

**EMPLOYER SATISFACTION IN PUBLIC SECTOR
DESIGN AND BUILD PROCUREMENT METHOD IN
SRI LANKA: PROFESSIONALS' PERSPECTIVE**

Jayasuriya Guruge Jude Anushka Sampath Perera

189561N

Degree of Master of Science in Construction Law and Dispute
Resolution

Department of Building Economics

University of Moratuwa

Sri Lanka

December 2023

**EMPLOYER SATISFACTION IN PUBLIC SECTOR
DESIGN AND BUILD PROCUREMENT METHOD IN
SRI LANKA: PROFESSIONALS' PERSPECTIVE**

Jayasuriya Guruge Jude Anushka Sampath Perera

189561N

Thesis/Dissertation submitted in partial fulfillment of the requirements
for the
Degree of Master of Science in Construction Law and Dispute
Resolution

Department of Building Economics

University of Moratuwa

Sri Lanka

December 2023

DECLARATION

I declare that this is my own work and this dissertation does not incorporate without acknowledgement any material previously submitted for a Degree or Diploma in any other University or institute of higher learning and to the best of my knowledge and belief it does not contain any material previously published or written by another person except where the acknowledgement is made in the text.

Also, I hereby grant to University of Moratuwa the non-exclusive right to reproduce and distribute my thesis/dissertation, in whole or in part in print, electronic or other medium. I retain the right to use this content in whole or part in future works (such as articles or books).

Signature:

Date:

J.G.J.A.S.Perera

The above candidate has carried out research for the Masters/MPhil/PhD thesis/Dissertation under my supervision.

Signature of supervisor:

Name of supervisor: Dr. Suranga Jayasena,

Date:

ABSTRACT

Employer satisfaction in public sector design and build procurement method in Sri Lanka: professionals' perspective

This research study focuses on investigating the degree of employer satisfaction in the public sector's Design and Build procurement method in Sri Lanka. The lack of knowledge regarding employer satisfaction with this procurement method in public sector projects necessitates a thorough exploration of the topic. The study aims to evaluate the degree of employer satisfaction in Design and Build procurement from the perspective of the employer, providing valuable insights for the country. By assessing the degree of employer satisfaction, this research aims to assist employers in understanding the effectiveness of the Design and Build procurement method in the public sector. The findings enable the government to make informed decisions on whether to adopt Design and Build procurement for public projects in Sri Lanka more effectively. The research study addresses the timely requirement of the country, considering the significance of procurement methods in ensuring successful project outcomes. The research methodology involves data collection from professionals representing employers engaged in public sector projects using Design and Build procurement. Questionnaires and interviews are utilized to gather the required data. The collected data is analysed using statistical techniques to determine the level of employer satisfaction and draw meaningful conclusions. The study finds that the degree of employer satisfaction in public sector Design and Build procurement method in Sri Lanka from the professionals' perspective is -33%. Consequently, it is recommended not procure Design and Build procurement method for public projects as a simple alternative to traditional procurement method. If Design and Build method is selected, it must be a well informed and calculated decision.

Keywords: Design and Build procurement, employer satisfaction, public sector projects, professional perspective, Sri Lanka

DEDICATION

I dedicate this piece of work to my
beloved family.....

ACKNOWLEDGEMENT

I would like to take this moment to extend my heartfelt gratitude to the individuals who have been instrumental in supporting and inspiring me throughout the course of this research endeavor. Their unwavering assistance and valuable insights, despite their busy schedules, have played an integral role in my achievements.

Foremost, my sincere appreciation goes to my supervisor, Dr. Suranga Jayasena, whose continuous guidance, support, and encouragement have been pivotal in shaping the trajectory and quality of this research. His expertise and mentorship have been invaluable assets on this journey.

I would like to express my gratitude to the entire team at the Department of Building Economics, University of Moratuwa, for their unyielding support and advice throughout this study, as well as during my academic pursuits. I also extend my acknowledgment to the dedicated non-academic staff of the department for their assistance and cooperation.

I am deeply thankful to the industry professionals who graciously shared their time and expertise for data collection, despite their busy schedules. Their insights have significantly enriched the depth and breadth of this research.

Lastly, I wish to convey my heartfelt appreciation to my cherished family members, fellow classmates, and senior colleagues for their unwavering support and encouragement throughout this journey. Their belief in me and their willingness to provide assistance have been a constant source of motivation.

In closing, I extend my profound gratitude to all those who have contributed, whether through significant or modest efforts, to the successful culmination of this research. Your contributions have been immeasurable and deeply valued.

