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**THE MEDIATING EFFECT OF E-SATISFACTION AND THE
MODERATING EFFECT OF CONVENIENCE TOWARDS E-LOYALTY
AMONG INTERNET BANKING USERS IN NORTHERN REGION OF
MALAYSIA**



By
NORHIDAYAH ALI

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Universiti Utara Malaysia

Thesis Submitted to
Othman Yeop Abdullah School of Business,
Universiti Utara Malaysia,
in Fulfilment of the Requirement for the degree of Doctor of Philosophy

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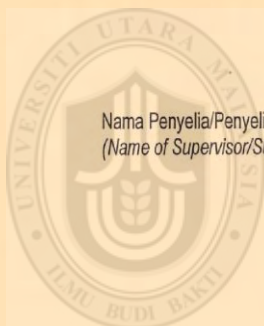
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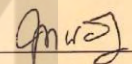
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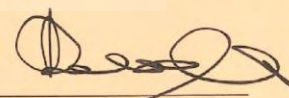


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ABSTRACT

Research on online customer loyalty among internet banking users is important because of the threat posed by phishing and other related issues. The literature has shown that it is a major concern, especially in Malaysia. This study examines the factors influencing eLoyalty such as eSatisfaction, eCommitment, eTrust, privacy, security, website quality and convenience among the internet banking users in Malaysia. The objectives of the study are to analyse the direct effect of eSatisfaction, eCommitment, eTrust towards eLoyalty and the mediating effect of eSatisfaction between privacy, security and website quality on eLoyalty. Another objective is to observe the moderating role of convenience between eSatisfaction and eLoyalty. The underpinning theory used to develop the study's framework is based on Oliver's Four-Stage Loyalty Model. An intercept data collection approach was chosen due to the nature of online users as well as the industry. A total of 427 datasets was employed for final analysis, performed using SPSS and SmartPLS-SEM (Partial Least Squares-Structural Equation Modeling). The results of the analysis show that all hypotheses are supported and only one is rejected. The study has established the direct relationship between eSatisfaction, eCommitment and eTrust towards eLoyalty. In addition, the study has confirmed the mediating effect of eSatisfaction between privacy and eLoyalty, security and eLoyalty and website quality on eLoyalty. However, the moderating role of convenience was found to be not significant indicating that there is a constant effect between eSatisfaction and eLoyalty. The study also discusses the theoretical and practical contributions as well as the limitations of the study and recommendations for future research.

Keywords: eLoyalty, eSatisfaction, privacy, security, convenience

ABSTRAK

Penyelidikan tentang kesetiaan pelanggan dalam talian dalam kalangan pengguna perbankan internet adalah penting kerana ancaman *phishing* dan isu-isu lain yang berkaitan. Perbincangan dalam beberapa kajian literatur telah menunjukkan bahawa ia telah menjadi suatu kebimbangan yang utama khususnya di Malaysia. Oleh itu, kajian ini mengkaji faktor-faktor yang mempengaruhi eKesetiaan seperti eKepuasan, eKomitmen, eAmanah, privasi, keselamatan, kualiti laman web dan kemudahan dalam kalangan pengguna perbankan internet di Malaysia. Objektif kajian ini adalah untuk menganalisis kesan langsung eKepuasan, eKomitmen, eAmanah ke atas eKesetiaan dan kesan eKepuasan sebagai pengantara bagi hubungan privasi, keselamatan dan kualiti laman web kepada eKesetiaan. Objektif kajian ini juga adalah untuk melihat peranan penyederhana iaitu kemudahan antara hubungan eKepuasan dan eKesetiaan. Teori yang menjadi asas untuk membangunkan rangka kerja kajian ini adalah berdasarkan kepada *Oliver's Four-Stage Loyalty Model*. Pengumpulan data kajian secara pintasan telah dipilih berdasarkan jenis pengguna dalam talian dan juga industri. Sebanyak 427 data telah digunakan untuk analisis akhir dan dianalisa dengan menggunakan kaedah SPSS dan *SmartPLS-SEM (Partial Least Squares-Structural Equation Modeling)*. Dalam data analisis, semua hipotesis telah disokong dan hanya satu sahaja yang ditolak. Kajian ini telah mengesahkan bahawa hubungan langsung antara eKepuasan, eKomitmen dan eAmanah ke atas eKesetiaan dan kesan pengantara eKepuasan antara privasi dan eKesetiaan, keselamatan dan eKesetiaan serta kualiti laman web pada eKesetiaan. Selain itu, peranan penyederhana iaitu kemudahan didapati tidak signifikan menunjukkan terdapat hubungan langsung antara eKepuasan dan eKesetiaan. Akhir sekali, kajian ini turut membincangkan tentang sumbangan teoretikal dan praktikal serta batasan kajian dan cadangan untuk kajian pada masa hadapan.

Kata kunci: eKesetiaan, eKepuasan, privasi, keselamatan, kemudahan

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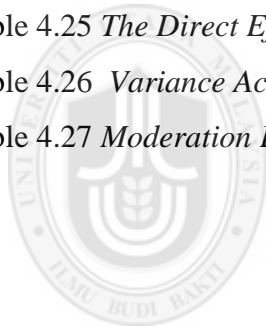
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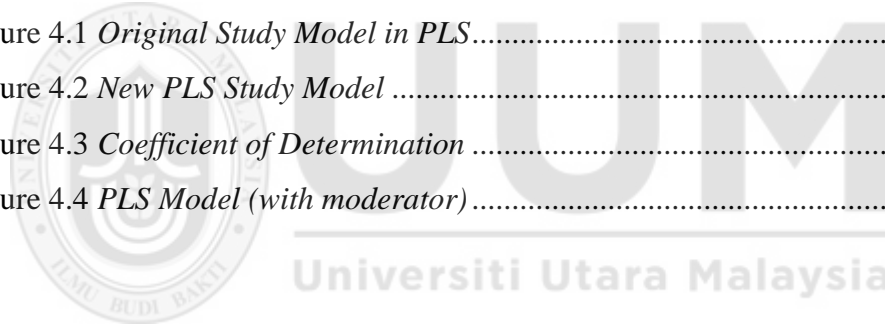
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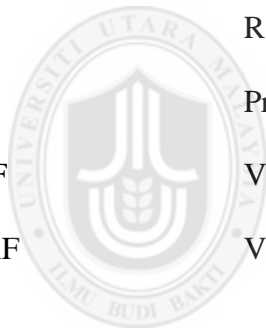
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LIST OF ABBREVIATIONS

SPSS	Statistical Package for Social Sciences
SEM	Structural Equation Modelling
PLS	Partial Least Square
BNM	Bank Negara Malaysia
CONV	Convenience
WebQuality	Website Quality
AVE	Average Variance Extracted
CR	Composite Reliability
CFA	Confirmatory Factor Analysis
R^2	R Square (Coefficient of Determination)
Q^2	Predictive Relevance
VIF	Variance Influence Factor
VAF	Variance Accounted For



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CHAPTER ONE

INTRODUCTION

1.1 Introduction

The chapter will discuss about the background of the study, problem statement, research questions, research objectives and scope of research. Subsequently, the chapter will also provide the significance of the research and definition of terms. Lastly, the chapter will end with the organization of the thesis.

