

**MANAGEMENT COMMITMENT TO ESTABLISH
SAFETY CULTURE IN CONSTRUCTION INDUSTRY**

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Degree of Master of Science

Department of Building Economics

University of Moratuwa

Sri Lanka

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Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of
Master of Science in Occupational Safety and Health Management

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DECLARATION

I declare that this submission is my own work and that to the best of my knowledge and belief, it contains neither materials published or written by another person nor material which to a substantial extent has been accepted for the award of any other degree or diploma or university or other institute of higher studies, except where references are mentioned.

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A.Haleemdeen

.....

Date

The above candidate has carried out research for the Masters Dissertation under my supervision.

.....

Signature

Dr. Sachie Gunatilake

Dissertation Supervisor

.....

Date

The Management commitment to establish safety culture in construction industry.

The construction industry is the largest accident prone industry in the world. It is also one of the least safe industry with a high frequency of accidents resulting in financial loses, injuries, disabilities and deaths. Hence, it is clear from the construction industry's safety records that there is room for improvement through the implementation of the management commitment which is a part of the safety culture. In recent years, many construction companies have recognized this importance of the establishment of good safety culture through better management commitment can help in reducing the construction costs by controlling the safety risks, minimising workplace accidents and increasing the efficiency of enduring project operations in the long term.

A better safety culture with the strong management commitment provides significant benefits to the construction industry. The features of management commitment of the safety culture and its applicability have dynamic impact in construction industry. Establishing safety culture through management commitment elements in construction industry faced some barriers due to various reasons. The aim of this research is to investigate the elements of management commitment and its barriers to propose a framework in order to establish the safety culture in construction industry.

The safety culture through management commitment which could be implemented in the construction sites were identified through mixed methodology approach. The expert interview was carried out among twelve experts as semi-structured interview and a questionnaire survey was conducted among forty respondents. The outcome of this research has proposed a framework to establish safety culture through management commitment in construction industry. More over the RII was used for data analysis to prioritize the factors and one sample t-test was carried out to identify the significant management commitment elements and its barriers.

27 management commitment elements and 30 barriers were identified through the literature review. Out of these, 21 elements and 18 barriers were identified as significant following the semi-structured interviews and the questionnaire survey and was used in developing the framework. Accordingly this frame work has contributed to fulfill the aim of the research and subsidized to knowledge by adding up a developed guidelines which could be used in establishing safety culture in construction industry.

Keywords: Safety Culture, Management Commitment, Mixed Methodology Approach, Relative Importance Index, Framework

*I dedicate this dissertation to my beloved family
for their consistent support and love for me to
accomplish my degree successfully with great
Endeavour ...!*

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TABLE OF CONTENTS

Declaration	i
Abstract	ii
Dedication	iii
Acknowledgement	iv
Table of contents	v
List of tables	ix
List of figures	x
List of abbreviations	xi
List of appendices	xii
CHAPTER ONE - INTRODUCTION	1
1.0 Background	1
1.1 Research Problem.....	3
1.2 Aim Of The Study	4
1.3 Objectives Of The Study	4
1.4 Methodology	5
1.5 Scope & Limitations.....	5
1.6 Chapter Breakdown.....	6
CHAPTER TWO - LITERATURE SYNTHESIS	7
2.0 Introduction	7
2.1 Safety Culture.....	7
2.2 Definitions Of Safety Culture	8

2.3 Safety Culture In Construction Industry	11
2.4 Occupational Safety And Health (OSH) In Construction Industry	13
2.5 Relationship Between Safety Culture And Management Commitment.....	16
2.6 Importance Of Management Commitment To Establish Safety Culture	21
2.7 Barriers In Establishing Management Commitment For Safety Culture	27
2.8 Developing A Conceptual Framework To Establish Safety Culture Through Management Commitment In Construction Industry.....	29
2.9 Summary.	31
CHAPTER THREE - RESEARCH METHODOLOGY	32
3.0 Introduction	32
3.1 Research Philosophy	32
3.2 Research Approach	33
3.3 Research Design.....	34
3.4 Data Collection Techniques	35
3.4.1 Expert Interviews.....	35
3.4.2 Questionnaire Survey	36
3.5 Sampling Technique.....	37
3.6 Data Analysis	38
3.6.1 Analysis Of Expert Interview Data	38
3.6.2 Analysis Of Questionnaire Survey Data.....	38
3.6.2.1 Relative Importance Index (RII).....	38
3.6.2.2 Statistical One Sample T-Test	39
3.7 Summary.	39