TABLE OF CONTENTS

DECLARATION	i
ABSTRACT.....	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS	v
LIST OF FIGURES	viii
LIST OF TABLES	ix
LIST OF ABBREVIATIONS	x
CHAPTER 1	1
1. INTRODUCTION	1
1.1 Back ground	1
1.2 Problem statement.....	3
1.3 Aim and objectives.....	4
1.4 Methodology	4
1.5 Scope and limitations	5
1.6 Chapter breakdown	5
1.7 Chapter summary	6
CHAPTER 2	7
2. LITERATURE REVIEW	7
2.1 Introduction.....	7
2.2 Construction industry.....	7
2.3 Procurement	8
2.4 Traditional Procurement Method	12
2.5 Design and Build (D&B) Procurement Method	13
2.5.1 Characteristics of Design and Build Procurement	14
2.5.2 Challenges of Design and Build Procurement	16
2.5.3 Advantages of Design and Build Procurement	18
2.5.4 Relevance and applicability in the public sector.....	20
2.6 Traditional procurement method vs D&B procurement method	22
2.7 Public Procurement Selection Factors	23
2.8 Significant Selection Factors for D&B	27
2.9 Employer’s Expectations in Using D&B Method	30

2.10 Employer Satisfaction of D&B in Public Projects	31
2.11 Summary	38
CHAPTER 3	39
3. RESEARCH METHODOLOGY	39
3.1 Introduction	39
3.2 Research design.....	39
3.3 Research approach	40
3.4 Research strategy	42
3.5 Research method	43
3.5.1 Data collection	43
3.5.2 Data analysis	44
3.6 Research process	46
3.7 Summary	47
CHAPTER 4	48
4. ANALYSIS AND RESEARCH FINDINGS	48
4.1 Introduction.....	48
4.2 Sample identification	48
4.3 Structured questionnaire	50
4.4 Data Analysis	51
4.5 Respondents details	52
4.6 Significance of the satisfaction factors	54
4.7 Satisfaction of the satisfaction factors	56
4.8 Employer satisfaction.....	58
4.9 Significance of the satisfaction factors – According to the profession.....	61
4.10 Satisfaction of the satisfaction factors – According to the profession.....	63
4.11 Employer Satisfaction– According to the profession	66
4.12 Summary	67
CHAPTER 5	70
5. CONCLUSIONS AND RECOMMENDATIONS	70
5.1 Summary of Study	70
5.2 Overview of objectives achieved	71
5.2.1 Identify the satisfaction factors considered in selection of public sector Design and Build procurement in Sri Lanka.....	71

5.2.2 Ascertain the significance of the factors when Design and Build procurement method is selected in public procurement in Sri Lanka	72
5.2.3 Find the employer satisfaction for each factor.....	74
5.2.4 Analyse the overall level of employer satisfaction for Design and Build procurement method for public projects in Sri Lanka	75
5.3 Conclusions	76
5.4 Recommendations	77
5.5 Limitations	79
5.6 Further research.....	79
REFERENCES	82
APPENDIX A: COVERING LETTER FOR INTERVIEW GUIDELINE.....	91
APPENDIX B: ONLINE QUESTIONNAIRE.....	92

LIST OF FIGURES

Figure 2.1: Generation of the satisfaction factors.....	36
Figure 3.1: Research process.....	46

LIST OF TABLES

Table 2.1: Pillars of public procurement	11
Table 2.2: Procurement performance.....	26
Table 2.3: Public sector procurement selection factors.....	29
Table 2.4: Participant profile.....	30
Table 2.5: Employer expectation.....	31
Table 2.6: Overall performance.....	35
Table 2.7: Satisfaction factors.....	37
Table 3.1: Characteristics of the research approach.....	41
Table 4.1: Responded professionals details.....	53
Table 4.2: Significance of factors.....	54
Table 4.3: Satisfaction of factors.....	57
Table 4.4: Weighted satisfaction.....	59
Table 4.5: Comparison of factor rank.....	60
Table 4.6: Significance of factors – According to the profession.....	61
Table 4.7: Satisfaction of factors – According to the profession.....	64

LIST OF ABBREVIATIONS

Abbreviation	Description
CIDA	Construction Industry Development Authority
D&B	Design & Build
EEA	European Economy Area
FIDIC	International Federation of Consulting Engineers
MAUT	Multi-Attribute Utility Theory
RFP	Request for Proposal
ROW	Right-of-way
SBD	Standard Bidding Document
USA	United States of America
VfM	Value for Money