1.2 Background of the Study

The rising of Relationship Marketing (RM) popularity started in the 80s and 90s (Little & Marandi, 2003). RM term is first initiated by Berry (1983) and further applied by Jackson (1985) in a business-to-business perspective (as cited in Gronroos, 2004). Recently, marketers are not merely focusing on satisfying their customers but also seeking and enhancing relationship with them (Hess & Story, 2005). As mentioned in Kotler, Keller, Swee, Siew and Chin (2009), RM is essential especially in dealing with Asian consumers. According to them, dual relationship between organization and client must inculcate trust and respect. Also, it is claimed that companies could enhance their long-term performance in term of growth and profit by focusing on relationship marketing rather than the transactional marketing (Sheth & Shah, 2003; Styles & Ambler, 2003). Loyalty conduct has been identified to generate continuous relationship as well as minimize risk and cost (Hess & Story, 2005). In addition, loyalty has been presented as the main element in customer relationship (Mathwick, 2002; Sirdeshmukh, Singh, & Sabol, 2002). Apart from

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**APPENDIX A
QUESTIONNAIRES**



Dear Respondent,

I am currently a student of University Utara Malaysia (UUM) undertaking a research investigating the online satisfaction and online loyalty toward internet banking. Your response is extremely important to the success of this research. Please take a few minutes to give your most thoughtful answers. Each of your opinion is greatly appreciated and your response will be treated as “Strictly Confidential” and will be used for academic purpose only.

Finally, I am highly thankful for your cooperation, time and effort in answering the questionnaires.

Yours Sincerely,
Norhidayah bt. Ali
Student of PhD Program (No. Matrik: 94318)

Responden yang Dihormati,

Saya adalah seorang pelajar Universiti Utara Malaysia (UUM) yang menjalankan penyelidikan berkaitan e-kepuasan dan e-kesetiaan terhadap perbankan internet. Maklumbalas dari anda adalah amat penting dalam menjayakan kajian ini. Sila luangkan beberapa minit untuk memberi jawapan yang bernas bagi anda. Setiap satu daripada pendapat anda amatlah dihargai dan respon anda akan dianggap sulit dan akan digunakan untuk tujuan akademik sahaja.

Akhir sekali, saya sangat berterima kasih di atas kerjasama, masa dan usaha anda menjawab soal selidik ini.

Yang Benar,
Norhidayah bt. Ali
Penuntut Program PhD (No. Matrik: 94318)

Questionnaires / Soalan Kaji Selidik

Section A: General Information (Please tick ✓ your answer)

Bahagian A: Maklumat Am (Sila tandakan ✓ jawapan anda).

1. **Are you a bank customer?** / Adakah anda seorang pelanggan bank?

Yes / Ya

No / Tidak (If no, thank you for your time in participating in the survey/ Jika tidak, terima kasih kerana meluangkan masa dalam kaji selidik ini)

2. **Gender / Jantina**

Male / Lelaki

Female / Perempuan

3. **Age group / Kumpulan umur**

Less than 20 / Bawah 20

20 – 29

30 – 39

40 – 49

50 & above / 50 & ke atas

4. **Marital status / Status perkahwinan**

Single / Bujang

Married / Berkahwin

Divorced / Duda atau Janda

Others (please specify) / Lain-Lain (sila nyatakan) _____

5. **Academic qualification / Kelayakan akademik**

PMR / LCE or below / PMR/LCE atau di bawah

SPM / MCE

Certificate / Diploma / Sijil / Diploma

Degree/ Professional Certificate / Ijazah / Sijil Profesional

Postgraduate / Pasca Siswazah

Others (please specify) / Lain-Lain (sila nyatakan) _____

6. **Employment Status / Status Pekerjaan**
- Student / Pelajar**
 - Self-Employed / Bekerja sendiri**
 - Professional / Profesional**
 - Manager / Pengurus**
 - Management level / Pihak Pengurusan**
 - Academician / Ahli akademik**
 - Technician / Juruteknik**
 - Clerical support employee / Pekerja sokongan perkeranian**
 - Service and sales employee / Pekerja perkhidmatan dan jualan**
 - Skilled employee- agricultural, forestry, fishery and craft / Pekerja mahir-pertanian, perhutanan, perikanan dan pertukangan**
 - Plant and machine operator and assembler / Operator loji dan mesin dan pemasang**
 - Others (please specify) / Lain-lain (sila nyatakan) _____**
7. **Monthly income / Pendapatan bulanan**
- RM3,000 and below / RM3000 dan ke bawah**
 - RM3,001 – RM6,000 / RM3,001 - RM6,000**
 - RM6,001 – RM9,000 / RM6,001 – RM9,000**
 - RM9,001 – RM12,000 / RM9,001 – RM12,000**
 - RM12,000 and more / RM12,000 dan ke atas**
8. **Are you an internet banking users? / Adakah anda seorang pengguna perbankan internet?**
- Yes (If yes, please proceed to Question 9 onwards) / Ya (Jika ya, sila terus ke Soalan 9 dan seterusnya)**
 - No / Tidak (If no, please state the reason(s) of not using the internet banking services) / (Jika tidak, sila nyatakan sebab atau sebab-sebab tidak menggunakan perkhidmatan perbankan internet)**
 - I am concern about the privacy of my private information.**
Saya bimbang mengenai privasi maklumat peribadi saya.
 - I am concern about the security risk of the service.**
Saya bimbang mengenai risiko keselamatan perkhidmatan.
 - The website design (such as information, design and interaction) is low in quality.**
Reka bentuk laman web (seperti maklumat, reka bentuk dan interaksi) adalah kurang berkualiti.
 - I do not trust the internet banking service**
Saya tidak percaya kepada perkhidmatan perbankan internet.
 - Others (please specify) _____**
Lain-lain (sila nyatakan) _____

9. **Internet banking usage frequency** / *Kekerapan penggunaan perbankan internet*
- 1-3 times per month** / *1-3 kali sebulan*
 - 4-6 times per month** / *4-6 kali sebulan*
 - 7-9 times per month** / *7-9 kali sebulan*
 - more than 9 times per month** / *Lebih dari 9 kali sebulan*
10. **Number of years using internet banking** / *Bilangan tahun menggunakan perbankan internet*
- Less than 1 year** / *Kurang daripada 1 tahun*
 - 1 years – 3 years** / *1 tahun - 3 tahun*
 - More than 3 years - 6 years** / *Lebih daripada 3 tahun - 6 tahun*
 - More than 6 years** / *Lebih daripada 6 tahun*
11. **Latest time usage of internet banking** / *Penggunaan terkini perbankan internet*
- Less than 1 week ago** / *Kurang daripada 1 minggu yang lalu*
 - 1-2 weeks ago** / *1-2 minggu yang lalu*
 - More than 2 - 4 weeks ago** / *Lebih daripada 2 - 4 minggu yang lalu*
 - 1-2 months ago** / *1-2 bulan yang lalu*
 - More than 2 months ago** / *Lebih daripada 2 bulan yang lalu*
12. **Internet banking accounts** / *Akaun perbankan internet*
- Maybank Berhad
 - CIMB Bank Berhad
 - Public Bank Berhad
13. **Decision to use internet banking services is influenced by: (You can tick more than one)** / *Keputusan untuk menggunakan perkhidmatan perbankan internet dipengaruhi oleh: (Anda boleh tandakan lebih daripada satu)*
- Own-self** / *Diri sendiri*
 - Friends** / *Rakan-rakan*
 - Co-workers** / *Kawan sekerja*
 - Family** / *Keluarga*
14. **Intention to use Internet Banking Services in the future?** / *Niat untuk menggunakan perkhidmatan perbankan internet pada masa akan datang?*
- Yes** / *Ya*
 - Not sure** / *Tidak pasti*
 - No** / *Tidak*

Section B (Please circle your answer)

The statement below indicates your behaviors towards factors leading to loyalty towards your internet banking services. Please read carefully each statement and place your response by circling the appropriate column.

