

UNIVERSITI TEKNOLOGI MARA

**IMPLEMENTATION OF GREEN DATA CENTER
TOWARDS GREEN IT**

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ABSTRACT

In the recent years, information technology (IT) is becoming significantly popular due to the explosive development of the computing systems and the growth of internet. As people progressively depend on the IT, the dilemma of energy utilization in IT industry and government organizations becomes global warming issues for society. These global issues have made it essential to explore a new paradigm of computing, called green IT. The implementation of green IT addresses on issues on how to offer the solutions for large scale computing system like a green data center where information systems and applications may have high energy utilization and aims at the development of technologies for a greener and more sustainable environment. The purpose of this research is to explore various issues pertaining to characteristics and factors that drive the green data center implementation and how green data center contribute to green IT. The research methodology involves four phases which are planning, information gathering, result and analysis, and documentation. Qualitative approach is used to gather data based on a case study in one of Malaysia State Government Office implementing green data center. Data were collected via semi structured interviews based on semi structured questionnaire with the Director of IT Department, Head of Data Center Operation Unit and Data Center Administrator. The findings of this research provide an overview on the significance of implementing green data center in the public sector to reduce energy consumption and lower the operational cost and facilitate business continuity of public sectors to serve citizens.

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TABLE OF CONTENTS

	Page
STUDENT’S DECLARATION	i
ABSTRACT	ii
ACKNOWLEDGEMENT	iii
TABLE OF CONTENTS	iv
LIST OF FIGURES	viii
LIST OF TABLES	ix
CHAPTER 1: INTRODUCTION	
1.1 Background of Study	1
1.2 Problem Statement	3
1.3 Research Question	5
1.4 Research Objective	5
1.5 Research Scope	5
1.6 Research Significance	6
1.7 Organization of Report	6
CHAPTER 2: LITERATURE REVIEW	
2.1 Green IT	9
2.1.1 Origin of Green IT	11
2.1.2 Green IT Concept	11
2.1.3 Green IT Benefits	12

2.2 Green Data Center	13
2.2.1 Origin of Green Data Center	14
2.2.2 Characteristics of Green Data Center	16
2.2.2.1 Energy and Performance Management	16
2.2.2.2 Power Management	16
2.2.2.3 Cooling Management	17
2.2.2.4 Virtualization	18
2.2.2.5 Live Migration	19
2.2.2.6 Consolidation	20
2.2.2.7 Green Cloud	21
2.2.3 Factors in Implementing Green Data Center	22
2.2.3.1 Energy Efficiency	22
2.2.3.2 Cost Saving	23
2.2.3.3 Resource Allocation	23
2.2.3.4 Data Management	24
2.3 Reviews of Relevant Works	24
2.4 Summary	26
CHAPTER 3: RESEARCH METHODOLOGY	
3.1 Research Approach	29
3.2 Strategy of Inquiry	30
3.3 Research Plan	30
3.3.1 Phase1: Planning	32
3.3.2 Phase 2: Information Gathering	32
3.3.2.1 Semi Structured Questionnaire	33
3.3.2.2 Semi Structured Interview	35
3.3.2.3 Respondents	36