

INTERNATIONAL JOURNAL OF LAW,
GOVERNMENT AND COMMUNICATION
(IJLGC)

www.ijlgc.com



DIGITAL COUPON ACCEPTANCE AMONG UNIVERSITI UTARA MALAYSIA STUDENTS: AN APPLICATION OF THE UNIFIED THEORY OF ACCEPTANCE AND USE OF TECHNOLOGY

Zuraidah Abu Talib^{1*}, Nishyantini A/P Vathemuralee²

¹ Department of Multimedia Technology, School of Multimedia Technology and Communication, Universiti Utara Malaysia

Email: zuraidah@uum.edu.my

² School of Multimedia Technology and Communication, Universiti Utara Malaysia

Email: nishyantini_vathe@smmtc.uum.edu.my

* Corresponding Author

Article Info:

Article history:

Received date: 24.12.2024

Revised date: 14.01.2025

Accepted date: 10.02.2025

Published date: 10.03.2025

To cite this document:

Abu Talib, Z., & Vathemuralee, N. (2024). Digital Coupon Acceptance Among Universiti Utara Malaysia Students: An Application of The Unified Theory of Acceptance and Use of Technology. *International Journal of Law, Government and Communication*, 10 (39), 26-51.

DOI: 10.35631/IJLGC.1039002

This work is licensed under [CC BY 4.0](https://creativecommons.org/licenses/by/4.0/)



Abstract:

This study investigates the factors influencing digital coupon acceptance among university students at Universiti Utara Malaysia (UUM) by utilising the Unified Theory of Acceptance and Use of Technology (UTAUT) as the theoretical framework. Key constructs such as performance expectancy, effort expectancy, social influence, and facilitating conditions are examined. As digital technology transforms marketing strategies, digital coupons have gained popularity for their ability to offer personalised and accessible discounts. Despite their advantages, limited research has explored the factors influencing students' usage behaviours and perceptions toward digital coupons. The study employs a quantitative research design using a questionnaire as a research instrument that was disseminated electronically to gather data on performance expectancy, effort expectancy, social influence, facilitating conditions, and behavioural intention regarding digital coupon use. Findings reveal that UUM students perceive digital coupons positively, noting their usefulness, ease of use, and social endorsement. Gender differences in usage intentions were also explored, contributing to a nuanced understanding of digital coupon acceptance. The insights from this study offer valuable implications for marketers, retailers, and educators in promoting effective digital marketing strategies in the evolving landscape of consumer behaviour.

Keywords:

Behavioural Intentions, Digital Coupons, Unified Theory of Acceptance and Use of Technology (UTAUT).

Introduction

The introduction of coupons as promotional tools originated in the late 19th century as a means for companies to stimulate consumer demand. The first known coupon was introduced by Coca-Cola in 1887 (Oliver & Shor, 2003). It was reported that Asa Candler gave out handwritten paper coupons to clients and sales representatives for a complimentary drink of Coca-Cola. During Asa Candler's time, the practice of distributing coupons proved to be a very effective method to draw clients (Oliver & Shor, 2003). Throughout the years, even though coupons have been available for more than 135 years, their primary use and popularity have significantly changed (Coupon Statistics Update, 2024). Significantly, throughout the 20th century, paper coupons became mainstream. They were distributed through newspapers, magazines, and direct mail, evolving into a significant marketing tool.

Meanwhile, smartphone mobile coupons began to emerge in the early 2010s, which also impacted the emergence of mobile and app-based coupons. Retailers launched apps that allowed consumers to access and redeem coupons directly from their phones. This innovation simplified the redemption process and enabled personalised offers based on consumer behaviour and location data. The current trends and innovations keep changing and evolving. The transition to digital coupons was due to the advent of the Internet in the late 1990s, and in the early 2000s marked a significant shift. Brands began exploring online coupon distribution via websites and email marketing, enabling a more efficient and targeted promotion approach. According to Mudd (2016), coupons have evolved in accordance with the development of technology, from handwritten coupons to machine paper coupons and now digital coupons.

Today, digital coupons are ubiquitous and integrated into loyalty programs, social media campaigns, and digital wallets. Technologies like QR codes and near-field communication (NFC) facilitate instant redemption, while advanced data analytics empower brands to tailor promotions to specific consumer segments (Retail Dive, 2023). As e-commerce grows, the digital coupon landscape is expected to evolve further, incorporating more interactive and engaging elements. In short, digital coupons have become more popular and faster, allowing tech-savvy consumers to save up to \$4 billion in savings in only the previous year (Coupon Statistics Update, 2024). Indeed, more than 90% of households reported using at least one coupon throughout the previous year. Furthermore, even though "digital coupons" are nothing new, their use and popularity have drastically changed since the COVID-19 pandemic, and the rise of online buying changed the face of consumer purchases forever (Coupon Statistics Update, 2024).

Problem Statement

Promotions for sales are a crucial component of marketing. By providing temporary incentives, they can encourage the purchase of specific items more quickly. Therefore, every marketer has to be effective and do frequent promotions to give the consumers win-win utility gains. Numerous strategies are available for promoting sales, including coupons, samples, competitions, discounts, and loyalty prizes. A coupon is a ticket or document used in marketing that enables customers to buy products at a discounted price (Rohani, Rohani, & Barth, 2017). The emergence of digital technology has transformed marketing strategies, resulting in the quick rise to prominence of digital discounts as a crucial component of modern marketing tactics. Technology constantly changes how people shop and engage with brands in the digital age. According to Nindyta, Rizki, Rohana, Richard, and Diah (2021), Briandana and Dwityas (2020), and Geni, Briandana, and Umarella (2021), consumer behaviour also rapidly changed

due to the development of digital technologies. The increasing use of digital discounts is one noteworthy development in digital marketing. Remarkably, digital coupons are one real-world use, gaining popularity among marketers as promotional tools (Guo & Zheng, 2019).

According to Bamforth, Sutherland, and Colley (2019), digital coupons are promotional codes offered through online platforms that enable consumers to receive discounts or special deals. The proliferation of smartphones and mobile applications has facilitated their adoption. In other words, digital coupons are revolutionising the traditional couponing experience by giving consumers fast access to discounts and promotional offers (Bamforth et al., 2019). They are typically issued through mobile applications, email campaigns, and social media platforms (Saura, 2020). Digital coupons, as opposed to traditional paper coupons, also provide a personalised and interactive way to give exclusive deals, discounts, and rewards (Nambiar & Boral, 2023).

Digital coupons are certificates that provide customers a reason to purchase a good or service. They are dispersed through digital media, which includes social media, email, newsletters, and the Internet. They are sometimes referred to as m coupons (mobile coupons) or e-coupons (electronic coupons) (Guo & Guihang, 2019). Since e-coupons can draw in coupon-averse customers, boost product awareness, and encourage repeat business, they have become essential in marketing campaigns (Li, Liou, & Ni, 2019). E-coupon marketing activities have greater reach and impact due to the cross-spatial communication made possible by social media platforms (Huang & Tang, 2018). This highlights how valuable and efficient digital coupons are in modern marketing campaigns. Despite the existing research, there remain gaps in understanding the unique context of digital coupon usage, specifically among university students. Many studies focus on general consumer behaviour without isolating the factors pertinent to younger demographics.

Additionally, most research has concentrated on mobile coupons, leaving a need to explore digital coupons in a broader context, including their integration with social media platforms and marketing strategies aimed at students. Hence, this has underscored the importance of understanding the acceptance of digital coupons within different cultural contexts and demographic groups. According to Akman and Türkmen (2022), insufficient studies have been done on the precise factors impacting students' usage behaviours, perspectives, and attitudes regarding digital couponing, leaving the uptake and impact of digital coupons largely unexamined. Marketers, retailers, and educators must comprehend these aspects to formulate efficacious strategies that cater to students' interests and augment their purchasing experiences.

