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**ADOPTION OF E-WALLET AMONG UNIVERSITI UTARA MALAYSIA
STUDENTS**

By

MATHANRAJ NAIDU A/L ARUMUGAM



**Thesis Submitted to
School of Business Management,
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in Partial Fulfilment of the Requirement for the Master of Sciences
(Management)**



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ABSTRACT

E-wallet usage has several benefits for users, however due to certain reasons the adoption rate among Malaysian students is still very less. Therefore, this study aims to study the factors that affect e-wallet adoption among students in Utara Malaysia University (UUM). The study examines the factors influencing the use of e-wallet by conducting survey. 181 UUM students were randomly selected to respond to the survey. This study investigates the relationship between perceived ease of use, speed, security and social influence of UUM student's e-wallet adoption. The survey questionnaire consist of 25 item of construct and demographic questions. The result of this study can be concluded that there is a significant relationship between the perceived ease of use, speed, security. While there is no significant relationship for social influence on the e-wallet adoption of UUM students. It has been discovered that the strongest relations is between speed and e-wallet adoption. Finally, this study is important to researchers, buyers and sellers who engage in electronic wallets because it demonstrates perceived ease of use, speed, security and social influence. Only a few research studies have tried to clarify the factors influence e-wallet adoption with the adoption variables from Technology Acceptance Model (TAM) and Unified Theory of Acceptance and Use of Technology (UTAUT). Instead, several researchers investigated how e-wallet adoption is related to security and trust. This research can therefore extend the literature showing the four factors influencing the adoption e-wallet. E-wallet service providers can use result from this study to improvise their service in order to attract more people to adopt e-wallet by considering improvising the affecting factors.

Keywords: E-wallet, Speed, Perceived Ease of Use, Security, Social Influence

ABSTRAK

Penggunaan E-dompet mempunyai beberapa manfaat untuk pengguna, namun disebabkan oleh sebab tertentu kadar penerimaan di kalangan pelajar Malaysia masih kurang. Oleh itu, kajian ini bertujuan untuk mengkaji faktor yang melibatkan penerimaan e-dompet di kalangan pelajar di Universiti Utara Malaysia (UUM). Kajian ini mengkaji semula faktor yang mempengaruhi penerimaan e-dompet dengan menjalankan kaji selidik. 181 pelajar UUM telah dipilih secara rawak untuk menjawab kaji selidik itu. Kajian ini menyiasat hubungan antara kemudahan penggunaan, kelajuan, keselamatan dan pengaruh sosial pelajar UUM. Soal selidik kaji selidik ini terdiri daripada 25 bahan dan Soalan demografi. Hasil kajian ini dapat menyimpulkan bahawa terdapat hubungan yang signifikan antara kemudahan penggunaan, kelajuan, Keselamatan. Manakala tiada hubungan yang signifikan untuk pengaruh sosial terhadap penggunaan e-dompet pelajar UUM. Ia telah mendapati bahawa hubungan yang terkuat antara kelajuan dan e-dompet pengangkutan. Akhir sekali, kajian ini penting untuk menyelidik, pembeli dan penjual yang terlibat dalam dompet elektronik kerana ia menunjukkan kemudahan penggunaan, kelajuan, Keselamatan dan pengaruh sosial yang dilihat. Hanya beberapa kajian penyelidikan telah cuba menjelaskan faktor yang mempengaruhi e-dompet yang boleh diterima pakai dengan pemboleh ubah daripada Technology Acceptance Model (TAM) dan Unified Theory of Acceptance and Use of Technology (UTAUT). Sebaliknya, beberapa penyelidik menyiasat cara e-dompet diterima berkaitan dengan keselamatan dan kepercayaan. Justeru itu, kajian ini dapat memajukan lagi kesusasteraan yang menunjukkan empat faktor yang mempengaruhi e-dompet. Pembekal perkhidmatan E-dompet boleh menggunakan hasil kajian ini untuk mendapatkan semula perkhidmatan mereka untuk menarik lebih ramai orang untuk menggunakan e-dompet dengan mempertimbangkan mengimprovisasi faktor yang mempengaruhi.