Bahagian B (Sila bulatkan jawapan anda)

Kenyataan di bawah menunjukkan tingkah laku anda terhadap faktor-faktor yang membawa kepada kesetiaan terhadap perkhidmatan perbankan internet anda. Sila baca dengan teliti setiap kenyataan dan bulatkan respon anda pada ruangan yang bersesuaian.



a) **Privacy (P) / Privasi**

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Disagree Somewhat	Neither Agree nor Disagree	Agree Somewhat	Agree	Strongly Agree
<i>Sangat Tidak Setuju</i>	<i>Tidak Setuju</i>	<i>Agak Tidak Setuju</i>	<i>Neutral</i>	<i>Agak Setuju</i>	<i>Setuju</i>	<i>Sangat Setuju</i>

Privacy (P)	To what extent						
1. This internet banking service shows concern for the privacy of its user. <i>Perkhidmatan perbankan internet menunjukkan keprihatinan terhadap privasi pengguna.</i>	1	2	3	4	5	6	7
2. I feel safe when I send personal information to this internet banking services. <i>Saya berasa selamat apabila saya menghantar maklumat peribadi kepada perkhidmatan perbankan internet ini.</i>	1	2	3	4	5	6	7
3. This internet banking service abides by personal data protection laws. <i>Perkhidmatan perbankan internet mematuhi undang-undang perlindungan data peribadi.</i>	1	2	3	4	5	6	7
4. This internet banking service only collects user personal data that are necessary for its activity. <i>Perkhidmatan perbankan internet hanya mengumpul data peribadi pengguna yang perlu untuk aktivitinya.</i>	1	2	3	4	5	6	7
5. This internet banking service respects the user rights when obtaining personal information. <i>Perkhidmatan perbankan internet menghormati hak-hak pengguna apabila mendapatkan maklumat peribadi.</i>	1	2	3	4	5	6	7
6. This internet banking services will not provide my personal information to other companies without my consent. <i>Perkhidmatan perbankan internet ini tidak akan memberikan maklumat peribadi saya kepada syarikat lain tanpa kebenaran saya.</i>	1	2	3	4	5	6	7

<p>7. This internet banking service will ask user's permission before sending any advertisements.</p> <p><i>Perkhidmatan perbankan internet akan meminta izin pengguna sebelum menghantar iklan.</i></p>	<p>1 2 3 4 5 6 7</p>
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b) **Security (S) / Keselamatan**

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Disagree Somewhat	Neither Agree nor Disagree	Agree Somewhat	Agree	Strongly Agree
<i>Sangat Tidak Setuju</i>	<i>Tidak Setuju</i>	<i>Agak Tidak Setuju</i>	<i>Neutral</i>	<i>Agak Setuju</i>	<i>Setuju</i>	<i>Sangat Setuju</i>

Security (S)	To what extent						
<p>1. This internet banking service has mechanisms to ensure the safe transaction of its users' information. <i>Perkhidmatan perbankan internet ini mempunyai mekanisme untuk memastikan transaksi yang selamat bagi maklumat pengguna.</i></p>	1	2	3	4	5	6	7
<p>2. This internet banking service shows great concern for the security of any transactions. <i>Perkhidmatan perbankan internet menunjukkan keprihatinan bagi keselamatan segala urusan niaga.</i></p>	1	2	3	4	5	6	7
<p>3. This internet banking service has sufficient technical capacity to ensure that no other organization will supplant (imitate) its identity on the internet. <i>Perkhidmatan perbankan internet mempunyai kapasiti teknikal yang mencukupi untuk memastikan tiada organisasi lain dapat menggantikan identitinya di internet.</i></p>	1	2	3	4	5	6	7
<p>4. I am sure of the identity of this internet banking service when I establish contact via the internet. <i>Saya pasti tentang identiti perkhidmatan perbankan internet ini apabila saya berhubung melalui internet.</i></p>	1	2	3	4	5	6	7
<p>5. When I send data to this internet banking services, I am sure that they will not be intercepted by unauthorized third parties. <i>Apabila saya menghantar data ke perkhidmatan perbankan internet ini, saya pasti bahawa mereka tidak akan dipintas oleh pihak ketiga yang tidak dibenarkan.</i></p>	1	2	3	4	5	6	7

<p>6. This internet banking service has sufficient technical capacity to ensure that the data I send will not be intercepted by hackers. <i>Perkhidmatan perbankan internet ini mempunyai kapasiti teknikal yang mencukupi untuk memastikan bahawa data yang saya hantar tidak akan dipintas oleh penggodam.</i></p>	<p>1 2 3 4 5 6 7</p>
<p>7. When I send data to this internet banking website, I am sure they cannot be modified by a third party. <i>Apabila saya menghantar data ke laman web perbankan internet ini, saya pasti mereka tidak boleh diubah suai oleh pihak ketiga.</i></p>	<p>1 2 3 4 5 6 7</p>
<p>8. This internet banking website has sufficient technical capability to ensure that the data I send cannot be modified by a third party. <i>Laman web perbankan internet ini mempunyai keupayaan teknikal yang mencukupi untuk memastikan bahawa data yang dihantar tidak boleh diubah suai oleh pihak ketiga.</i></p>	<p>1 2 3 4 5 6 7</p>



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c) Website Quality (WQ) / Kualiti Laman Web

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Disagree Somewhat	Neither Agree nor Disagree	Agree Somewhat	Agree	Strongly Agree
<i>Sangat Tidak Setuju</i>	<i>Tidak Setuju</i>	<i>Agak Tidak Setuju</i>	<i>Neutral</i>	<i>Agak Setuju</i>	<i>Setuju</i>	<i>Sangat Setuju</i>

Website Quality (WQ)	To what extent						
1. Learning to operate this internet banking website is easy for me. <i>Pembelajaran tentang mengendalikan laman web perbankan internet ini adalah mudah bagi saya.</i>	1	2	3	4	5	6	7
2. The display pages within this internet banking website are easy to read. <i>Laman-laman paparan dalam laman web perbankan internet ini adalah mudah untuk dibaca.</i>	1	2	3	4	5	6	7
3. This internet banking website loads quickly. <i>Muatnaik di laman web perbankan internet ini adalah cepat.</i>	1	2	3	4	5	6	7
4. When I use this internet banking website, there is very little waiting time between my actions and the internet banking services website's response. <i>Apabila saya menggunakan laman web perbankan internet ini, masa menunggu adalah sangat sedikit antara tindakan saya dan tindak balas laman web perkhidmatan perbankan internet ini.</i>	1	2	3	4	5	6	7
5. This internet banking website adequately meets my information needs. <i>Laman web perbankan internet ini memenuhi secukupnya maklumat yang saya perlukan.</i>	1	2	3	4	5	6	7

<p>6. It is easier to use this internet banking website to complete my banking needs compared to using other mediums (i.e. ATM and counter service).</p> <p><i>Ianya lebih mudah untuk menggunakan laman web perbankan internet ini untuk melengkapkan keperluan perbankan saya berbanding menggunakan medium lain (i.e. ATM dan perkhidmatan kaunter)</i></p>	<p>1 2 3 4 5 6 7</p>
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d) **e-Satisfaction (eS) / e-Kepuasan**

