491.
- So, A. T. P., & Wong, K. C. (2002). "On the quantitative assessment of intelligent buildings". *Facilities*, 20(5/6), 208-216.
- Stake, R. (1995). "The art of case research". Thousand Oaks, CA: Sage Publications.
- Stenbacka, C. (2001). "Qualitative research requires quality concepts of its own". *Management Decision*, 39(7), 551-555.
- Strauss, A., & Corbin, J. (1998). "Basic of Qualitative Research, Techniques and Procedures for Developing Grounded Theory". Thousand Oaks: Sage Publications.
- Sun, S. H., & Lan, Y. L. (2001). "Computers in property management companies A case study of Singapore". *Property Management*, 19(5), 433-440.
- Tellis, W. (1997). "Introduction to case study". The Qualitative Report, 3(2).
- Teoh, W. K. (1992). "Corporate Real Estate Management: The New Zealand Evidence". Journal of Real Estate Research., 8(4), 607-623.
- Then, D. S. S. (1996). "Minimum data sets: finding the balance in benchmarking". *Facilities*, *14*(1/2), 47-51.

- Then, D. S.-S. (1996a). "A conceptual framework for describing built assets maintenance standards". *Facilities*, *14*(7/8), 12-15.
- Then, D. S. S. (1997). "Property as an enabling Resource to Business Real Estate Management". Paper presented at the RICS Research Conference COBRA.
- Then, D. S. S. (1997a). "A model for considering operational property as an enabling resource to business". Paper presented at the RICS Conference Cutting Edge.
- Then, D. S. S. (1999). "An Integrated Resource Management View Of Facilities Management". *Facilities*, *17*(12/13).
- Then, D. S. S. (2000). "The role of real estate assets in supporting the fulfilment of corporate business plan: key organisational variables for integrated resource management framework". *Facilities*, 18(7/8), 273-280.
- Then, D. S. S. (2002). "The strategic context of FM". Paper presented at the International Real Estate Research Symposium (IRERS), Kuala Lumpur.
- Thiagarajan, T., & Zairi, M. (1998). "An empirical analysis of critical factors of TQM:

 A proposed tool for self-assessment and benchmarking purposes". *Benchmarking for Quality Management & Technology*, 5(4), 291-303.
- Todd, F., & Louise, S. (1999). "What Is The Difference Between Performance Measurement And Benchmarking?" *Public Management (US)*, *January* 1999(81), 1.
- Tranfield, D., & Akhlaghi, F. (1995). Performance measures: relating facilities to business indicators. *Facilities*, *13*(3), 6-14.

- Trosa, S., & William, S. (1996). "Benchmarking in public sector performance management Performance Measurement in Government". *OECD Occasional Papers* (No. 9).
- Turrell, P. (1997). "Small is different: a strategic of effective management of maintenance in a non-profit making organisations". Paper presented at the RICS Conference COBRA.
- UK Cabinet Office. (1999). "A guide to using self-assessment to achieve performance improvement in the public sector": Cabinet office http://www.cabinet-office.gov.uk/eeg/1999/excellence/04.htm printed 03/03/01.
- Valuation and Property Services Department. (1994 1999). "Property Market Report". Kuala Lumpur.
- Varcoe, B. J. (1996). "Facilities Performance measurement". *Facilities*, *14*(10/11), 46 51.
- Varcoe, B. J. (1996a). "Business-driven Facilities Benchmarking". *Facilities*, *14*(3/4), 42-48.
- Varcoe, B. J. (2000). "Implications of facility management of changing business climates". Facilities, 18(10/11/12), 383-391.
- Varcoe, B. (2000). "Implications for FM of the changing business climates" (Survey report): Johnson Controls, Inc. Integrated FM.
- Veale, P. R. (1988). "Corporate Real Estate Asset Management in the US". Unpublished Master of Science Thesis, Massachusetts Institute of Technology (MIT).

- Veale, P. R. (1989). "Managing Corporate Real Estate Assets: Current Executive Attitudes and Prospects for an Emergent Management Discipline". *Journal Of Real Estate Research*, 4(3).
- Vijverberg, G. (2002). "Accommodation functionality assessment in office buildings". *Facilities, 20*(3/4), 94-103.
- Walters, M. (1996). "Property and the strategic objectives of the organisation". Paper presented at the RICS Conference Cutting Edge.
- Walters, M. (1999). "Performance Measurement Systems A Case Study of Customer Satisfaction". *Facilities*, 17(3/4), 97 104.
- Wan Jaafar Wan Endut, Mokhtar Abdullah, & Nooreha Husain, (2000). "Benchmarking institutions of higher education" *Total Quality Management*, 11(4/5), 765-799.
- Waterhouse, M., Mccabe, S. & Kelly, G. T. (1999). "The Practical Issues Inherent in the Use of Generic Model for Benchmarking in a Number of Surveying Practices in the West Midlands". Paper presented at the RICS Conference COBRA.
- Welch, S., & Mann, R. (2001). "The development of a benchmarking and performance improvement resource". *Benchmarking: An International Journal*, 8(5), 431-452.
- Wescott, C. (2000). "Measuring governance in developing Asia". Paper presented at the Asian Development Bank (ADB), Manila.
- Whymark, J. (1998). "Benchmarking and credit risk management in financial services".

 Benchmaring for Quality Management & Technology, 5(2), 126-137.
- Willis, P. C. (2001). "Corporate real estate asset management". *New Zealand Property Journal*, (1st Ed.) 21- 26.

- Willis, P. C. (2001a). "Corporate Real Estate Asset Management, just an extension of facilities management or are specific skills and competencies required?" Paper presented at the PRRES Conference, Adelaide.
- Yasin, M. M. (2002). "The theory and practice of benchmarking: then and now". Benchmarking: An International Journal, 9(2), 217-243.
- Yin, R. K. (1994). "Case Study Research Design and Methods". (2nd Ed.) Thousand Oaks: Sage Publications.
- Zailan Mohd Isa. (2001). "The Management of Public Sector Property In Malaysia".

 Paper presented at the FIG Working Week 2001, Seoul, Korea.
- Zairi, M. (1997). "Benchmarking: Towards Being Accepted Management Tool or is it on its way out?" Total Quality Management, 8(2/3).