

---

**ANALYSIS OF PERSONALIZATION MODEL TO IMPROVE THE  
COMPETITIVE ADVANTAGE ON ONLINE TOUR AND TRAVEL  
SERVICE**

By

Annisa Prameswari Firdausy

A Thesis submitted to the Faculty of

INFORMATION TECHNOLOGY

Department of  
INFORMATION SYSTEM

In Partial Fulfillment of the Requirements for

BACHELOR DEGREE

IN

INFORMATION TECHNOLOGY

**SWISS GERMAN UNIVERSITY**

Swiss German University  
EduTown BSDCity  
Tangerang 15339  
INDONESIA

Telp. +62 21 3045 0045  
Fax. +62 21 3045 0001  
E-mail: [info@sgu.ac.id](mailto:info@sgu.ac.id)  
[www.sgu.ac.id](http://www.sgu.ac.id)

June 2012

Revision after the Thesis Defense on July, 20th 2012

### STATEMENT BY THE AUTHOR

I hereby declare that this submission is my own work and to the best of my knowledge, contains no material previously 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 at any educational institution, except where due acknowledgement is made in the thesis.

\_\_\_\_\_  
Annisa Prameswari Firdausy

\_\_\_\_\_  
Date

Approved by:

\_\_\_\_\_  
James Purnama, M.Sc.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Gunawan Zuardi, M.Sc.

\_\_\_\_\_  
Date

\_\_\_\_\_  
Chairman of the Examination Steering Committee

\_\_\_\_\_  
Date

\_\_\_\_\_  
Annisa Prameswari Firdausy

## ABSTRACT

By

Annisa Prameswari Firdausy

SWISS GERMAN UNIVERSITY

Bumi Serpong Damai

James Purnama, M.Sc., Advisor

Gunawan Zuardi, M.Sc., Co-Advisor

Over the years, tourism has growth continually and is one of the fastest growing economic sectors in the world. Today, the business of tourism industry equals or even exceeds the oil exports, food products, and the textile industry. Even in Indonesia, tourism has been in the top five of state income for the last four years. It represents a large portion of foreign exchange revenue for a developing country. However, problems such as socialization, promotion, and particularly transportation are the main problems that need to be overcome. The purpose of the research is to construct and analyze a personalization model that will give the consumers flexibility in choosing the package. The research would concern on the analysis and give solution of how to overcome these problems.

*Keywords: personalization website, web personalization model, personalization model tourism*

## DEDICATION

I dedicate this thesis research to my family, whose continuous support, love, and patience over the years has been remarkable. Especially to Arvin, the little boy whose laughter, energy, and enthusiasm keep my heart and mind young.

To Martin, a frog whose humor and encouragement has been formidable. Tu es formidable!

And to my IT classmates batch 2008 for their support and humor throughout the course.



## ACKNOWLEDGMENTS

The author wishes to express gratitude to:

Both parents, for their continuous support.

Elvina, Akbar, Amira, Dio, Theresa, Adit, Gana, Angga, Galih, Denny, Ishaq, and Salman for the laughter and the great support.

Arief, Ario, Sara, Dhinny, Ajuna, Danny, Dhana, Tito, Daniel, and other fellow classmates.

Michael Roberts, for always give assistance in the thesis writing.

Finally, to Mr. Gunawan Zuardi, M.Sc. and Mr. James Purnama, M.Sc., for the opportunity to participate in this thesis research and for always give assistance in completing this thesis.

SWISS GERMAN UNIVERSITY

## TABLE OF CONTENTS

STATEMENT BY THE AUTHOR.....	2
ABSTRACT.....	3
DEDICATION.....	4
ACKNOWLEDGEMENTS.....	5
TABLE OF CONTENTS.....	6
LIST OF TABLES.....	11
LIST OF FIGURES.....	12
CHAPTER 1 - INTRODUCTION.....	14
1.1 Background.....	14
1.2 Research Objectives.....	16
1.3 Research Problems.....	16
1.4 Significance of Study.....	17
1.5 Research Question and Hypothesis.....	17
1.5.1 Questions.....	17
1.5.2 Hypothesis.....	18
1.6 Scope of Work.....	18
1.7 Systematic of Writing.....	18
CHAPTER 2 - LITERATURE REVIEW.....	20
2.1 Tourism Industry.....	20
2.1.1 Types of Tourists in Tourism Industry.....	20
2.1.2 Tourism in Indonesia.....	21
2.2 Small and Medium Enterprises.....	23
2.3 E-Commerce.....	27
2.3.1 Types of E-Commerce.....	27
2.3.2 E-Commerce Business Strategies.....	27
2.3.3 E-Commerce Usage in Tourism Industry.....	28
2.4 E-Tourism.....	29
2.5 Consumer Behavior.....	30

