

TABLE OF CONTENTS

APPROVAL SHEET	i
INTELLECTUAL PROPERTY STATEMENT FORM	ii
ABSTRACT	iii
PREFACE	iv
TABLE OF CONTENTS	v
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF APPENDIX	x
CHAPTER I INTRODUCTION	1
1.1 Research Background	1
1.2 Problem Formulation	4
1.3 Research Objective	4
1.4 Research Benefit	4
1.5 Research Limitation	4
1.6 Writing Systematics	4
CHAPTER II LITERATURE REVIEW	6
2.1 Anthropometric	6
2.2 Complaints of Musculoskeletal	6
2.3 Task Analysis Toolkit (TAT) on Jack Software	7
2.3.1 Rapid Upper Limb Assessment (RULA)	7
2.4 Kansei Engineering	8
2.5 Kansei Engineering Methodology	9
2.6 Sampling Technique Using Lemeshow Formula	9
2.7 Validity and Reliability Test	10
2.8 Exploratory Factor Analysis	12
2.9 Previous Research	16
CHAPTER III RESEARCH METHODOLOGY	18
3.1 Conceptual Model	18
3.2 Problem Solving Systematics	19
3.2.1 Research Preparation	20
3.2.2 Collecting and Processing Data	20

3.2.3	Product Design and Analysis.....	20
3.2.4	Conclusion.....	20
CHAPTER IV	COLLECTING AND PROCESSING DATA	21
4.1	Market Identification	21
4.2	Kansei Word	22
4.2.1	Collecting Kansei Word.....	22
4.2.2	Importance Level	23
4.2.3	Validity and Reliability Test	23
4.2.4	Semantic Differential	24
4.2.5	Analysis Factor	24
4.3	Map Product Concept	28
4.3.1	KJ Method	28
4.3.2	Characteristic Determination	30
4.4	Concept Design	31
4.4.1	Search for Design Ideas	31
4.4.2	Visualization of Product Concept Design	33
CHAPTER V	ANALYSIS.....	36
5.1	Kansei Words.....	36
CHAPTER VI	CONCLUSION.....	54
6.1	Conclusion	54
6.2	Suggestions	55
REFERENCES.....		56