Kata kunci: E-dompet, kelajuan, kemudahan penggunaan, keselamatan, pengaruh sosial

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LIST OF ABBREVIATIONS

AVE	Average Variance Extracted
BI	Behavioural Intent
CR	Composite Reliability
EPS	Electronic Payment System
GDP	Gross Domestic Product
HTMT	Heterotrait-Monotrait Ratio
NFC	Near Field Communications
PEOU	Perceived Ease of Use
PLS SEM	Partial Least Squares Structural Equation Modelling
PU	Perceived Utility
QR code	Quick Response code
SOCINF	Social Influence
TAM	Technology Acceptance Model
TRA	Theory of Reasoned Action
UK	United Kingdom
UTAUT	Unified Theory Acceptance and Use Theory
UUM	Universiti Utara Malaysia

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Payments system development not only stopped with plastic money but also progressed further in terms of technological growth and progress. The substantial growth in internet and mobile use has facilitated or may be referred to as e-payment systems. Furthermore, online shopping and the rise in banking also brought about a dramatic rise in e-payment use (Wróbel-Konior, 2020).

Instead of traditional paper money and coins, the modern method of payment to customers makes it easier, and the e-payment has been an important part of the business sector. Specific forms of payment methods are now used, for example, online banking, cards for debit, charge cards, credit cards also e-wallets, etc.

The Silent Generation born before 1942, Baby boomers are people who born from 1946 to 1964 and Generation X people were born from 1965 to 1976, is based on The Center for Generational Kinetics (2020). It followed generation Y, which came into existence from 1977 to 1995 and, finally, generation Z, which came into being after 1996. Various generations are usually categorized based on their acceptance of different things, their behaviour when meeting different trends, their reaction to innovation or technology, their attitude to expectations, etc. (Taylor, 2017).

Different generations have different levels of understanding and tolerance for technology. “Millennials: Coming of Age” (2020) identified the Generation Y as a generational change and globalization, which gave them different views and behaviors in comparison to previous generations, as an overview of working generations.

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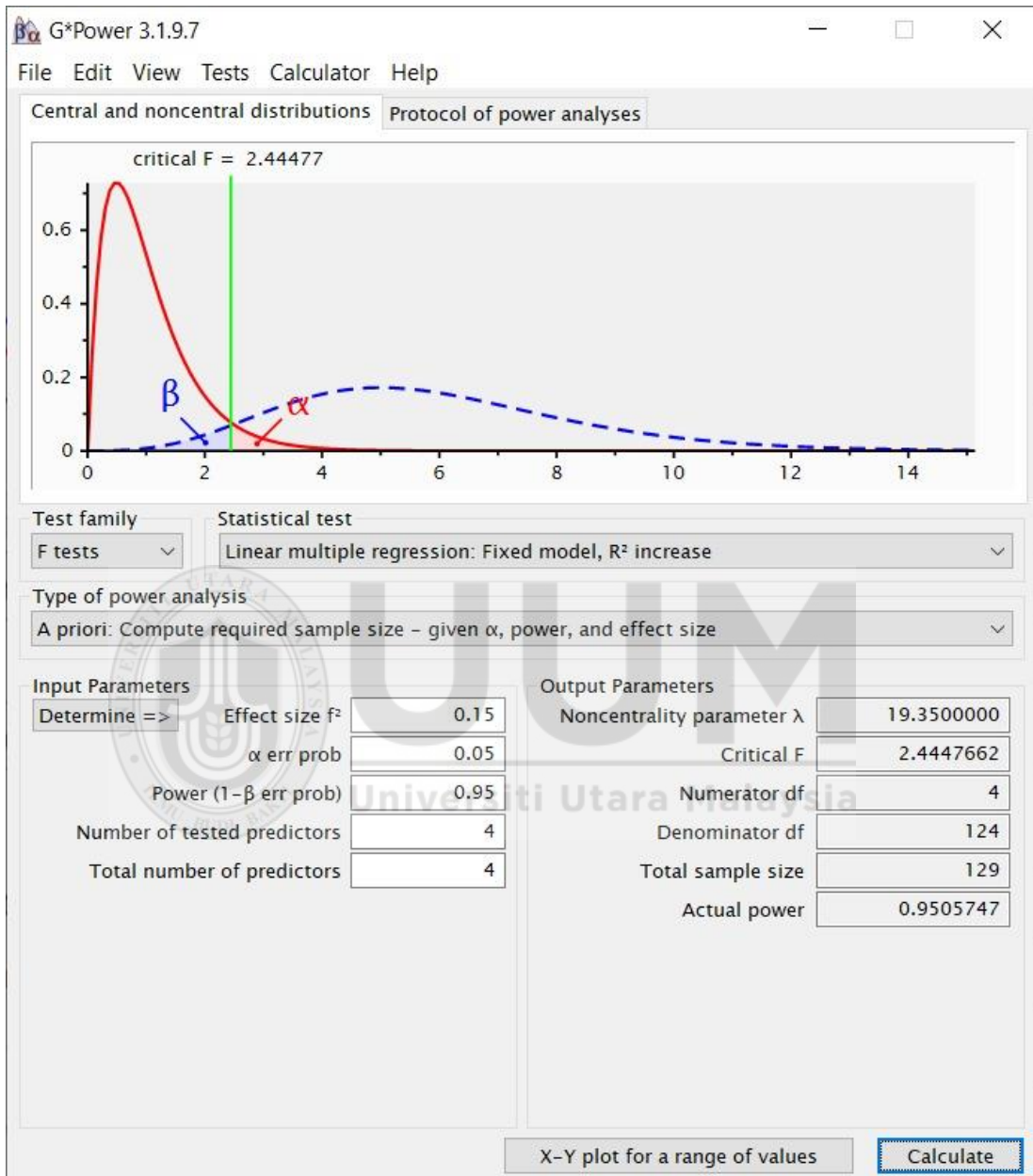
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APPENDICES

