

UNIVERSITI TEKNOLOGI MARA

**S-LINE CENTRE AUTOMATED
BEAUTY PRODUCT REVIEW
SYSTEM BY USING KEYWORD
EXTRACTION AND ANALYSIS
EXTRACT FROM TWITTER**

**AMIEZA KAMELIA BINTI AHMAD
KAMARRUDIN**

**BACHELOR OF INFORMATION
TECHNOLOGY (HONS.) INFORMATION
SYSTEMS ENGINEERING**

JANUARY 2017

STUDENT'S DECLARATION

I certify that this report and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

.....
AMIEZA KAMELIA BINTI AHMAD KAMARRUDIN
2014917061

FEBRUARY 10, 2017

ABSTRACT

In recent year, the spectacular development of web technologies, lead to a large quantity of use generated information in online systems. This large amount of information on web platforms makes them viable to use as the data sources. The objective of this research is to develop a website that provides polarity review for the product beauty by using sentiment analysis. There is several beauty product uses as the prototype for the research. Currently, S-Line Centre does not have it own websites to provide online view of the product for the company's product. To overcome the problem, the objective has been discovered. This website can help the staff to provide product review based on customer opinion in Twitter. The tweet from the twitter is extracted, and the tweets are then analyzed by using sentiment analysis to provide the polarity of the product. The result from the project of the sentiment analysis is the negativity and the positivity of the tweets about the product. The website will show the most number of polarities that occurs. Text blob is used as the tool to generate the NLTK. To develop the project, the waterfall model methodology is used. The future enhancement for this project is to handle the limitations of the project which is to add more language to be detects. Other than that, this project can also be improved by adding new social network sites (SNS) other than twitter such as Instagram. This can provide a variety of people from different characteristic group.

TABLE OF CONTENT

CONTENTS	PAGE
SUPERVISOR’S APPROVAL	ii
STUDENT’S DECLARATION	iii
ACKNOWLEDGEMENT	iv
ABSTRACT	v
TABLE OF CONTENT	vi
LIST OF FIGURES	ix
LIST OF TABLES	xi
CHAPTER ONE: INTRODUCTION	
1.1 Background of Study	1
1.2 Problem Statement	2
1.3 Research Objectives	3
1.4 Research Scope	3
1.5 Research Significance	3
1.6 Research Outline of the Thesis	4
CHAPTER TWO: LITERATURE REVIEW	
2.1 Beauty Industry	6
2.1.1 Beauty Product	6
2.2 Social Network	8
2.2.1 Types of Social Network	9
2.2.2 Twitter	15
2.2.3 Conclusion of social network	16
2.3 Opinion	17
2.4 Opinion and review on product	17
2.5 Data mining	18
2.6 Sentiment Analysis	19
2.6.1 Sentiment Analysis technique	20
2.6.2 Machine Learning Classifier Comparison	20

2.7	Application of sentiment analysis	21
	2.7.1 Shopping	22
	2.7.2 Entertainment	22
	2.7.3 Government	23
	2.7.4 Research and Development	24
	2.7.5 Education	25
	2.7.6 Marketing	26
2.8	Related Works	26
2.9	Chapter Summary	29

CHAPTER THREE: METHODOLOGY

3.1	Development Methodology	30
3.2	Waterfall Model	31
	3.2.1 Requirement Gathering Phase	32
	3.2.2 Requirement Analysis Phase	33
	3.2.3 Design Phase	38
	3.2.4 Development Phase	39
3.3	Software and Hardware Requirements	42
3.4	Chapter Summary	43

CHAPTER FOUR: RESULTS AND ANALYSIS

4.1	Interview Results	44
4.2	Survey Results	45
4.3	Data extracted	47
4.4	Sentiment result for twitter data	48
4.5	System Interface	49
4.6	Chapter Summary	54

CHAPTER FIVE: CONCLUSION AND RECOMENDATION

5.1	Conclusion	55
	5.1.1 Objective one	55
	5.1.2 Objective Two	56
	5.1.3 Objective Three	56
5.2	Limitation	56