CHAPTER FOUR - FINDINGS AND DISCUSSION: EXPERT INTERVIEWS.....	40
4.0 Introduction	40
4.1 Content Analysis	40
4.2 Management Commitment Elements: Expert Interview Findings	40
4.3 Barriers To Be Overcome In Implementing Management Commitment: Expert Interview Findings.....	52
4.4 Summary	63
CHAPTER FIVE - FINDINGS & DISCUSSION: QUESTIONNAIRE SURVEY	65
5.0 Introduction	65
5.1 Questionnaire Survey	65
5.1.1 Comparison Of Respondents' Details	66
5.1.2 Structure Of The Questionnaire.....	66
5.2 Developing The Questionnaire.....	66
5.2.1 Identification Of Management Commitment Elements	67
5.2.2 Identification Of Barriers Need To Overcome In Implementing Management Commitment.....	67
5.3 Outcome Of The Questionnaire Survey	68
5.3.1 Analysis Of Management Commitment Elements -RII	69
5.3.2 Analysis Of Management Commitment Elements T-Test	70
5.3.3 Analysis Of Barriers To Overcome In Implementing Management Commitment Using RII.....	76
5.3.4 Analysis Of Barriers Using T-Test.....	77

5.4 Proposed Framework To Establish Safety Culture	83
5.5 Summary.	85
CHAPTER SIX - CONCLUSIONS AND RECOMMENDATIONS	86
6.0 Introduction	86
6.1 Conclusions	86
6.2 Recommendations	88
6.2.1 Recommendations For Construction Project Managers	89
6.2.2 Recommendations For Government Agencies And Policy Makers.....	89
6.3 Further Research	90
REFERENCES.....	91
Appendix A: - Calculation Of RII Value For Management Commitment Elements And Barriers.....	101
Appendix B: Management Commitment Elements: T- Test Output	102
Appendix C: Barriers To Be Overcome: T- Test Output.....	104
Appendix D: T- Table And Critical T-Value.....	106
Appendix E: Interview Guideline	107
Appendix F: Questionnaire Guideline	110
Appendix G: Management Commitment's Involment In Construction Projects.....	116
Appendix H: Management Commitment Tools Are Practiced In Compliance With Hse System.....	119

LIST OF TABLES

Table 2.1 Definitions of safety culture.....	8
Table 2.2 Comparison between significant hazards and reportable accidents.....	12
Table 2.3 Qualities and attributes contributing for a good health and safety culture	18
Table 2.4 The principles to promote safety culture	19
Table 2.5 Management commitment elements with reference	26
Table 2.6 Barriers to implement the management commitment with reference	29
Table 3.1 Summarized research philosophy	32
Table 3.2 Selection of interviewees	36
Table 3.3 Sampling technique.....	37
Table 4.1 Management Commitment Elements to establish safety culture: Expert interview findings	41
Table 4.2 Barriers to be overcome in implementing management commitment: Expert interview findings.....	53
Table 4.3 Additional elements of management commitment and barriers: content analysis findings.....	63
Table 5.1 Management commitment elements	67
Table 5.2 Barriers need to overcome in implementing management commitment ...	68
Table 5.3 Prioritized management commitment elements.....	69
Table 5.4 one sample t-test for management commitment	70
Table 5.5 Prioritized barriers	76
Table 5.6 One sample t-test for barriers.....	78

LIST OF FIGURES

Figure 1.1 Chapter breakdown.....	6
Figure 2.1 Human factors contributing towards establishing the safety culture.....	9
Figure 2.2: Safety culture model of Hudson	10
Figure 2.3 Conceptual framework	30
Figure 3.1 Research approach.....	34
Figure 3.2 Research design	35
Figure 5. 1 Composition of respondents	66
Figure 5.2 Proposed frameworks to establish safety culture in construction industry	84

LIST OF ABBREVIATIONS

OSH	-Occupational Safety and Health
CASA	-Civil Aviation Safety Authority
NIOSH	-National Institute for Occupational Safety and Health
ILO	-International Labour Organization
HSE	-Health, Safety & Environment
OSHA	-Occupational Safety & Health Administration
ICTAD	-Institute for Construction Training and Development
CIDA	-Construction Industry Development Authority
NCR	-Non-Conformance Report
LTI	-Lost Time Injury
PPE	-Personal Protective Equipment
QHSE	-Quality, Health, Safety & Environment
ISO	-International Organization for Standardization
RII	-Relative Importance Index

LIST OF APPENDICES

Appendix A: - Calculation Of RII Value For Management Commitment Elements And Barriers.....	101
Appendix B: Management Commitment Elements: T- Test Output	102
Appendix C: Barriers To Be Overcome: T- Test Output.....	104
Appendix D: T- Table And Critical T-Value.....	106
Appendix E: Interview Guideline	107
Appendix F: Questionnaire Guideline	110
Appendix G: Management Commitment's Involment In Construction Projects.....	116
Appendix H: Management Commitment Tools Are Practiced In Compliance With Hse System.....	119