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Disagree Somewhat	Neither Agree nor Disagree	Agree Somewhat	Agree	Strongly Agree
<i>Sangat Tidak Setuju</i>	<i>Tidak Setuju</i>	<i>Agak Tidak Setuju</i>	<i>Neutral</i>	<i>Agak Setuju</i>	<i>Setuju</i>	<i>Sangat Setuju</i>

e-Satisfaction (eS)	To what extent						
1. I am completely happy with my internet banking services. <i>Saya amat gembira dengan perkhidmatan perbankan internet ini.</i>	1	2	3	4	5	6	7
2. I am very pleased with what this internet bank services do for me. <i>Saya amat berpuas hati dengan segala yang dilakukan oleh perkhidmatan perbankan internet ini.</i>	1	2	3	4	5	6	7
3. My experiences with this internet banking services have always been satisfying. <i>Pengalaman saya dengan perkhidmatan perbankan internet ini adalah sentiasa memuaskan.</i>	1	2	3	4	5	6	7
4. Overall, I am very satisfied with my internet banking services. <i>Secara keseluruhan, saya amat berpuas hati dengan perkhidmatan perbankan internet ini.</i>	1	2	3	4	5	6	7
5. If I had to do it all over again, I would still choose to use this internet banking services. <i>Jika saya terpaksa melakukannya sekali lagi, saya masih memilih untuk menggunakan perkhidmatan perbankan internet ini.</i>	1	2	3	4	5	6	7

e) **e-Trust (eT) /e-Amanah**

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Disagree Somewhat	Neither Agree nor Disagree	Agree Somewhat	Agree	Strongly Agree
Sangat Tidak Setuju	Tidak Setuju	Agak Tidak Setuju	Neutral	Agak Setuju	Setuju	Sangat Setuju

e-Trust (eT)	To what extent						
1. This internet banking provider is honest. <i>Pembekal perbankan internet ini adalah jujur.</i>	1	2	3	4	5	6	7
2. This internet banking provider will keep its promise. <i>Pembekal perbankan internet ini akan mengotakan janjinya.</i>	1	2	3	4	5	6	7
3. This internet banking provider puts customer interest first before its own. <i>Pembekal perbankan internet ini mengutamakan kepentingan pelanggan.</i>	1	2	3	4	5	6	7
4. This internet banking provider demonstrates its belief that “the customer is always right”. <i>Pembekal perbankan internet ini menunjukkan kepercayaan bahawa "pelanggan sentiasa betul".</i>	1	2	3	4	5	6	7
5. This internet banking provider is competent in carrying out its online banking transactions. <i>Pembekal perbankan internet adalah kompeten (atau cekap) dalam menjalankan transaksi perbankan internet.</i>	1	2	3	4	5	6	7
6. This internet banking provider is capable in carrying out its online banking transactions. <i>Pembekal perbankan internet ini mampu menjalankan transaksi perbankan internet.</i>	1	2	3	4	5	6	7
7. This internet banking provider knows how to provide excellent internet banking services. <i>Pembekal perbankan internet ini tahu bagaimana untuk menyediakan perkhidmatan perbankan internet yang terbaik.</i>	1	2	3	4	5	6	7

f) **e-Commitment (eC) / e-Komitmen**

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Disagree Somewhat	Neither Agree nor Disagree	Agree Somewhat	Agree	Strongly Agree
Sangat Tidak Setuju	Tidak Setuju	Agak Tidak Setuju	Neutral	Agak Setuju	Setuju	Sangat Setuju

e-Commitment (eC)	To what extent						
1. I will not change my preference for this internet banking service. <i>Saya tidak akan menukar pilihan saya untuk perkhidmatan perbankan internet ini.</i>	1	2	3	4	5	6	7
2. It would be difficult to change my belief about this internet banking service. <i>Itu adalah sukar untuk mengubah kepercayaan saya terhadap perkhidmatan perbankan internet ini.</i>	1	2	3	4	5	6	7
3. Even if close friends recommend another online banking service, I would not change my preference for this internet banking service. <i>Walaupun kawan-kawan rapat mengesyorkan perkhidmatan perbankan internet yang lain, saya tidak akan menukar pilihan saya untuk perkhidmatan perbankan internet ini.</i>	1	2	3	4	5	6	7
4. To change my preference from this internet banking service would require major rethinking. <i>Untuk menukar pilihan saya daripada perkhidmatan perbankan internet ini memerlukan pemikiran yang lama.</i>	1	2	3	4	5	6	7

g) Convenience (C) / Kemudahan

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Disagree Somewhat	Neither Agree nor Disagree	Agree Somewhat	Agree	Strongly Agree
Sangat Tidak Setuju	Tidak Setuju	Agak Tidak Setuju	Neutral	Agak Setuju	Setuju	Sangat Setuju

Convenience (C)	To what extent						
1. I want the convenience offers by this internet banking services. <i>Saya inginkan kemudahan yang ditawarkan oleh perkhidmatan perbankan internet.</i>	1	2	3	4	5	6	7
2. I enjoy the flexibility of this internet banking services. <i>Saya menikmati fleksibiliti perkhidmatan perbankan internet.</i>	1	2	3	4	5	6	7
3. I am interested in taking advantage of the ease of this internet banking services. <i>Saya berminat untuk mengambil kesempatan tentang mudahnya perkhidmatan perbankan internet.</i>	1	2	3	4	5	6	7
4. I would like to do transaction at my own pace while transacting the internet banking services. <i>Saya ingin melakukan transaksi mengikut rentak saya sendiri semasa menjalankan transaksi perkhidmatan perbankan internet.</i>	1	2	3	4	5	6	7
5. I would like to do transaction at my own feasibility while transacting the internet banking services. <i>Saya ingin melakukan transaksi pada kebolehlaksanaan saya sendiri semasa menjalankan transaksi perkhidmatan perbankan internet.</i>	1	2	3	4	5	6	7
6. I would like to do transaction at my own time while transacting the internet banking services. <i>Saya ingin melakukan transaksi mengikut masa saya sendiri semasa menjalankan transaksi perkhidmatan perbankan internet.</i>	1	2	3	4	5	6	7

<p>7. I would like to do transaction at my own place while transacting the internet banking services.</p> <p><i>Saya ingin melakukan transaksi di tempat saya sendiri semasa menjalankan transaksi perkhidmatan perbankan internet.</i></p>	<p>1 2 3 4 5 6 7</p>
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h) e-Loyalty (eL) /e-Kesetiaan

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Disagree Somewhat	Neither Agree nor Disagree	Agree Somewhat	Agree	Strongly Agree
Sangat Tidak Setuju	Tidak Setuju	Agak Tidak Setuju	Neutral	Agak Setuju	Setuju	Sangat Setuju

e-Loyalty (eL)	To what extent						
<p>1. I seldom consider switching to another internet banking services after using this internet banking service. <i>Saya jarang mempertimbangkan untuk beralih kepada satu lagi perkhidmatan perbankan internet selepas menggunakan perkhidmatan perbankan internet ini.</i></p>	1	2	3	4	5	6	7
<p>2. As long as the current service continues, I doubt that I would switch internet banking services. <i>Selagi perkhidmatan perbankan internet sekarang berterusan, saya yakin saya tidak akan menukar kepada perkhidmatan perbankan internet yang lain.</i></p>	1	2	3	4	5	6	7
<p>3. I try to use the internet banking services whenever I need to do any transaction. <i>Saya akan cuba menggunakan perkhidmatan perbankan internet ini setiap kali saya perlu melakukan sebarang transaksi.</i></p>	1	2	3	4	5	6	7
<p>4. When I need to do any transaction, this internet banking services is my first choice. <i>Apabila saya perlu melakukan sebarang transaksi, perkhidmatan perbankan internet ini adalah pilihan pertama saya.</i></p>	1	2	3	4	5	6	7
<p>5. I like using this internet banking services. <i>Saya suka menggunakan perkhidmatan perbankan internet ini.</i></p>	1	2	3	4	5	6	7
<p>6. To me this site is the best internet banking services to do transaction with. <i>Bagi saya laman web ini adalah perkhidmatan perbankan internet yang terbaik untuk melakukan sebarang transaksi.</i></p>	1	2	3	4	5	6	7