2.6 Personalization.....	31
2.6.1 Types of Personalization.....	32
2.6.2 Benefit of Personalization.....	34
2.6.3 Personalization vs. Customization.....	34
2.6.4 Personalization Model in Tourism Industry.....	34
2.7 Single Sign - On.....	37
2.7.1 Benefit of Single Sign - On.....	39
2.8 Unified Modeling Language.....	41
2.8.1 Modeling using UML.....	43
2.8.2 Types of Diagrams.....	44
2.9 Entity Relationship Diagram.....	47
2.9.1 ER Diagram Usage.....	47
2.9.2 Developing an ER Diagram.....	48
2.9.3 Benefit of ER Diagram.....	49
2.10 Business Concept.....	50
2.11 Business Process.....	50
2.12 Cost & Benefit Analysis.....	50
2.12.1 Valuation Components of Cost & Benefit Analysis.....	51
2.12.2 Benefit Components of Cost & Benefit Analysis.....	53
2.12.3 Methods of Cost & Benefit Analysis.....	54
CHAPTER 3 - METHODOLOGY.....	55
3.1 Preliminary.....	55
3.2 Research Design.....	55
3.3 Research Framework.....	59
3.4 Research Questions and Hypothesis.....	59
3.4.1 Research Questions.....	59
3.4.2 Hypothesis.....	60
3.5 Research Data.....	60
3.5.1 Data Collection Method.....	61
3.5.2 Questionnaire Designing.....	61

---

3.5.3 Survey Sampling Method.....	62
CHAPTER 4 - ANALYSIS & DISCUSSION.....	65
4.1 Preliminary.....	65
4.2 A Brief Overview about Tourism in Indonesia.....	65
4.2.1 Background of Condition.....	65
4.2.2 Problems & Challenges.....	66
4.3 Analysis of Personalization Model.....	67
4.3.1 Research Objective.....	67
4.3.2 Literature Review.....	67
4.3.3 Business Concept and Personalization Model.....	68
4.3.3.1 Business Concept.....	68
4.3.3.2 Personalization Model.....	69
4.3.3.2.1 Use Case Diagram.....	69
4.3.3.2.2 Activity Diagram.....	70
4.3.3.2.3 Screen Layout.....	73
4.3.3.2.4 Single Sign - On.....	76
4.3.4 Business Process and Database Structure.....	77
4.3.4.1 Business Process.....	78
4.3.4.1.1 Flowchart.....	78
4.3.4.2 Database Structure.....	79
4.3.4.2.1 Tables.....	80
4.3.4.2.2 Entity Relationship Diagram.....	85
4.3.5 Survey.....	87
4.3.5.1 Respondent's Profile.....	87
4.3.5.1.1 Gender.....	87
4.3.5.1.2 Age.....	88
4.3.5.1.3 Occupation.....	89
4.3.5.2 Respondents' Habit & Behavior Information.....	90
4.3.5.2.1 Internet Frequency Usage.....	90
4.3.5.2.2 Traveling.....	91



4.3.5.2.3 What do People Search on the Internet in the Travel....	91
4.3.5.3 Questions about Travel Industry.....	93
4.3.5.3.1 Use Information from the Website to Plan a Travel.....	93
4.3.5.3.2 What do People do in Planning a Travel.....	94
4.3.5.3.3 What do People Expect from a Travel Website.....	95
4.3.5.3.4 Other Things that People Expect from a Travel Website.....	96
4.3.5.4 Questions about Personalized Travel Website.....	97
4.3.5.4.1 Travel Website with Personalization Feature.....	97
4.3.5.4.2 Usefulness of Dusun Merapi to Plan the Travel to Yogyakarta.....	97
4.3.5.4.3 Things that Make People Interested to Visit Dusun Merapi.....	98
4.3.5.4.4 Other Things that Make People Interested to Visit Dusun Merapi.....	99
4.3.5.4.5 Things that Make People Interested in Personalization of Dusun Merapi.....	99
4.3.5.4.6 Public Interest to Use Dusun Merapi for Travel to Yogyakarta.....	100
4.3.5.4.7 Suggestions for Dusun Merapi.....	101
4.3.6 Analysis & Discussion.....	102
4.3.7 Cost & Benefit Analysis.....	105
4.3.7.1 Cost Analysis.....	105
4.3.7.2 Benefit Analysis.....	106
4.3.8 Result.....	106
4.3.9 Conclusion & Recommendation.....	108
CHAPTER 5 - CONCLUSION AND FUTURE WORK.....	109
5.1 Conclusion.....	109
5.2 Future Work.....	109
5.3 Recommendation.....	110

GLOSSARY.....	111
REFERENCES.....	114
APPENDICES.....	120
APPENDIX A - Questionnaire Questions.....	120
APPENDIX B - Screenshot of DusunMerapi.....	124
CURRICULUM VITAE.....	145