Therefore, this paper explores the factors influencing digital coupon acceptance among university students, utilising the Unified Theory of Acceptance and Use of Technology (UTAUT) as a theoretical framework. Hence, by examining the constructs of performance expectancy, effort expectancy, social influence, and facilitating conditions, this study aims to identify the key determinants that affect the intention to use digital coupons in this demographic. Hence, the research questions and the research objectives are as follows:

Research Questions

The research questions have been formulated to meet the objectives of this study. This study seeks to answer the following questions:

- a. What is the UUM student's perception of the digital coupon performance expectancy and the intention to use it?
- b. What is the UUM students' perception of the digital coupon effort and their expectancy and intention to use it?
- c. What is the UUM student's perception of digital coupons' social influence and intention to use them?
- d. What is the UUM student's perception of digital coupons facilitating conditions and intention to use digital coupons?
- e. Is there any difference in the intention to use digital coupons between the male and female UUM students?

Research Objectives

The specific objectives of this study are outlined as follows:

- a. To study UUM students' perceptions of digital coupon performance expectancy and the intention to use digital coupons.
- b. To study UUM students' perceptions of digital coupon effort expectancy and the intention to use digital coupons.
- c. To study UUM students' perceptions of digital coupon social influence and the intention to use digital coupons.
- d. To study UUM students' perceptions of digital coupon facilitating conditions and the intention to use digital coupons.
- e. To compare the differences between the intention to use digital coupons among male and female UUM students.

Literature Review

Today, digital coupons have gained popularity as a marketing tool, particularly among younger consumers such as university students. This demographic, known for its tech-savvy nature, increasingly relies on digital solutions for shopping. Understanding the factors influencing their acceptance of digital coupons can provide critical insights for businesses aiming to engage this audience effectively. Understanding the factors influencing their acceptance of digital coupons can provide essential insights for businesses aiming to engage this audience effectively. This study employs the Unified Theory of Acceptance and Use of Technology (UTAUT) as a framework to investigate these factors. Key constructs such as performance expectancy, effort expectancy, social influence, and facilitating conditions are examined.

Intention to Use Digital Coupons

Nayal and Pandey's (2020) contribution marks a significant advancement in the field by developing a comprehensive scale specifically tailored to measure digital coupon redemption. Hence, their study overcomes the shortcomings of earlier studies, including digital elements like desire to search, attitude toward online searching, perceived risk, perceived convenience, and individual inventiveness. Therefore, by conducting rigorous reliability and validity analyses, Nayal and Pandey provide marketers with a valuable tool to maximise digital coupon redemption during promotional campaigns. This study represents a pioneering effort to provide a robust measurement framework for digital coupon redemption in the marketing literature.

Yakasai and Wan Jusoh (2015) use the Theory of Planned Behavior (TPB) to provide essential insights into the intent of university students to use digital coupons. Their research, conducted among 392 respondents from an International University in Kuala Lumpur, Malaysia, highlights attitude, subjective norm, and perceived behavioural control as crucial determinants of intention to use digital coupons. By emphasising the importance of attitude, social influences, and perceived control, the study offers actionable guidance for marketers to enhance consumer perceptions and confidence in digital coupon usage. This research contributes to both theoretical understanding and practical application, offering marketers valuable strategies to optimise digital coupon promotions among university students.

The study by Akman and Türkmen (2022) delves into customer perceptions and attitudes towards digital coupons, offering valuable insights into consumer behaviour in digital marketing contexts. Through examining attitudes towards digital discount coupons across ten dimensions and surveying 300 participants, the research emphasises the holistic impact of digital coupons on consumer behaviour beyond mere redemption rates. It highlights the importance of considering consumer perceptions and attitudes towards digital coupons, regardless of their redemption status, and suggests that marketers should not overlook the broader benefits digital coupons offer sellers. This study underscores the need for a comprehensive approach to evaluating the effectiveness of digital coupon strategies in digital business models, contributing to refining marketing tactics to better meet consumer needs and preferences in online environments.

The phenomena of electronic coupon (e-coupon) sharing behaviour are examined in the study by Shia, Chang and Huang (2021) from the viewpoints of social marketing and consumer social sharing behaviour. The authors hope to fill in knowledge gaps about e-coupon sharing, investigate key elements influencing customers' e-coupon sharing behaviours, and create a theoretical framework to explain this behaviour. The study highlights the role of social norms in benefit sharing with others by utilising the idea of social marketing, specifically community-based social marketing. Through sharing e-coupons on social media, consumers participate in marketing and fulfil the duties of regular users and marketers. Recipients are likelier to become potential customers when they feel trusted by reporters, improving e-coupon acceptance.

According to Xing and associates (2020), digital coupons are grouped in a study by their value. Stimulus plans with substantial budgets that used digital coupons were examined as an economic stimulus measure. According to the researchers, low-value, use-it-or-lose-it coupons offer an extensive and instantaneous incentive to buy at a low cost. To meet the minimum spending requirements of coupons, they concluded that customers preferred to use their purchases of more expensive options (Xing, Zou, Yin, & Wang, 2020).

In summary, analysis of the prior research indicates that it provides a detailed explanation of how students' acceptance of digital coupons influences their perception. Since no theory is perfect, this study examined the benefits of several technology acceptance models and reviewed the most popular models used in adopting technology. These models are extensively employed in a wide range of technological domains. However, because UTAUT theory can explain 70% of the diversity in the concept of behavioural intention, it has the advantage of having high explanatory power. This research will allow future academics to conduct empirical studies on different technologies using a realistic approach. The drawbacks of this study are its scope and the lack of discussion on how these theories apply to specific fields. It would be wise

for future research to consider applying this theory to a particular topic to provide comprehensive information. As a result, this study can be used in various contexts to enhance comprehension of the advantages and disadvantages of each theory based on the literature review.

Theoretical Framework: The Unified Theory of Acceptance and Use of Technology (UTAUT)

Many researchers view UTAUT as a valuable and thorough model because it examines every theory that has been proposed on technology adoption. Compared to other technological acceptance theories, it has the most significant explanatory power (Venkatesh, Sykes, & Zhang, 2011). According to Halili and Sulaiman (2018), it has also been utilised to research technical advancements that assist higher education. In particular, the idea was applied in broad-spectrum learning settings that included interactive whiteboards, desktop web conferencing, cloud-based virtual learning technologies, and virtual learning environments (Suki & Suki, 2017).

The UTAUT theoretical model states that technology use is determined by behavioural intention. The perceived likelihood of technology adoption is determined by the direct influence of four important constructs: social influence, performance expectancy, effort expectancy, and facilitating factors. Meanwhile, the predictors' influence is moderated by age, gender, experience, and voluntary use (Venkatesh, Morris, Davis & Davis, 2003). UTAUT has contributed to the literature in several ways. Besides contrasting well-known theories of technology adoption—which frequently present conflicting or incomplete viewpoints—the model offers empirical insight into technology acceptance. When compared to other models that study technological adoption (e.g., Davis, 1993; Sheppard, Hartwick & Warshaw, 1988), UTAUT offers greater predictive power, showing that proposed components explain 70% of the variance in use intention (Venkatesh et al., 2003). The intricacy of the technology adoption process, which depends on an individual's age, gender, and experience, is demonstrated by the interactive effect of various constructs with personal and demographic characteristics (Venkatesh et al., 2003).

UTAUT Key Construct Use in This Study

This research's key constructs include performance expectancy, effort expectancy, social influence, and facilitating conditions. This key construct is also called the independent variable for this research. Meanwhile, the dependent variable is the intention to use digital coupons. This research also examined the differences in acceptance levels between genders. According to Andrade (2021), variables are defined as sample characteristics that are analysed, quantified, explained, and interpreted. Variables are categorised as continuous or categorical and are evaluated as dependent and independent variables.