<p>7. To me this is my favorite internet banking services <i>Bagi saya perkhidmatan perbankan internet ini adalah kegemaran saya.</i></p>	1	2	3	4	5	6	7
<p>8. I say positive things about this internet banking services to other people. <i>Saya mengatakan hal-hal positif mengenai perkhidmatan perbankan internet ini kepada orang lain.</i></p>	1	2	3	4	5	6	7
<p>9. I recommend this internet banking services to someone who seeks my advice. <i>Saya mencadangkan perkhidmatan perbankan internet ini kepada seseorang yang meminta nasihat.</i></p>	1	2	3	4	5	6	7
<p>10. I encourage friends and relatives to do transaction with this internet banking services. <i>Saya menggalakkan rakan-rakan dan saudara-mara untuk melakukan transaksi dengan perkhidmatan perbankan internet.</i></p>	1	2	3	4	5	6	7
<p>11. I have always used this internet banking service. <i>Saya sentiasa menggunakan perkhidmatan perbankan internet ini.</i></p>	1	2	3	4	5	6	7
<p>12. I am currently using this internet banking service. <i>Saya kini menggunakan perkhidmatan perbankan internet ini.</i></p>	1	2	3	4	5	6	7
<p>13. I will always want to use this internet banking service again. <i>Saya akan sentiasa ingin menggunakan perkhidmatan perbankan internet ini lagi.</i></p>	1	2	3	4	5	6	7

APPENDIX B
KMO and Bartlett's Test

Privacy		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.791
Bartlett's Test of Sphericity	Approx. Chi-Square	120.093
	df	21
	Sig.	0
Security		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.804
Bartlett's Test of Sphericity	Approx. Chi-Square	168.358
	df	28
	Sig.	0
Website Quality		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.67
Bartlett's Test of Sphericity	Approx. Chi-Square	100.502
	df	15
	Sig.	0
eSatisfaction		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.825
Bartlett's Test of Sphericity	Approx. Chi-Square	131.775
	df	10
	Sig.	0

eTrust		
<hr/>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.846
Bartlett's Test of Sphericity	Approx. Chi-Square	151.988
	df	21
	Sig.	0

eCommitment		
<hr/>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.722
Bartlett's Test of Sphericity	Approx. Chi-Square	63.944
	df	6
	Sig.	0

Convenience		
<hr/>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.773
Bartlett's Test of Sphericity	Approx. Chi-Square	202.503
	df	21
	Sig.	0

eLoyalty		
<hr/>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.903
Bartlett's Test of Sphericity	Approx. Chi-Square	397.566
	df	78
	Sig.	0

**APPENDIX C
MISSING VALUES**

Univariate Statistics

	N	Mean	Std. Dev.	Missing		No. of Extremes	
				Count	Percent	Low	High
Pri1	436	5.179	1.100	0	0.0	1	0
Pri2	435	4.749	1.205	1	0.2	5	0
Pri3	436	5.007	1.121	0	0.0	6	0
Pri4	436	5.025	1.169	0	0.0	7	0
Pri5	436	5.069	1.078	0	0.0	34	0
Pri6	436	4.940	1.223	0	0.0	1	0
Pri7	436	4.665	1.275	0	0.0	5	0
Sec1	436	5.259	1.068	0	0.0	0	0
Sec2	436	5.227	1.094	0	0.0	0	0
Sec3	436	4.954	1.212	0	0.0	4	0
Sec4	436	5.023	1.184	0	0.0	1	0
Sec5	436	4.842	1.188	0	0.0	2	0
Sec6	436	4.755	1.183	0	0.0	1	0
Sec7	436	4.674	1.235	0	0.0	2	0
Sec8	436	4.732	1.197	0	0.0	2	0
WQ1	436	5.422	1.108	0	0.0	27	0
WQ2	435	5.363	1.099	1	0.2	28	0
WQ3	436	5.030	1.133	0	0.0	0	0
WQ4	436	4.970	1.171	0	0.0	1	0
WQ5	436	5.094	1.067	0	0.0	1	0
WQ6	436	5.530	1.202	0	0.0	22	0
eSat1	436	5.289	1.080	0	0.0	27	0
eSat2	433	5.314	1.051	3	0.7	21	0
eSat3	436	5.161	1.177	0	0.0	41	0
eSat4	436	5.307	1.084	0	0.0	25	0
eSat5	436	5.427	1.119	0	0.0	22	0
eTr1	436	5.092	0.983	0	0.0	0	0
eTr2	436	5.041	0.998	0	0.0	1	0
eTr3	436	4.970	1.040	0	0.0	2	0
eTr4	436	4.899	1.132	0	0.0	5	0
eTr5	436	5.204	0.974	0	0.0	15	0
eTr6	436	5.374	1.024	0	0.0	17	0
eTr7	436	5.328	1.026	0	0.0	15	0
eComt1	436	5.046	1.181	0	0.0	4	0
eComt2	436	4.890	1.025	0	0.0	2	0

	N	Mean	Std. Deviation	Missing		No. of Extremes	
				Count	Percent	Low	High
eComt3	436	4.787	1.144	0	0.0	3	0
eComt4	436	4.906	1.185	0	0.0	2	0
Conv1	436	5.493	1.049	0	0.0	21	0
Conv2	436	5.399	1.027	0	0.0	18	0
Conv3	436	5.408	1.099	0	0.0	23	0
Conv4	436	5.404	1.032	0	0.0	16	0
Conv5	436	5.378	1.060	0	0.0	19	0
Conv6	436	5.507	1.049	0	0.0	21	0
Conv7	436	5.562	1.041	0	0.0	19	0
eL1	436	4.908	1.181	0	0.0	5	0
eL2	436	4.986	1.087	0	0.0	1	0
eL3	436	5.195	1.149	0	0.0	36	0
eL4	435	5.207	1.255	1	0.2	3	0
eL5	436	5.356	1.186	0	0.0	32	0
eL6	436	5.211	1.131	0	0.0	0	0
eL7	436	5.147	1.139	0	0.0	0	0
eL8	436	5.204	1.101	0	0.0	0	0
eL9	436	5.252	1.064	0	0.0	27	0
eL10	436	5.236	1.092	0	0.0	0	0
eL11	436	5.227	1.167	0	0.0	35	0
eL12	436	5.369	1.142	0	0.0	30	0
eL13	436	5.365	1.117	0	0.0	33	0

**APPENDIX D
T-TEST**

Independent Samples Test (Gender)						
	Levene's Test for Equality of Variances		t-test for Equality of Means			
	F	Sig	t	Sig. (2-tailed)	95% Confidence Interval of the Difference	
					Lower	Upper
Equal variances assumed	1.21	0.271	0.016	0.987	-0.191	0.194
Equal variances not assumed			0.016	0.987	-0.191	0.194



**APPENDIX E
ANOVA TEST**

AGE GROUP (years)	Sum of Squares	Mean Square	F	Sig.
Between Groups	3.992	0.998	1.093	0.36
Within Groups	385.468	0.913		
Total	389.46			

MARITAL STATUS	Sum of Squares	Mean Square	F	Sig.
Between Groups	3.765	1.255	1.376	0.249
Within Groups	385.695	0.912		
Total	389.46			

ACADEMIC QUALIFICATION	Sum of Squares	Mean Square	F	Sig.
Between Groups	5.84	1.168	1.282	0.271
Within Groups	383.62	0.911		
Total	389.46			

MONTHLY INCOME	Sum of Squares	Mean Square	F	Sig.
Between Groups	4.833	1.208	1.326	0.26
Within Groups	384.627	0.911		
Total	389.46			

EMPLOYMENT STATUS	Sum of Squares	Mean Square	F	Sig.
Between Groups	33.247	3.022	3.521	0
Within Groups	356.213	0.858		
Total	389.46			

