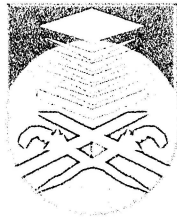


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# **DESIGN OUTDOOR SWITCH COVER BY USING QFD METHOD**

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## **ABSTRACT**

This project has been conducted to design of new outdoor switch cover. The aim of this project is to identify market needs of new electrical protective product (switch outdoor cover). The new outdoor switch cover design is considered the materials properties and easy of manufacturing process to produce the components at lower cost together with fulfill the requirement of local standards. The project was implemented by using Quality Function Deployment (QFD) design method. QFD is an effective design method to integrate human ergonomics needs into product design because it explicitly addresses the translation of customer needs into engineering characteristics. Customer needs was derived by comparing the correlations estimated with those observed in a questionnaire evaluation study which has not been done before. Cost per piece is the most agree criteria to be considered during design phase based on questionnaire results. Safety was being discovered as the most important criteria for customer while selecting the outdoor switch cover product as sixty seven percent of them declared. The other criteria are simple to use, portable, small in size, interesting and colorful. There are eight different design concepts has been proposed to meet the customer demand. The final design concept was choose as it is closely meet the aesthetics requirement, easy to used and provide safety feature. At the end of this project, the prototype of newly design outdoor switch cover has been produced by using rapid prototyping machine.

## **TABLE OF CONTENTS**

<b>CONTENTS</b>	<b>PAGE</b>
ACKNOWLEDGEMENT	i
ABSTRACT	ii
TABLE OF CONTENTS	iii
LIST OF FIGURE	vii
LIST OF TABLE	ix
 <b>CHAPTER I</b>	
<b>INTRODUCTION</b>	
1.0 Introduction	1
1.1 Problem statement	1
1.2 Objective	2
1.3 Scope of project	2
1.4 Significant of Project	3
 <b>CHAPTER II</b>	
<b>LITERATURE REVIEW</b>	
2.1 Introduction	4
2.2 Design Process	5
2.2.1 Phase of Design Process	5
2.3 Quality Function Deployment (QFD)	6
2.3.1 Customer Requirements	7

2.3.2	Competitive Comparison	8
2.3.3	Technical Characteristics	8
2.3.4	Correlation Matrix	9
2.3.5	Important Ratings	9
2.4	Switch	11
2.5	Introduction Rapid prototyping	12

### **CHAPTER III      RESEARCH METHODOLOGY**

3.1	Introduction	13
3.2	Product and Model Selection	14
3.3	Quality Function Deployment (QFD)	15
3.3.1	Need analysis and identification of customer requirements	15
3.3.2	Importance of customer requirements	16
3.3.3	Identification of design dependent Parameters	16
3.3.4	Correlation of customer requirements and design	17
3.3.5	Check correlation matrix	17
3.3.6	Benchmarking customer requirements	17
3.3.7	Technical assessment of design dependent parameters (DDPs)	18
3.3.8	QFD matrix inconsistency analysis.	18
3.3.9	Definition of design dependent parameter target values	18
3.4	Rapid Prototyping	19
3.5	Plastic Technology (Injection Molding and Material)	20
3.5.1	Thermoset Plastic	21
3.5.2	Thermoplastic Plastic	21
3.6	Injection Molding Process	23