TABLE OF CONTENTS

COVER

ORIGINALITY STATEMENT OF THE THESIS i

THESIS SUPERVISOR'S APPROVAL ii

THESIS EXAMINATION COMMITTEE……..... iii

ABSTRACT iv

PENGANTAR v

TABLE OF CONTENTS vi

LIST OF TABLES ix

LIST OF FIGURES x

CHAPTER I 1

INTRODUCTION 1

1.1. Background and Introduction 1

1.2. Research Problem 7

1.3. Research Goals 7

1.4. Research Benefits 8

1.5. Research System 9

CHAPTER II 11

LITERATURE REVIEW 11

2.1. Base Theory 11

2.1.1. Age Generation 12

2.1.2. Location (City) 13

2.1.3. Paylater 15

2.1.4. Users' Ratings on OTA Application 16

2.1.5. Travel Purposes 17

2.1.6. Data Mining 18

2.1.7. Data Mining Processing Steps 18

2.2. Hypothesis Constructions 20

2.2.1. Relationship between Age Generation and Customer Spending 22
2.2.2. Relationship between Cities and Customer Spending 22
2.2.3. Relationship between PayLater Status and Customer Spending..... 23
2.2.4. Relationship between User's Ratings towards OTA app and Customer Spending 23
2.2.5. Relationship between Travel Purposes and Customer Spending 24

CHAPTER III 25
RESEARCH FRAMEWORK AND STATISTICAL TESTING 25
3.1. Data Collection and Methods 25
3.2. Data Formatting, Sampling, and Cleansing 27
3.3. Statistical Testing: Shapiro-Wilk Test 29
3.4. Statistical Testing: Kruskal-Wallis Test 33
3.5. Statistical Testing: Conover-Iman Test 33

CHAPTER IV 37
HYPOTHESIS RESULTS AND DISCUSSION 37
4.1. Hypothesis testing results 37
4.2. Influence of Age Generation on customer spending in an Online Travel Agent 39
4.3. Influence of User's locations on customer locations (city) in an Online Travel Agent 40
4.4. Influence of User's PayLater status on customer spending in an Online Travel Agent 40
4.5. Influence of User's Rating on customer spending in an Online Travel Agent 41
4.6. Influence of User's Travelling Purposes on customer spending in an Online Travel Agent 42
4.7. Sub-variable Results 42

CHAPTER V 48
CONCLUSION 48

5.1. Conclusion 48
5.2. Managerial Implications 49
5.3. Limitations and Suggestions for Future ResearchImplications 51
REFERENCES 54

LIST OF TABLES

Table 2.1.1. Age Generation Groups 13
Table 2.1.2. Grouping of Cities 14
Table 2.1.3. PayLater Status Groups 15
Table 2.1.4. Rating Groups 16
Table 2.1.5. Travel Purposes Groups 17
Table 4.1. Hypothesis Results 38
Table 4.7. Sub-Variable Results 43

LIST OF FIGURES

Figure 3.1.1. Sample Data of Customer Transaction 25
Figure 3.1.2. Sample data of customer demographic 26
Figure 3.1.3. Sample data join SQL 26
Figure 3.1.4. Raw final data sample 27
Figure 3.2. R Sample snippets interquartile formula to exclude outliers 28
Figure 3.3.1. R Shapiro Wilk Test Result (Age) 29
Figure 3.3.2. R Shapiro Wilk Test Result (Cities) 30
Figure 3.3.3. R Shapiro Wilk Test Result (Paylater Status) 30
Figure 3.3.4. R Shapiro Wilk Test Result (Rating/Review) 31
Figure 3.3.5. R Shapiro Wilk Test Result (Travel Purposes) 32
Figure 3.5.1. Kruskal-Wallis/Conover-Iman Test (Age) 34
Figure 3.5.2. Kruskal-Wallis/Conover-Iman Test (Cities) 34
Figure 3.5.3. Kruskal-Wallis/Conover-Iman Test (Paylater Status) 35
Figure 3.5.4. Kruskal-Wallis/Conover-Iman Test(Review/Rating) 35
Figure 3.5.5. Kruskal-Wallis/Conover-Iman Test(Travel Purposes) 36
Figure 4.7. Sub-Variable Results 45