APPENDIX F
Loadings and Cross Loadings (before deletion)

Items	Convenience	Privacy	Security	WebQuality	eCommitment	eLoyalty	eSatisfaction	eTrust
Conv1	0.844	0.460	0.568	0.615	0.601	0.668	0.623	0.565
Conv2	0.887	0.537	0.619	0.700	0.660	0.745	0.713	0.615
Conv3	0.872	0.498	0.581	0.612	0.609	0.675	0.639	0.570
Conv4	0.836	0.439	0.549	0.540	0.565	0.636	0.597	0.535
Conv5	0.859	0.447	0.546	0.588	0.572	0.643	0.594	0.571
Conv6	0.871	0.431	0.534	0.586	0.566	0.659	0.604	0.563
Conv7	0.848	0.422	0.511	0.571	0.562	0.631	0.583	0.543
Pri1	0.514	0.779	0.594	0.495	0.563	0.548	0.560	0.495
Pri2	0.427	0.750	0.585	0.454	0.500	0.536	0.505	0.468
Pri3	0.349	0.772	0.526	0.376	0.444	0.454	0.458	0.442
Pri4	0.384	0.777	0.520	0.460	0.484	0.457	0.492	0.425
Pri5	0.469	0.857	0.662	0.543	0.542	0.541	0.630	0.538
Pri6	0.320	0.741	0.600	0.487	0.445	0.431	0.534	0.504
Pri7	0.372	0.623	0.544	0.481	0.426	0.482	0.505	0.522
Sec1	0.628	0.634	0.784	0.601	0.531	0.600	0.636	0.590
Sec2	0.629	0.662	0.820	0.643	0.561	0.612	0.692	0.633
Sec3	0.514	0.648	0.803	0.561	0.589	0.550	0.583	0.639
Sec4	0.538	0.622	0.838	0.607	0.552	0.566	0.596	0.640

Sec5	0.474	0.572	0.802	0.551	0.544	0.508	0.507	0.631
Sec6	0.527	0.607	0.809	0.554	0.613	0.569	0.585	0.577
Sec7	0.437	0.608	0.821	0.536	0.572	0.499	0.541	0.598
Sec8	0.453	0.602	0.840	0.601	0.582	0.529	0.584	0.640
WQ1	0.568	0.550	0.592	0.812	0.566	0.606	0.663	0.604
WQ2	0.592	0.538	0.650	0.847	0.559	0.603	0.670	0.643
WQ3	0.494	0.423	0.477	0.774	0.508	0.554	0.586	0.570
WQ4	0.502	0.470	0.550	0.802	0.574	0.557	0.588	0.628
WQ5	0.591	0.552	0.665	0.806	0.614	0.631	0.663	0.634
WQ6	0.618	0.463	0.509	0.773	0.567	0.642	0.713	0.518
eComt1	0.616	0.588	0.659	0.661	0.873	0.783	0.711	0.670
eComt2	0.614	0.571	0.616	0.629	0.855	0.690	0.650	0.645
eComt3	0.526	0.544	0.560	0.535	0.823	0.693	0.552	0.543
eComt4	0.579	0.480	0.522	0.558	0.847	0.665	0.565	0.568
eLoy1	0.477	0.496	0.521	0.537	0.605	0.684	0.539	0.543
eLoy2	0.595	0.564	0.574	0.620	0.728	0.812	0.642	0.584
eLoy3	0.653	0.583	0.586	0.638	0.716	0.838	0.707	0.630
eLoy4	0.662	0.533	0.529	0.625	0.707	0.862	0.700	0.569
eLoy5	0.734	0.549	0.589	0.626	0.692	0.872	0.716	0.592
eLoy6	0.613	0.527	0.536	0.581	0.698	0.858	0.661	0.590
eLoy7	0.598	0.587	0.598	0.604	0.750	0.877	0.728	0.630

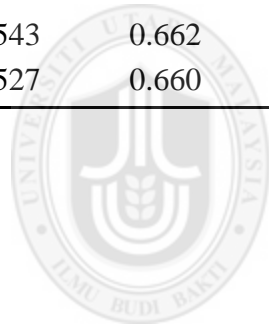
eLoy8	0.661	0.546	0.594	0.663	0.696	0.832	0.696	0.621
eLoy9	0.712	0.567	0.581	0.655	0.730	0.855	0.691	0.658
eLoy10	0.717	0.543	0.593	0.688	0.706	0.854	0.718	0.670
eLoy11	0.688	0.550	0.593	0.646	0.717	0.871	0.724	0.648
eLoy12	0.681	0.517	0.560	0.635	0.695	0.864	0.701	0.595
eLoy13	0.685	0.598	0.645	0.686	0.724	0.875	0.729	0.675
eSat1	0.671	0.652	0.674	0.717	0.639	0.709	0.892	0.642
eSat2	0.634	0.650	0.666	0.752	0.627	0.711	0.907	0.642
eSat3	0.640	0.614	0.651	0.757	0.661	0.728	0.898	0.666
eSat4	0.666	0.617	0.664	0.718	0.660	0.743	0.904	0.664
eSat5	0.638	0.594	0.615	0.684	0.701	0.771	0.877	0.608
eTr1	0.538	0.549	0.651	0.620	0.628	0.636	0.583	0.835
eTr2	0.573	0.507	0.662	0.637	0.594	0.595	0.570	0.867
eTr3	0.509	0.538	0.617	0.610	0.603	0.624	0.615	0.856
eTr4	0.430	0.476	0.545	0.567	0.540	0.543	0.537	0.761
eTr5	0.601	0.568	0.657	0.649	0.594	0.632	0.624	0.849
eTr6	0.627	0.563	0.662	0.678	0.631	0.634	0.646	0.847
eTr7	0.582	0.556	0.660	0.618	0.621	0.618	0.644	0.856

APPENDIX G
Loadings and Cross Loadings (after deletion)

Items	Convenience	Privacy	Security	WebQuality	eCommitment	eLoyalty	eSatisfaction	eTrust
Conv1	0.844	0.449	0.569	0.615	0.601	0.668	0.623	0.565
Conv2	0.887	0.524	0.619	0.700	0.660	0.745	0.713	0.615
Conv3	0.872	0.494	0.582	0.612	0.609	0.676	0.639	0.570
Conv4	0.837	0.421	0.550	0.540	0.565	0.642	0.597	0.535
Conv5	0.859	0.438	0.546	0.588	0.572	0.649	0.594	0.571
Conv6	0.871	0.415	0.534	0.586	0.566	0.660	0.604	0.563
Conv7	0.848	0.410	0.511	0.571	0.562	0.636	0.583	0.543
Pri1	0.514	0.801	0.594	0.495	0.563	0.548	0.560	0.495
Pri2	0.427	0.764	0.585	0.454	0.500	0.534	0.505	0.468
Pri3	0.349	0.804	0.526	0.376	0.444	0.446	0.458	0.442
Pri4	0.384	0.792	0.520	0.460	0.484	0.447	0.492	0.425
Pri5	0.469	0.860	0.662	0.543	0.542	0.540	0.630	0.538
Pri6	0.320	0.716	0.600	0.487	0.445	0.425	0.534	0.504
Sec1	0.628	0.629	0.785	0.601	0.531	0.603	0.636	0.590
Sec2	0.629	0.642	0.820	0.643	0.561	0.613	0.692	0.633
Sec3	0.514	0.626	0.803	0.561	0.589	0.543	0.583	0.639
Sec4	0.538	0.587	0.838	0.607	0.552	0.561	0.596	0.640
Sec5	0.474	0.538	0.802	0.551	0.544	0.503	0.507	0.631
Sec6	0.527	0.597	0.809	0.554	0.613	0.565	0.584	0.577
Sec7	0.437	0.596	0.820	0.536	0.572	0.489	0.541	0.598
Sec8	0.453	0.584	0.839	0.600	0.582	0.520	0.584	0.640