The variables used in this research are discussed below.

a. Performance expectancy (perceived usefulness)

Performance expectancy is the extent to which a user expects that employing a new technology or system will enable them to perform tasks exceptionally (Ayaz & Yanartas, 2020). A study by Tamilmani, Rana, Prakasam, and Dwivedi (2019) mentioned that when people initially start using a new technology, they have hedonic motivation. This refers to the individual's desire for pleasure, enjoyment, or satisfaction when using the technology. When individuals are first exposed to a particular technology, they may use

it because they expect to derive pleasure from it. However, the results of this study show that as individuals gain more experience using the technology, their expectations shift towards "performance expectancy." This means that individuals become more focused on the technology's ability to provide efficiency and practical outcomes. They start valuing the impact of technology on work efficiency, task completion ability, and other valuable aspects rather than just seeking pleasure. This finding can be supported by (Harsono & Suryana, 2014), in which a study has extensively examined the adoption of social media using the unified theory of acceptance and use of technology (UTAUT). The study's result revealed a positive relationship between the intention to use social media and performance expectations. At the same time, hedonic motivation factors seemed less significant in this relationship, although it is still positive.

Hypothesis 1: There is a positive relationship between performance expectancy and intention to use digital coupons.

b. Effort expectancy (perceived ease of use)

According to UTAUT, effort expectancy is the system's level of user-friendliness. Venkatesh et al. (2003) state that this factor was developed using the Technology Acceptance Model's (TAM) perceived ease of use factor. Davis (1989) and Venkatesh et al. (2003) have shown that individuals are more likely to have a positive attitude towards a technology if they perceive it to be simple and easy to use. In this study, effort expectancy refers to a student's belief that digital coupons will make their shopping experience easier and more understandable. Thus, it is crucial to comprehend how students perceive the amount of work digital coupons require to forecast whether or not they would embrace and utilise them. A study on the intention to continue using restaurant reservation applications in Spain by Palau-Saumell, Forgas-Coll, Sánchez-García, and Robres (2019) found a positive correlation between performance expectations and intention to use them. Then, in a study by Saviti and Indrawati (2019), continuous intention was also positively influenced by expectation of effort.

Hypothesis 2: There is a positive relationship between effort expectancy and intention to use digital coupons.

c. Social influence (subjective norm)

Significant individuals believe that technology use is essential, and this perception affects the degree of social influence perceived by a user (Diaz & Loraas, 2010). The Unified Theory of Acceptance and Use of Technology (UTAUT), created by Venkatesh et al. (2003), states that social influence positively influences a person's desire to embrace and utilise technology. Studies conducted by Davis (1989) and Venkatesh et al. (2003) have shown that people are more inclined to adopt a technology if they believe that people who are important to them will also utilise it. Understanding the impact of subjective norms is crucial for predicting students' intention to adopt and use digital coupons, as it reflects the social context in which technology adoption occurs and can significantly influence individual behaviour—as in research on continuance intention towards restaurant reservation applications in Spain conducted by (Palau-Saumell, Forgas-Coll, Sánchez-García, & Robres, 2019), concluded that there is a positive relationship between social influence and intention to use them. Then, a study conducted (Savitri & Indrawati,

2019) also concluded that social influence positively influences the continuous intention to use.

Hypothesis 3: There is a positive relationship between social influence and intention to use digital coupons.

d. Facilitating conditions

Facilitating conditions are the extent to which an individual perceives the presence of an institutional and technical framework that supports the utilisation of a particular system (Shiferaw & Mehari, 2019). According to Raza, Qazi, Khan, and Salam (2021), pupils' behavioural intention is positively impacted by facilitating conditions. The degree to which an individual believes that an organisation's technical infrastructure exists to support the use of the system is the definition of facilitating conditions (Venkatesh et al., 2003). Compatibility, perceived behavioural control, and facilitating conditions constructs from the Theory of Planned Behaviour, Comprehensive Theory of Planned Behavior, Model of Personal Computer Utilization, and Innovation Diffusion Theory combine to generate the facilitating conditions construct. The intention to use is positively impacted by facilitating conditions, although this effect fades after the first usage. As a result, the model suggests favourable circumstances directly and significantly influence how people use technology (Venkatesh et al., 2003). Research conducted by Ambarwati, Harja, and Thamrin (2020) emphasised that the presence of adequate resources and support structures, which are part of facilitating conditions, encourages the adoption of digital technologies, supporting the idea that facilitating conditions play a crucial role in the intention to use digital coupons.

Hypothesis 4: There is a positive relationship between facilitating conditions and intention to use digital coupons.

e. Behavioural intention

Behavioural intention to use (BIU) refers to the likelihood or propensity of individuals to engage in a particular activity or behaviour. As Al-Rahmi, Alias, Othman, Marin, & Tur (2018) described, BIU serves as a crucial precursor to actual behaviour, wherein individuals who express stronger motivation to participate in a specific activity are likelier to follow through and engage in that behaviour. This concept aligns with Ajzen's (1991) Theory of Planned Behaviour, which emphasises the link between behavioural intention and subsequent behaviour. Numerous studies, including research by Davis (1989), have established a robust relationship between behavioural intention to use and actual user behaviour, underscoring BIU's predictive power in contexts of technology adoption. In the realm of online education, BIU has been found to exert a significant favourable influence on the adoption and usage of online learning platforms, as evidenced by a wealth of research in the field.

f. Gender

According to Marikyan and Papagiannidis (2023), the links between effort expectancy, performance expectancy, and social influence are influenced by gender. The impact of gender on the adoption of information and communication technologies (ICTs) has garnered significant interest in research papers. Researchers in Information Science have also become interested in it because of its significance in modulating technology

acceptance behaviour. Gender has a significant moderating effect on technology adoption and use, according to UTAUT's theory by Daniali, Barykin, Zendeheel, Kalinina, and Kulibanova (2022). As a result, Venkatesh et al. (2003) proposed that gender is a crucial variable in the associations between the intention to use technology and the constructive psychological components of UTAUT.

Methodology

In this study, the research design approach is the quantitative method for collecting the related data. The study was conducted among UUM students from various faculties and academic levels at Universiti Utara Malaysia (UUM) in Sintok, Kedah, Malaysia. The sampling strategy uses purposive sampling to provide a focused population representation that aligns with the research objectives.

Research Instrument

The questionnaire is a popular research instrument for gathering structured data from many respondents. Usually, they comprise a set of closed- or open-ended questions to collect particular data according to the study's goals. In this study, a Google Form questionnaire was distributed among the UUM students to gather data for this study. The questions for the questionnaire were derived from the article by Karulkar, Pahuja, Uppal, and Sayed. These questions were then modified to align with the objectives of this study and subsequently distributed to participants. The measurement instruments will include validated scales adapted from previous studies and tailored to fit the context of digital coupon usage among UUM students. Each attribute is examined using a multiple Likert scale consisting of items with responses ranging from 1 (strongly disagree) to 5 (strongly agree). The validity and reliability of these metrics are confirmed through statistical analysis and pilot testing.

Data Collection

The data collection was done online. A questionnaire containing relevant questions is created using Google Forms, which is considered a way to collect significant information from responders by including various questions, including multiple-choice or Likert scale inquiries. The questionnaire was delivered to respondents via multiple methods, including WhatsApp and official UUM accounts on social media platforms such as Instagram and Facebook. These platforms will enable this data collection procedure to reach more significant respondents and boost your chances of getting responses. This multichannel strategy ensures that this information-collecting process receives a variety of perspectives and points of view from UUM students.

The data and information collected through the questionnaires are recorded on tablets and smartphones. The responses provided by the participants are directly loaded into Microsoft Excel, ensuring precise and speedy data collection. This computerised technology minimises the requirement for human data entering, lowering the possibility of inaccuracies. Tablets and smartphones allow for better data acquisition and capture more simply and securely. The respondents will be provided with a clear explanation of the study, including the purpose and procedures, to ensure the ethical considerations in collecting data and information about the respondents. All participants' identities and personal information will be kept confidential, ensuring that those pieces of information and data will be used for the study and will not be shared with other external parties.