Appendix A G*Power



APPENDIX A



Adoption of E-Wallet Among Students

Dear respondent,

I am conducting a research on “**Adoption of E-Wallet Among Students**”. The ultimate purpose of this study to explore the influencing factors of students to adopt e-wallet in Malaysia.

I have identified your undergraduate and postgraduate students as having the characteristics necessary to participate in this research study. I would very much appreciate your contribution and cooperation to complete the enclosed questionnaires within your valuable time. Your answers are very important to ensure accuracy to this research. All information obtained would be treated **STRICTLY CONFIDENTIAL** and use for **ACADEMIC PURPOSES ONLY**.

If you have any questions about the survey, I shall be contacted at 016-2474208. A summary report will be provided to the participants upon request.

Thank you for your assistance and cooperation. I hope this study will provide a significant contribution for the betterment of e-wallet applications in Malaysia.

Yours sincerely,

School of Business Management
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School of Business Management
Universiti Utara Malaysia

Penerimaan E-Wallet di kalangan Pelajar

Responden yang dihormati,

Saya sedang menjalankan kajian penyelidikan mengenai "**Penerimaan E-Wallet di kalangan Pelajar**". Tujuan utama kajian ini untuk meneroka faktor-faktor yang mempengaruhi pelajar untuk menerima E-Wallet di Malaysia.

Saya telah mengenal pasti mahasiswa dan pascasiswazah kerana mempunyai ciri-ciri yang diperlukan untuk menyertai kajian penyelidikan ini. Saya amat menghargai sumbangan dan kerjasama anda untuk menyiapkan soal selidik yang disertakan dalam masa yang anda hargai. Jawapan anda adalah sangat penting untuk memastikan ketepatan kajian penyelidikan. Semua maklumat yang diperolehi akan dianggap **SULIT** dan hanya akan digunakan untuk **TUJUAN AKADEMIK SAHAJA**.

Sekiranya anda mempunyai sebarang soalan mengenai soal selidik ini, saya boleh dihubungi melalui 016-2474208. Laporan ringkasan akan diberikan kepada para peserta atas permintaan. Terima kasih atas bantuan dan kerjasama anda. Saya harap kajian ini akan memberi sumbangan penting demi penambahbaikan E-Wallet di Malaysia.

Yang ikhlas,

Mathanraj Naidu Arumugam
Pusat Pengajian Pengurusan Perniagaan
Universiti Utara Malaysia
E-mel: mathanrajnaidu@gmail.com

(Ts. Dr. Mathivannan A/L Jaganathan)
Pusat Pengajian Pengurusan Perniagaan
Universiti Utara Malaysia

SECTION A / SEKSYEN A

Please **CIRCLE** the degree to which you agree with the following statements about **E-WALLET ADOPTION**.

Sila **BULATKAN** sejauh mana anda bersetuju dengan kenyataan berikut tentang **Penerimaan E-Wallet**.