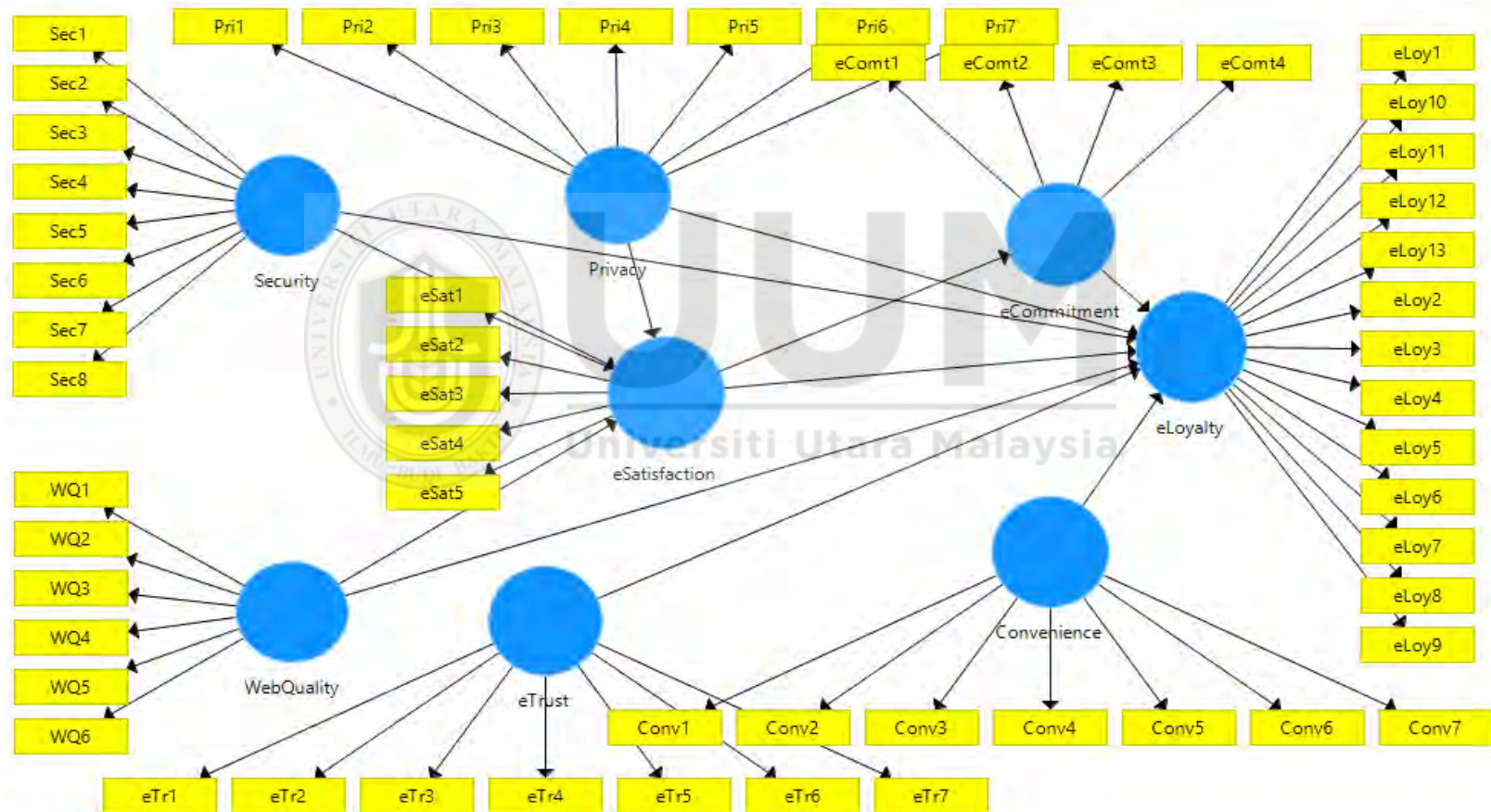
WQ1	0.568	0.533	0.593	0.813	0.566	0.605	0.663	0.604
WQ2	0.592	0.520	0.650	0.847	0.559	0.602	0.670	0.643
WQ3	0.493	0.396	0.477	0.774	0.508	0.552	0.586	0.570
WQ4	0.501	0.451	0.550	0.802	0.574	0.553	0.588	0.628
WQ5	0.590	0.522	0.665	0.806	0.614	0.624	0.663	0.634
WQ6	0.618	0.446	0.509	0.773	0.567	0.643	0.713	0.518
eComt1	0.616	0.568	0.659	0.661	0.873	0.780	0.711	0.670
eComt2	0.614	0.560	0.616	0.629	0.855	0.687	0.650	0.645
eComt3	0.526	0.540	0.560	0.535	0.823	0.688	0.552	0.543
eComt4	0.578	0.473	0.522	0.558	0.847	0.662	0.565	0.568
eLoy2	0.717	0.518	0.593	0.688	0.706	0.858	0.718	0.670
eLoy3	0.688	0.537	0.594	0.646	0.717	0.878	0.724	0.648
eLoy4	0.681	0.505	0.561	0.635	0.695	0.871	0.701	0.595
eLoy5	0.685	0.575	0.645	0.686	0.724	0.879	0.729	0.675
eLoy6	0.595	0.548	0.574	0.620	0.728	0.799	0.642	0.584
eLoy7	0.653	0.570	0.587	0.638	0.716	0.836	0.707	0.630
eLoy8	0.662	0.516	0.529	0.625	0.707	0.867	0.700	0.569
eLoy9	0.734	0.525	0.590	0.626	0.692	0.877	0.716	0.592
eLoy10	0.613	0.506	0.536	0.581	0.698	0.857	0.661	0.590
eLoy11	0.598	0.566	0.598	0.604	0.750	0.874	0.728	0.630
eLoy12	0.661	0.515	0.594	0.663	0.696	0.831	0.696	0.621
eLoy13	0.712	0.542	0.581	0.655	0.730	0.858	0.691	0.658
eSat1	0.671	0.631	0.674	0.717	0.639	0.708	0.892	0.642
eSat2	0.634	0.635	0.666	0.752	0.627	0.709	0.907	0.642

eSat3	0.640	0.582	0.652	0.757	0.661	0.728	0.898	0.666
eSat4	0.666	0.593	0.664	0.718	0.660	0.744	0.905	0.664
eSat5	0.638	0.583	0.615	0.684	0.701	0.774	0.877	0.608
eTr1	0.538	0.515	0.651	0.620	0.628	0.634	0.583	0.835
eTr2	0.573	0.482	0.662	0.637	0.594	0.591	0.570	0.867
eTr3	0.509	0.507	0.617	0.610	0.603	0.616	0.615	0.855
eTr4	0.430	0.449	0.545	0.566	0.540	0.539	0.537	0.761
eTr5	0.601	0.541	0.657	0.649	0.594	0.630	0.624	0.849
eTr6	0.627	0.543	0.662	0.678	0.631	0.632	0.646	0.848
eTr7	0.582	0.527	0.660	0.618	0.621	0.614	0.644	0.856