Pilot Test

A pilot study is a small feasibility study designed to test various aspects of the methods planned for a more significant, more rigorous, or confirmatory investigation (Arain, Campbell, Cooper, & Lancaster, 2010). A pilot test assesses and improves many components of the study concept, methodology, tools, and procedures. It enables researchers to discover and handle potential concerns or challenges before launching a full-scale research endeavour. It is a great way to test whether items that have been constructed can be used or trusted after they have been built. In this study, a pilot test involving 35 respondents was conducted to evaluate and refine the study's design, methodology, and instruments, ensuring the reliability and validity of the measures. However, five chose 'No' when asked if they had used digital coupons. Therefore, the pilot test was based on the responses of the remaining 30 participants. The demographic profile of respondents revealed a distribution across various genders, ages, races, and semester categories, with a majority having used digital coupons before. The reliability analysis, assessed using Cronbach's Alpha, demonstrated high internal consistency across all constructs, with values exceeding the 0.7 threshold.

Table 1: Items and Cronbach's Alpha

Constructs	Number of items	Cronbach's Alpha	Source
Performance Expectancy	4	0.804	(Karulkar, Y., Pahuja, J., Uppal, B. S., & Sayed, S., 2021)
Effort Expectancy	4	0.865	
Social Influence	3	0.790	
Facilitating Conditions	4	0.818	
Behavioural Intention	3	0.823	
Total	18		

Data Analysis Method

Data analysis is conducted using statistical software such as SPSS. Data analysis is sorting, absorbing, modelling, and manipulating data researchers acquire. In this study, the data will be analysed both descriptively and inferentially. Descriptive data will be presented using the frequency, percentage, mean, and standard deviation. Mean ranges for all agreement levels are shown in Table 2. The Pearson's Correlation test was used to determine all hypotheses in this study. At the same time, the t-test was used to determine the significant difference between the means of two groups of male and female students.

Mean Ranges for Agreement Level

Table 2 outlines the mean ranges associated with different levels of agreement on a Likert scale, commonly used in survey research to measure respondents' attitudes or opinions. The table breaks down the mean scores into five categories: "Strongly Disagree" corresponds to mean scores between 1.00 and 1.80, "Disagree" ranges from 1.81 to 2.60, "Neutral" is from 2.61 to 3.40, "Agree" covers 3.41 to 4.20, and "Strongly Agree" is from 4.21 to 5.00. This classification helps in interpreting survey results by providing a clear framework for understanding the level of agreement or disagreement reflected in the mean scores of the responses. The mean ranges are crucial for analysing and discussing the data collected in research, particularly in assessing respondents' perceptions and attitudes toward digital coupon acceptance.

Table 2: Mean Ranges for Agreement Level

Level of agreement	Mean
Strongly Disagree	1.00 to 1.80
Disagree	1.81 to 2.60
Neutral	2.61 to 3.40
Agree	3.41 to 4.20
Strongly Agree	4.21 to 5.00

Pearson's Correlation Coefficient Scale

Table 3 illustrates Pearson's Correlation Coefficient Scale, which measures the strength and direction of the relationship between two variables. The table categorises the correlation coefficient values into different ranges, each describing the strength of the relationship. For instance, a coefficient of less than 0.2 indicates a "Very weak relationship," suggesting that the variables have minimal linear association. A coefficient between 0.2 and 0.4 is considered a "Weak relationship," while 0.4 to 0.6 represents a "Moderate relationship." As the coefficient increases, the relationship becomes stronger, with values between 0.6 and 0.8 indicating a "Strong relationship" and values greater than 0.8 reflecting an "Extremely strong relationship." This scale is essential for interpreting the correlation results in the study, helping to determine the significance and impact of relationships between variables.

Table 3: Pearson's Correlation Coefficient Scale

The range of coefficient	The description of strength
<0.2	Very weak relationship
0.2 – 0.4	Weak relationship
0.4 – 0.6	Moderate relationship
0.6 – 0.8	Strong relationship
>0.8	Extremely strong relationship

Source: (Hair et al., 2009)

Research Findings

As mentioned, the data will be analysed both descriptively and inferentially. Therefore, the findings will also be presented both descriptively and inferentially.

Descriptive Finding***Demographics of Respondents***

Surveyed UUM students to assess their acceptance of digital coupons, initially collecting 377 responses. However, 18 responses were removed because those respondents answered "no" to the question, "Have you used digital coupons before?" As a result, the findings are based on the remaining 359 responses. From the data collected, it can be found that the frequency of male respondents was 143, representing 39.8%, while female respondents numbered 216, or 60.2%. This indicates that female respondents were more numerous than male respondents, suggesting a higher interest or availability among female students.

Regarding age distribution, most respondents fell within the 18-20 age group, with a frequency of 153 (42.6%). The 21-23 years group followed this with 109 respondents (30.4%), the 24-26 years group with 87 respondents (24.2%), and lastly, the 27 years and above group with ten respondents (2.8%). For racial demographics, the researcher primarily received responses from

Malay, Chinese, and Indian students but also included an option for other races. Indian respondents were the most frequent, with a frequency of 122 (34%), followed by Chinese respondents at 118 (32.9%) and Malay respondents at 110 (30.6%). There were also nine respondents from other races, making up 2.5% of the total. Additionally, the semester distribution revealed that students from various semesters participated. The highest number of respondents were from Semester 2 (83 respondents, 23.1%), followed by Semester 3 (57 respondents, 15.9%), and Semester 1 (35 respondents, 9.7%) and other semesters had more miniature representations, with Semester 8 having the least at 17 respondents (4.7%). This detailed demographic profile helps us understand the diverse backgrounds of the respondents, providing valuable insights into the acceptance of digital coupons among different student groups at UUM.

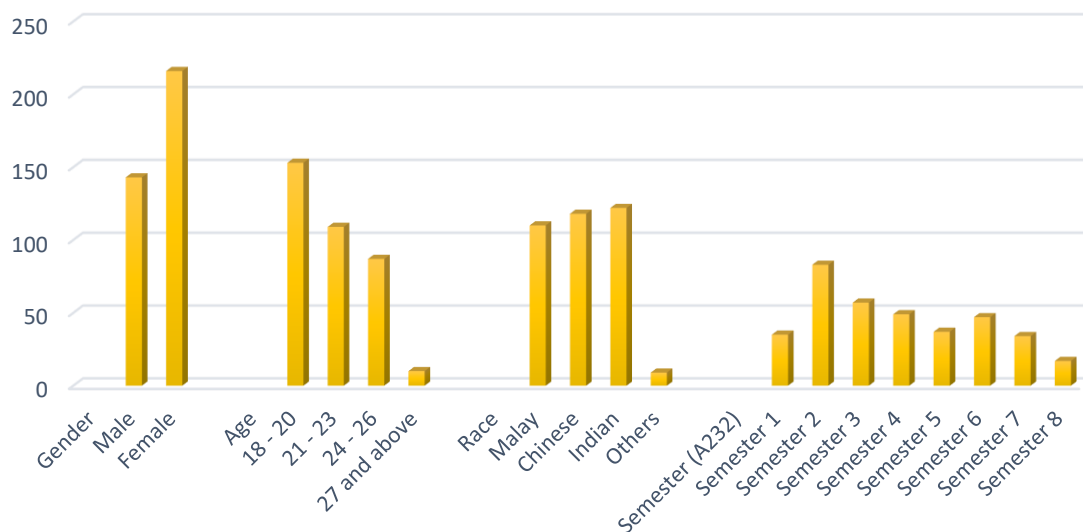


Figure 1: Respondent's Demographics

Mean Ranges for Agreement Level

This section will discuss the descriptive findings of each key factor in this research.

The Distribution of Performance Expectancy

The data from Figure 2 and Table 4, which examine the Performance Expectancy (PE) of digital coupons among UUM students, provide a detailed view of their perceptions.

PE1—For item PE1, “I find digital coupons useful in my daily life,” the mean score is 4.33, with a standard deviation of 0.602. This high mean score indicates strong agreement on the usefulness of digital coupons in daily routines, while a low standard deviation suggests consistent opinions among respondents.

PE2 - item PE2, “Using digital coupons increases my chances of achieving savings that are important to me,” has a mean score of 4.23 and a standard deviation of 0.639. This score reflects a strong relationship that digital coupons help achieve significant savings, with some variability in responses but still a strong consensus on their financial benefits.