Strongly Disagree <i>Sangat Tidak Setuju</i> 1	Disagree <i>Tidak Setuju</i> 2	Neutral <i>Berkecuali</i> 3	Agree <i>Setuju</i> 4	Strongly Agree <i>Sangat Setuju</i> 5
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1	E-wallet can substitute the cash based payment method. <i>E-wallet boleh menggantikan kaedah pembayaran berasaskan Tunai.</i>	1	2	3	4	5
2	E-wallet can support the existing payment method. <i>E-wallet boleh menyokong kaedah pembayaran sedia ada.</i>	1	2	3	4	5
3	Using E-wallet is beneficial. <i>Menggunakan E-wallet adalah bermanfaat.</i>	1	2	3	4	5
4	Using E-wallet is wise. <i>Menggunakan E-wallet bijak.</i>	1	2	3	4	5
5	Using E-wallet is interesting. <i>Menggunakan E-wallet adalah menarik.</i>	1	2	3	4	5

Please **CIRCLE** the degree to which you agree with the following statements about **PERCEIVED EASE OF USE** of E-WALLET.

Sila **BULATKAN** sejauh mana anda bersetuju dengan kenyataan berikut tentang **KEMUDAHAN PENGGUNAAN E-WALLET**.

Strongly Disagree <i>Sangat Tidak Setuju</i> 1	Disagree <i>Tidak Setuju</i> 2	Neutral <i>Berkecuali</i> 3	Agree <i>Setuju</i> 4	Strongly Agree <i>Sangat Setuju</i> 5
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1	I do not get frustrated when use e-payment.	1	2	3	4	5
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	<i>Saya tidak akan kecewa apabila menggunakan e-Payment.</i>					
2	E-payment is easy to learn and use. <i>E-Payment adalah mudah untuk dipelajari dan digunakan.</i>	1	2	3	4	5
3	I feel flexible in performing e-payment. <i>Saya berasa fleksibel dalam melaksanakan e-Payment.</i>	1	2	3	4	5
4	E-payment provides various payment channels that ease my online shopping process. <i>E-Payment menyediakan pelbagai saluran pembayaran yang memudahkan proses membeli-belah dalam talian saya.</i>	1	2	3	4	5
5	Less effort is needed when I perform e-payment <i>Kurang usaha diperlukan apabila saya melaksanakan e-Payment</i>					

Please **CIRCLE** the degree to which you agree with the following statements about **SPEED** of E-WALLET.

Sila **BULATKAN** sejauh mana anda bersetuju dengan kenyataan berikut tentang **KELAJUAN** E-WALLET.

Strongly Disagree <i>Sangat Tidak Setuju</i> 1	Disagree <i>Tidak Setuju</i> 2	Neutral <i>Berkecuali</i> 3	Agree <i>Setuju</i> 4	Strongly Agree <i>Sangat Setuju</i> 5
--	--	---	---	---

1	I believe that using E-wallet will improve the speed of transaction. <i>Saya percaya bahawa menggunakan E-wallet akan meningkatkan kelajuan transaksi.</i>	1	2	3	4	5
2	Transactions will be faster compared to traditional payment methods. <i>Transaksi akan lebih cepat berbanding dengan kaedah pembayaran tradisional.</i>	1	2	3	4	5
3	It will save my time for using E-wallet payment system. <i>Ia akan menjimatkan masa saya untuk menggunakan sistem pembayaran e-Wallet.</i>	1	2	3	4	5
4	Using E-wallet can get quick response. <i>Menggunakan E-wallet boleh mendapatkan respons cepat.</i>	1	2	3	4	5

5	No waiting time/delay. <i>Tiada masa menunggu/kelewatan.</i>	1	2	3	4	5
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Please **CIRCLE** the degree to which you agree with the following statements about **SECURITY** of E-WALLET.

Sila **BULATKAN** sejauh mana anda bersetuju dengan kenyataan berikut tentang **KESELAMATAN E-WALLET**.