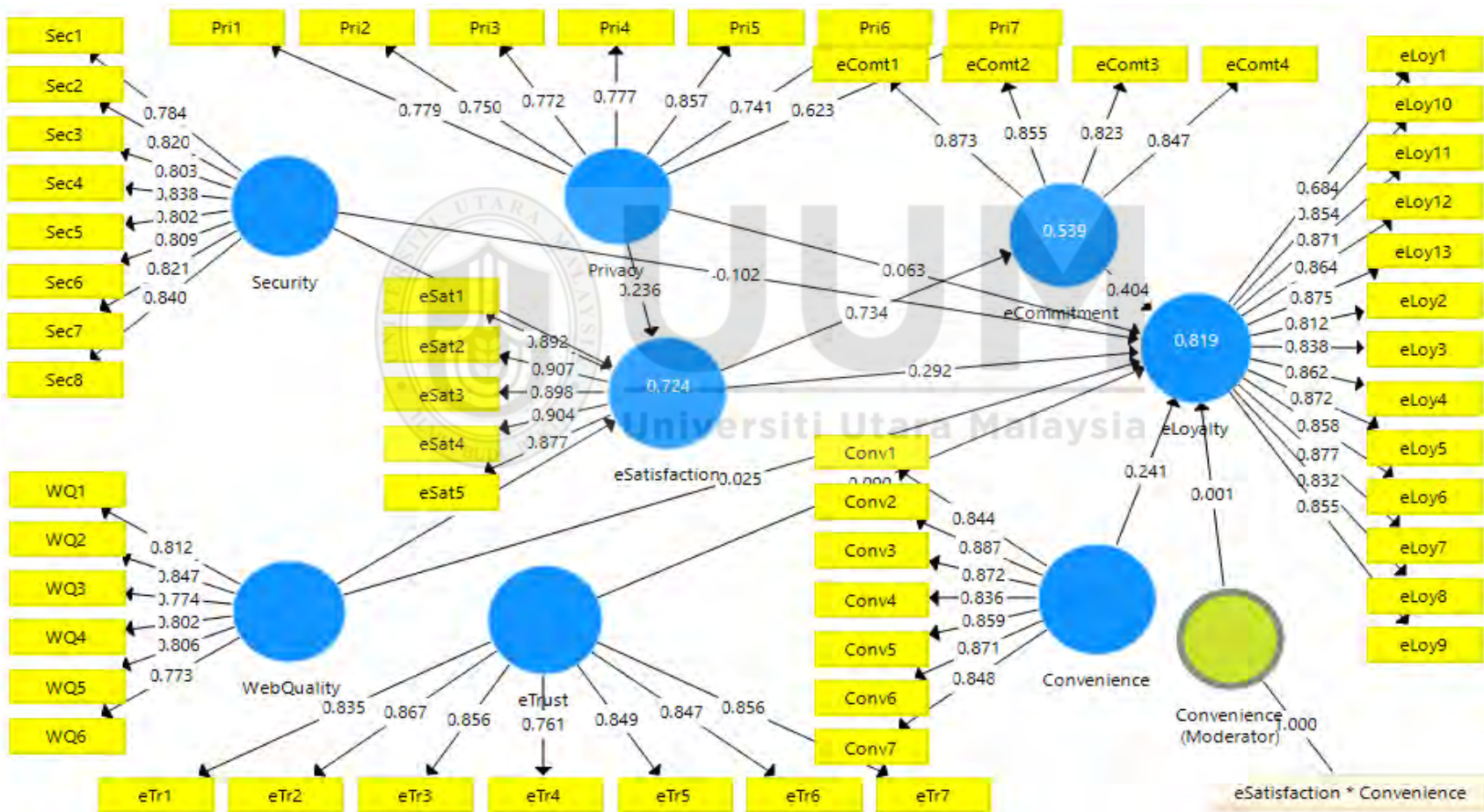


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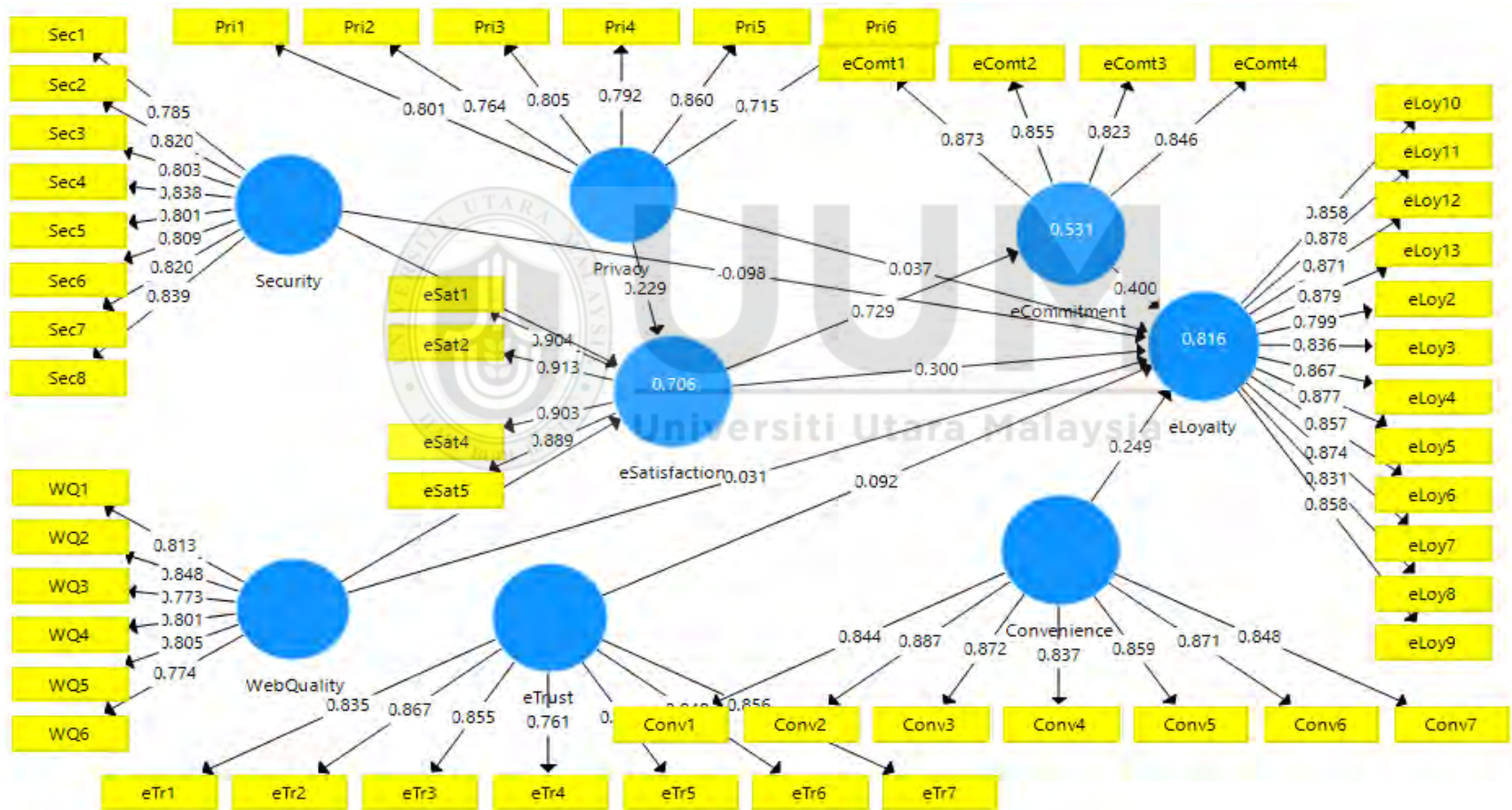
APPENDIX H Original Study Model



APPENDIX I
ITEMS LOADING, PATH COEFFICIENT AND R² VALUES FOR ORIGINAL STUDY MODEL



APPENDIX J
ITEMS LOADING, PATH COEFFICIENT AND R² VALUES (after deletion)



APPENDIX K
COEFFICIENT OF DETERMINATION (R² VALUE)