PE3 - item PE3, “Using digital coupons helps me make purchases more quickly,” the mean score is 4.32, and the standard deviation is 0.631. This indicates a strong agreement that digital coupons facilitate quicker purchasing, with a slight variation in individual experiences.

PE4—Item PE4, “Using digital coupons increases my overall shopping productivity,” has a mean score of 4.34 and a standard deviation of 0.673. This suggests a high level of agreement

that digital coupons enhance overall shopping efficiency, though there is more response variability than the other items.

The mean scores for the PE items range from 4.23 to 4.34, indicating strong agreement among UUM students on the positive impact of digital coupons. While showing some variability, the standard deviations generally suggest a consistent positive perception. These findings indicate that digital coupons are highly beneficial and user-friendly, supporting their acceptance and use as outlined in the Unified Theory of Acceptance and Use of Technology (UTAUT).

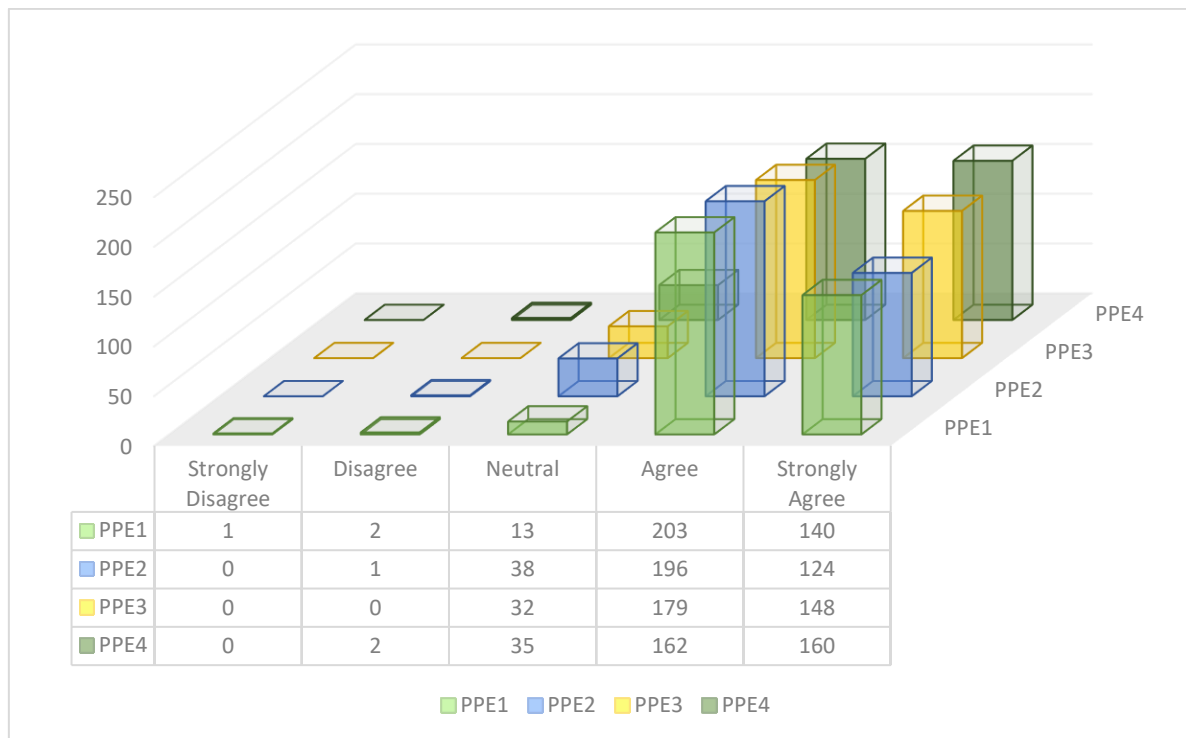


Figure 2: The Distribution of Performance Expectancy

Table 4: The Mean and Standard Deviation of Performance Expectancy (n=359)

	PPE1	PPE2	PPE3	PPE4
Mean	4.33	4.23	4.32	4.34
SD	0.602	0.639	0.631	0.673

The Distribution of Effort Expectancy

Figure 3 and Table 5 provide data on Effort Expectancy (EE) related to the use of digital coupons among UUM students:

EE1- item EE1, "Learning how to use digital coupons would be easy for me", has a mean score of 4.28 with a standard deviation of 0.644. This indicates that students generally agree that learning to use digital coupons is straightforward, though the moderate standard deviation suggests some variability in responses about the ease of learning.

EE2- based on the table below, "My interaction with digital coupons is clear and understandable" shows a mean score of 4.26 and a standard deviation of 0.582. This score

reflects that students find their interactions with digital coupons clear and understandable, with a low standard deviation indicating strong consensus on this clarity.

EE3- Based on the table below, item "I find digital coupons easy to use regularly" has the highest mean score of 4.38, with a standard deviation of 0.778. This suggests strong agreement that digital coupons are easy to use regularly. However, the higher standard deviation indicates more variation in how easily students find them to use daily.

EE4- Based on the table below, the item "It is easy for me to become skilful at using digital coupons" has a mean score of 4.23 and a standard deviation of 0.686. This score shows agreement that becoming skilled in using digital coupons is relatively easy, with a moderate standard deviation reflecting some differences in how students perceive the skill acquisition process.

Hence, the mean scores for the Effort Expectancy (EE) items range from 4.23 to 4.38, reflecting a solid consensus among UUM students that digital coupons are easy to use and require minimal learning effort. Although the standard deviations indicate some variability in individual responses, the general trend supports the perception that interacting with and becoming proficient in using digital coupons is straightforward. These findings align with the Effort Expectancy construct of the Unified Theory of Acceptance and Use of Technology (UTAUT), underscoring that ease of use plays a crucial role in student acceptance of digital coupons.

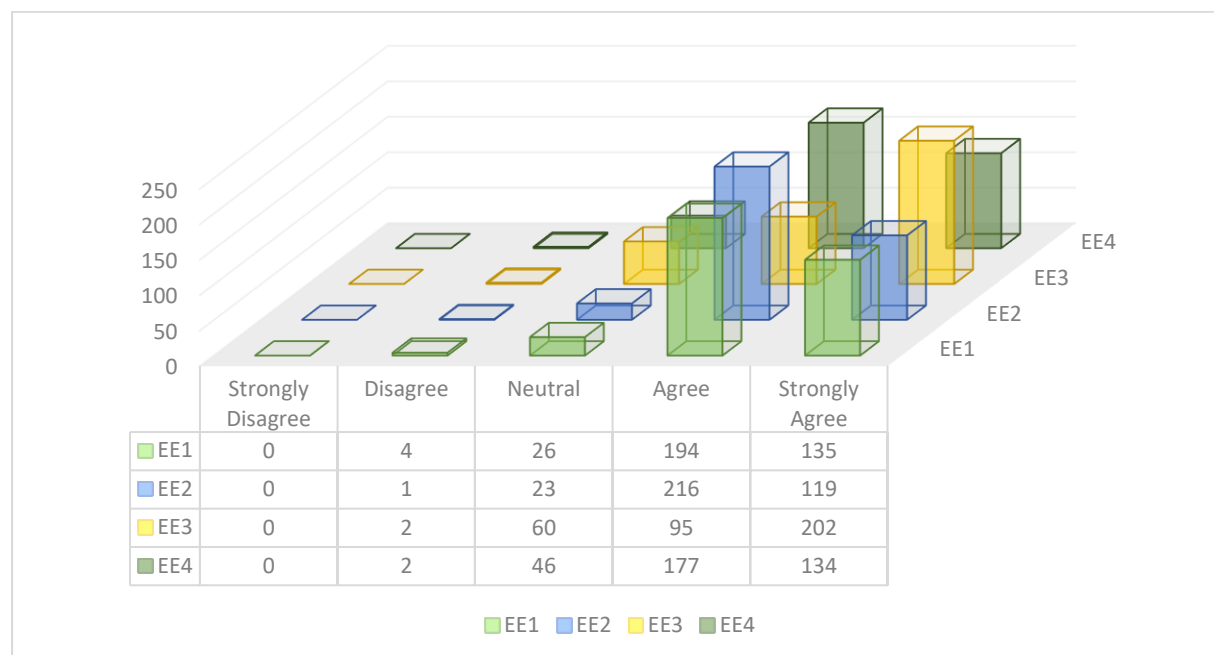


Figure 3: The Distribution of Effort Expectancy

Table 5: The Mean and Standard Deviation of Effort Expectancy (n=359)

	EE1	EE2	EE3	EE4
Mean	4.28	4.26	4.38	4.23
SD	0.644	0.582	0.778	0.686

The Distribution of Social Influence

Figure 4 and Table 6 provide insights into the role of Social Influence (SI) on digital coupon usage among UUM students:

SI1 - Based on the table below, item SI1, “People who influence my behaviour think that I should use digital coupons”, has a mean score of 4.30 and a standard deviation of 0.647. This indicates that students generally agree that influential people encourage them to use digital coupons, with some variability in how strongly this influence is perceived.