Strongly Disagree <i>Sangat Tidak Setuju</i> 1	Disagree <i>Tidak Setuju</i> 2	Neutral <i>Berkecuali</i> 3	Agree <i>Setuju</i> 4	Strongly Agree <i>Sangat Setuju</i> 5
--	--	---	---	---

1	Satisfied with the security system. <i>Berpuas hati dengan sistem keselamatan.</i>	1	2	3	4	5
2	E-wallets keep customers information private and confidential. <i>E- wallets menyimpan maklumat pelanggan peribadi dan sulit.</i>	1	2	3	4	5
3	Customers' financial information are protected. <i>Maklumat kewangan pelanggan dilindungi.</i>	1	2	3	4	5
4	E-Wallets ensure protection against risk of fraud and financial loss. <i>E-Wallets memastikan perlindungan terhadap risiko penipuan dan kerugian kewangan.</i>	1	2	3	4	5
5	It keeps my payment credentials secure. <i>Ia mengekalkan kelayakan pembayaran saya selamat.</i>	1	2	3	4	5

Please **CIRCLE** the degree to which you agree with the following statements about **SOCIAL INFLUENCE** of E-WALLET.

Sila **BULATKAN** sejauh mana anda bersetuju dengan kenyataan berikut tentang **PENGARUH SOCIAL E-WALLET**.

Strongly Disagree <i>Sangat Tidak Setuju</i> 1	Disagree <i>Tidak Setuju</i> 2	Neutral <i>Berkecuali</i> 3	Agree <i>Setuju</i> 4	Strongly Agree <i>Sangat Setuju</i> 5
--	--	---	---	---

1	People who influence my behavior think that I should use mobile payment. <i>Orang yang mempengaruhi tingkah laku saya berfikir bahawa saya perlu menggunakan pembayaran mudah alih.</i>	1	2	3	4	5
2	My friends think that I should use mobile payment. <i>Kawan saya berfikir bahawa saya perlu menggunakan pembayaran mudah alih.</i>	1	2	3	4	5
3	Using mobile payment is considered a status symbol among my friends. <i>Penggunaan pembayaran mudah alih dianggap sebagai simbol status di kalangan rakan saya.</i>	1	2	3	4	5
4	People who are important to me expect me to use mobile payment technology. <i>Orang yang penting untuk saya mengharapkan saya untuk menggunakan teknologi pembayaran mudah alih.</i>	1	2	3	4	5
5	People who are important to me are likely to recommend using mobile payment technology <i>Orang yang penting bagi saya mungkin mengesyorkan menggunakan teknologi pembayaran mudah alih</i>					

SECTION B / SEKSYEN B

The following questions ask for information concerning yourself and your firm's background. Please answer each question by ticking the appropriate box and fill-up the required information.

Soalan-soalan berikut meminta maklumat mengenai diri anda dan latar belakang firma anda. Sila jawab setiap soalan dengan menandakan kotak yang sesuai dan isi maklumat yang diperlukan.

Please tick (/) in the appropriate box / Sila tandakan (/) dalam kotak yang sesuai.

1. **Gender/Jantina**

Male/Lelaki

Female/Perempuan

2. **Age/Umur**

- Below 18/*Bawah18* 22-24
 19-21 24 and above/ 21 dan atas

3. **In which education level are you in now? / Tahap pengajian mana satu anda sekarang**

- Undergraduate/*Mahasiswa* Postgraduate/ *Pascasiswazah*

4. **In which state are you from/ Dari negeri mana**

- | | | |
|---|-----------------------------------|-------------------------------------|
| <input type="checkbox"/> Wilayah Persekutuan KL | <input type="checkbox"/> Selangor | <input type="checkbox"/> Sabah |
| <input type="checkbox"/> Sarawak | <input type="checkbox"/> Johor | <input type="checkbox"/> Kelantan |
| <input type="checkbox"/> Pulau Pinang | <input type="checkbox"/> Perak | <input type="checkbox"/> Terengganu |
| <input type="checkbox"/> Kedah | <input type="checkbox"/> Perlis | <input type="checkbox"/> Pahang |
| <input type="checkbox"/> Negeri Sembilan | | |
| <input type="checkbox"/> Melaka | | |

5. **Are you studying in UUM KL?**

Adakah anda mengaji di UUM KL?

- Yes/Ya No / Tidak

6. **What is your degree program?**

Apakah bidang sarjana muda anda ?

- Business/ Perniagaan Non Business / Bukan Perniagaan

THANK YOU VERY MUCH FOR YOUR KIND COOPERATION.

TERIMA KASIH ATAS KERJASAMA ANDA.