SI2 - Based on the table below, item SI2, “People who are important to me think that I should use digital coupons”, shows a mean score of 4.35 with a standard deviation of 0.750. This slightly higher mean score suggests a strong perception that significant others think they should use digital coupons. However, the higher standard deviation indicates more variation in the intensity of this influence.

SI3 - Based on the table below, item SI3, “People whose opinions I value prefer that I use digital coupons”, has the highest mean score of 4.39 and a standard deviation of 0.624. This score reflects a strong agreement that students feel encouraged by valued opinions to use digital coupons, with a relatively low standard deviation suggesting consistency in this perception.

Therefore, the mean scores for the SI items range from 4.30 to 4.39, demonstrating a solid consensus that social influence significantly impacts students' decisions to use digital coupons. The standard deviations, while showing some variability, generally support the notion that the opinions and influence of others are critical factors in encouraging digital coupon usage among UUM students. These results align with the Social Influence component of the Unified Theory of Acceptance and Use of Technology (UTAUT), highlighting the importance of social factors in the acceptance of digital coupons.

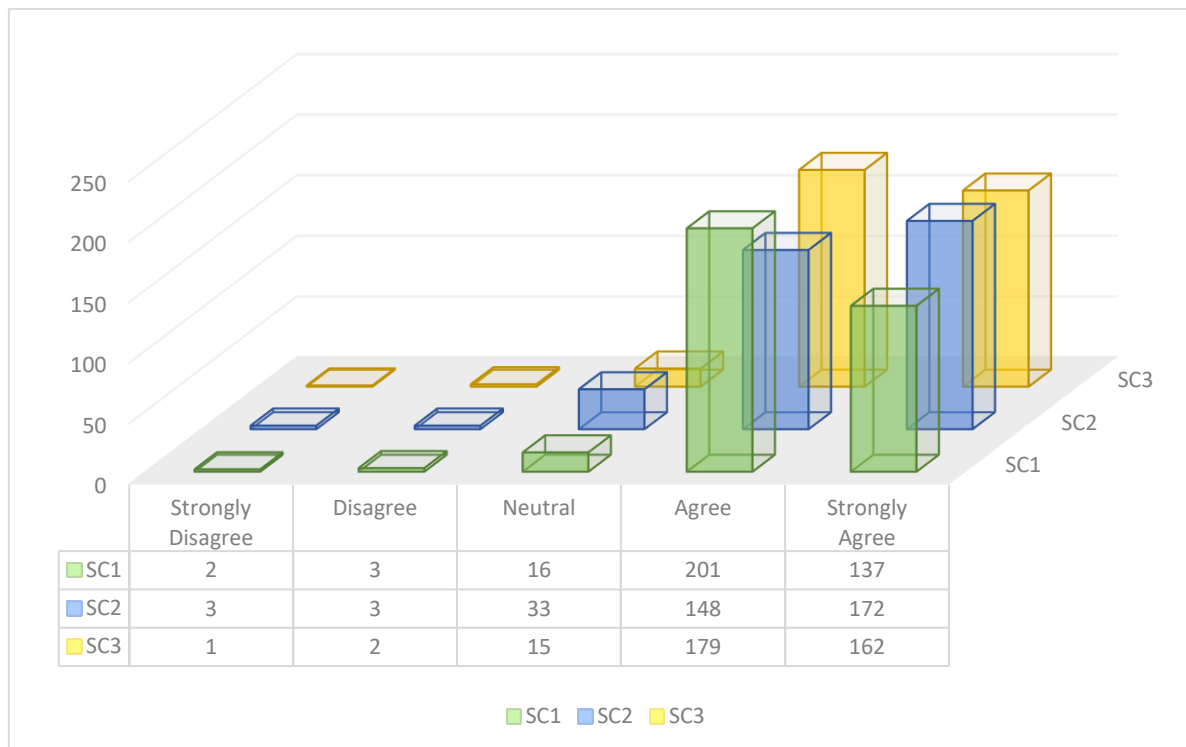


Figure 4: The Distribution of Social Influence

Table 6: The Mean and Standard Deviation of Social Influence (n=359)

	SI1	SI2	SI3
Mean	4.30	4.35	4.39
SD	0.647	0.750	0.624

The Distribution of Facilitating Conditions

Figure 5 and Table 7 provide data on Facilitating Conditions (FC) related to the use of digital coupons among UUM students:

FC1 - Based on the table below, item FC1, “I have the resources necessary to use digital coupons (e.g., smartphone, internet),” has a mean score of 4.37 and a standard deviation of 0.543. This high mean score indicates strong agreement that students feel well-equipped with the necessary resources to use digital coupons. The low standard deviation suggests a consistent perception among respondents that access to resources like smartphones and the Internet is widely available.

FC2 - Based on the table below, item FC2, “I have the necessary knowledge to use digital coupons”, shows a mean score of 4.28 and a standard deviation of 0.623. This score reflects that students generally agree they possess the knowledge required to use digital coupons effectively, with some variability in responses, as indicated by the standard deviation.

FC3 - Based on the table below, item FC3, “Digital coupon platforms provide adequate support and help when I face difficulties”, has a mean score of 4.21 and a standard deviation of 0.758. Although the mean score is still high, it is slightly lower than the other items, suggesting that while students generally agree that support is available, there is more variability in their experiences with the help provided by digital coupon platforms.

FC4 - Based on the table below, item FC4, “The digital coupon apps I use are compatible with my mobile devices”, has a mean score of 4.37 and a standard deviation of 0.554. This high mean score indicates strong agreement that the digital coupon apps are compatible with students' mobile devices, and the low standard deviation suggests consistency in this perception.

Hence, the findings show that the mean scores for the FC items range from 4.21 to 4.37, indicating a high level of agreement that UUM students have the necessary resources, knowledge, and compatible devices to use digital coupons effectively. The standard deviations, although showing some variability, generally support the view that students feel supported in using digital coupons. These findings align with the Facilitating Conditions component of the Unified Theory of Acceptance and Use of Technology (UTAUT), highlighting that having the right resources and support is critical in adopting and continuing digital coupons.

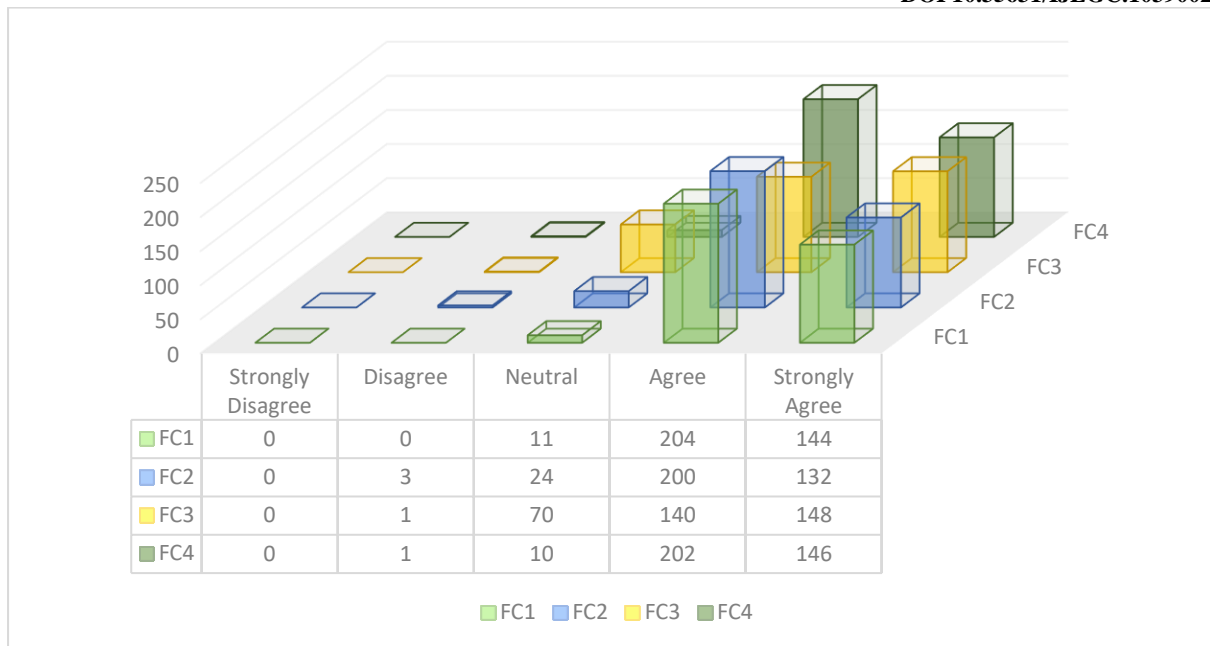


Figure 5: The Distribution of Facilitating Conditions

Table 7: The Mean and Standard Deviation of Facilitating Conditions(n=359)

	FC1	FC2	FC3	FC4
Mean	4.37	4.28	4.21	4.37
SD	0.543	0.623	0.758	0.554

The Distribution of Behavioural Intention

Based on the data presented in the figure and table below, there is a high desire and intention to use digital coupons in the future. The data shows that a large proportion of respondents have positive behavioural intentions across all three behavioural intention items.

BI1 - Based on the table above, item BI1 states that “I am likely to use digital coupons in the future” and has a mean score of 4.40 and a standard deviation of 0.652. This high mean score indicates strong agreement that students are inclined to use digital coupons in the future. The standard deviation suggests that while most respondents agree, there is some variability in the level of certainty about their future use.

BI2 - Based on the table above for BI2, 356 respondents (99.2%) agree with the statement “I will probably use digital coupons again in the future”, showing a mean score of 4.43 with a standard deviation of 0.693. This slightly higher mean score reflects strong confidence among students that they will continue to use digital coupons. While somewhat higher than BI1, the standard deviation indicates that most students consistently intend to reuse digital coupons.

BI3 - Based on the table above, item BI3 states, “I will tell my friends that they should use digital coupons,” has a mean score of 4.37 and a standard deviation of 0.573. This score demonstrates a firm intention among students to recommend digital coupons to their friends, with the low standard deviation suggesting a high level of agreement on this intention.

Therefore, the findings show that most respondents have a positive behavioural intention towards using digital coupons in the future. The high agreement percentages across all items under the construct of behavioural intention suggest a solid inclination to adopt and recommend digital coupons, reflecting their perceived value and effectiveness.

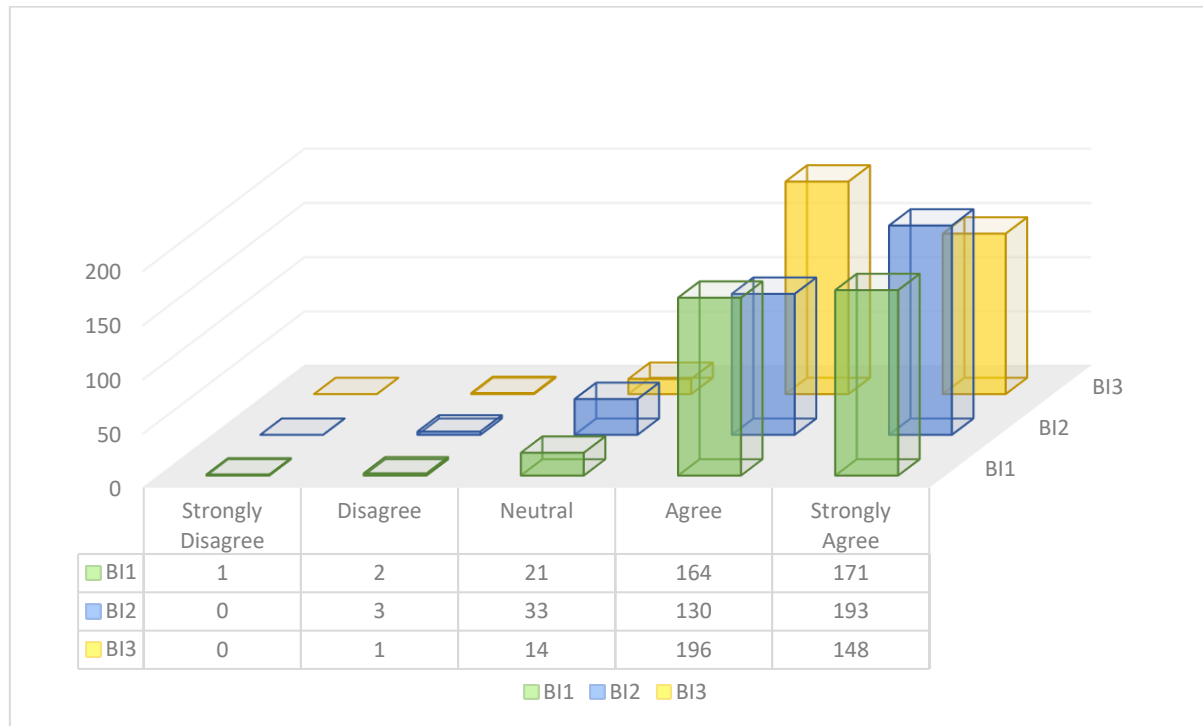


Figure 6: The Distribution of Behavioural Intention

Table 8: The Mean and Standard Deviation of Behavioural Intention (n=359)

	BI1	BI2	BI3
Mean	4.40	4.43	4.37
SD	0.652	0.693	0.573

Independent Samples t Test

An Independent Samples t-test is a statistical method used to compare the means of two independent groups to determine if there is a significant difference between them. Table 9 presents the results of an Independent Samples t-test, comparing the Behavioral Intention (BI) between male and female students. The mean BI score for males is 4.42, slightly higher than the mean score of 4.38 for females. Despite this slight difference in mean scores, the t-value of 0.80 indicates that the difference between the two groups is minimal relative to the variability within each group.

The p-value of 0.945 is well above the typical significance threshold of 0.05, suggesting that the observed difference in Behavioral Intention between males and females is not statistically significant. This suggests insufficient evidence to reject the null hypothesis, indicating that the mean BI scores for males and females are not significantly different.

These findings suggest that behavioural intentions (BI) are not significantly different between genders, meaning that both men and women are likely to exhibit similar intentions in response to certain stimuli or situations. The study by Wong (2015) supports this, showing that gender does not play a crucial role in shaping these intentions.

In summary, the study suggests that gender does not play a significant role in determining BI towards digital coupons, reinforcing that both males and females perceive and intend to use digital coupons similarly.

Table 9: Independent Samples T-test by Gender

Variables	Male (Mean)	Female (Mean)	p-value	t-value
Behavioural Intention (BI)	4.4242	4.3812	0.945	0.80

Hypothesis Testing

Correlation of Variable Performance Expectancy and Behavioural Intention

Table 10 shows the correlation analysis of the results obtained from the respondents. According to Cohen (1988), the results of the study found a strong relationship between performance expectancy and the intention to use digital ($r = 0.672$, $p < 0.01$). The magnitude of the correlation between performance expectancy and behavioural intention is large ($r = 0.5$ to 1.0). This indicates that high-performance expectancy significantly influences the intention to use digital coupons. Hence, **H1** is supported.

Hypothesis 1: There is a significant relationship between performance expectancy and the intention to use digital coupons.

Table 10: Correlation of Variable Performance Expectancy and Behavioural Intention

Dimension Variables	Performance Expectancy	
	p	r
Behavioural Intention	0.01	0.67

$p < 0.01^*$

Correlation of Variable Effort Expectancy and Behavioural Intention

Table 11 shows the correlation analysis of the results obtained from the respondents. According to Cohen (1988), the results of the study found a moderate positive relationship between effort expectancy and the intention to use digital ($r = 0.556$, $p < 0.01$). The magnitude of the correlation between effort expectancy and behavioural intention is moderate to large ($r = 0.5$ to 1.0). This indicates that higher effort expectancy significantly influences the intention to use digital coupons. Hence, **H2** is supported.

Hypothesis 2: There is a significant relationship between effort expectancy and the intention to use digital coupons.

Table 11: Correlation of Variable Effort Expectancy and Behavioural Intention

Dimension Variables	Effort Expectancy	
	p	r
Behavioural Intention	0.01	0.55

p<0.01*

Correlation of Variable SI and Behavioural Intention

Table 12 shows the correlation analysis of the results obtained from the respondents. According to Cohen (1988), the results of the study found a moderate positive relationship between social influence and the intention to use digital coupons ($r = 0.496$, $p < 0.01$). The magnitude of the correlation between social influence and behavioural intention is moderate ($r = 0.3$ to 0.5). This indicates that social influence significantly impacts the intention to use digital coupons. Hence, **H3** is supported.

Hypothesis 3: There is a significant relationship between social influence and the intention to use digital coupons.

Table 12: Correlation of Variable Social Influence and Behavioural Intention

Dimension Variables	Social Influence	
	p	r
Behavioural Intention	0.01	0.49

p<0.01*

Correlation of Variable Facilitating Conditions and Behavioural Intention

Table 13 shows the correlation analysis of the results obtained from the respondents. According to Cohen (1988), the results of the study found a weak relationship between facilitating conditions and the intention to use digital coupons ($r = 0.400$, $p < 0.01$). The magnitude of the correlation between facilitating conditions and behavioural intention is moderate ($r = 0.3$ to 0.5). This indicates that facilitating conditions significantly influence the intention to use digital coupons. Hence, **H4** is supported.

Hypothesis 4: There is a significant relationship between facilitating conditions and the intention to use digital coupons.

Table 13: Correlation of Variable Facilitating Conditions and Behavioural Intention

Dimension Variables	Facilitating Conditions	
	p	r
Behavioural Intention	0.01	0.40

p<0.01*

Discussion

The findings from the study regarding UUM students' perceptions of digital coupons highlight significant insights into their acceptance. The performance expectancy (PE) analysis revealed an overwhelmingly positive response, with students agreeing that digital coupons are helpful

in their daily lives. This strong consensus indicates that students recognise the practical benefits of digital coupons, particularly in enhancing their shopping experiences.

Moreover, the item examining the speed of purchases (PE3) received unanimous agreement, suggesting that the convenience and efficiency offered by digital coupons resonate deeply with this demographic. The high agreement rates across all performance expectancy items underscore a robust perception that digital coupons add value and facilitate quicker and more productive shopping. The aspect of effort expectancy (EE) also garnered notable positive feedback, with the majority of students stating that learning to use digital coupons would be easy. This suggests students feel confident in engaging with this technology without significant barriers. The clarity and understandability of digital coupons, as reflected in EE2, further reinforce the notion that ease of use is a critical factor in their acceptance.

Regarding social influence (SI), many students indicated that influential people believe they should use digital coupons. The strong agreement on social influence reflects the importance of community and social validation among students, which can significantly impact their adoption of digital technologies. Facilitating conditions (FC) showed similarly encouraging results, with the majority of students agreeing that they possess the necessary resources, such as smartphones and internet access, to utilise digital coupons. This lack of resource-related barriers suggests a favourable environment for students to uptake digital coupons.

Overall, the high levels of agreement across all constructs—performance expectancy, effort expectancy, social influence, and facilitating conditions—demonstrate a cheerful disposition towards digital coupons. The results indicate a strong intention among UUM students to adopt and utilise digital coupons, reinforcing their perceived value and effectiveness in enhancing shopping experiences. These insights align with existing theories on technology adoption, suggesting that perceived utility and ease of use are pivotal in determining the acceptance of digital coupon strategies among young consumers.

Conclusion

This study has provided valuable insights into the acceptance of digital coupons among UUM students, utilising the Unified Theory of Acceptance and Use of Technology (UTAUT) framework. The findings reveal a strong positive perception of digital coupons across various constructs, including performance expectancy, effort expectancy, social influence, and facilitating conditions. These dimensions collectively indicate that UUM students view digital coupons as useful, easy to use, socially endorsed, and accessible. The overwhelming agreement on the utility of digital coupons highlights their potential to enhance shopping experiences by providing tangible benefits such as savings and increased efficiency. High effort expectancy indicates that students feel confident using digital coupons, which is crucial for encouraging adoption. Furthermore, the significant role of social influence underscores the importance of people's opinions in shaping behavioural intentions towards digital coupons.

Additionally, this study is particularly impactful compared to previous research due to its focused examination of digital coupon acceptance among a specific demographic—UUM students—using the UTAUT framework. While earlier studies may have addressed general technology acceptance or digital marketing strategies, this research hones in on young consumers' unique perceptions and behaviours in a Malaysian context, providing nuanced insights that reflect their distinct preferences and social dynamics. The study also integrates

multiple constructs—performance expectancy, effort expectancy, social influence, and facilitating conditions—to provide a comprehensive view of the factors driving digital coupon adoption. This multifaceted approach deepens the understanding of how these elements interact and offers a more holistic perspective than prior studies that may have considered these factors in isolation. Therefore, emphasising the significance of social influence and the role of facilitating conditions, this research underscores the importance of community dynamics and resource availability in technology adoption, making it a timely and relevant contribution to the evolving field of digital marketing.

Further research could build on this study by examining the adoption of digital coupons among a broader range of demographics, such as age groups, cultural backgrounds, and geographic areas, in addition to UUM students. The results may be more broadly applicable if adopting this more significant viewpoint reveals different attitudes and behaviours about digital coupons. The researcher examining how variables like income bracket, educational attainment, and technical competence impact perceptions may yield a more profound understanding of customer behaviour. Qualitative research techniques like focus groups and interviews could also be used to develop a more profound, more complex understanding of the challenges and motives faced by customers. These potential directions for future research could significantly impact the current conversation about digital marketing tactics and how consumers behave in an increasingly digital economy.

Acknowledgement

I want to thank my co-author for her willingness to conduct the research and write this paper. The paper has been presented at the 9th International Conference On Communication And Media 2024 (I-Come'24). I hope that we can work together again in the future.

References

- Abdat, F. A. (2020). Using the UTAUT Model to predict social media adoption among Indonesian SMEs. *Saudi Journal of Economics and Finance*, 4(10), 498–505. <https://doi.org/10.36348/sjef.2020.v04i10.003>
- Akman, Y., & Turkmen, H. G. (2022). A study on customer perception and attitudes towards digital coupons. *Journal of Business Innovation and Governance*. <https://doi.org/10.54472/jobig.1034612>
- Al-Rahmi, W. M., Alias, N., Othman, M. S., Marin, V. I., & Tur, G. (2018). A model of factors affecting learning performance through the use of social media in Malaysian higher education. *Computers & Education*, 121, 59–72. <https://doi.org/10.1016/j.compedu.2018.02.010>
- Ali, A., & Muhammad, K. (2021). Impact of promotional tools on consumer buying behavior: A case of FMCG industry. *Journal of Marketing Strategies*, 3(1), 44–67. <https://doi.org/10.52633/jms.v3i1.34>
- Ambarwati, R., Harja, Y. D., & Thamrin, S. (2020). The role of facilitating conditions and user habits: A case of Indonesian online learning platform. *The Journal of Asian Finance, Economics and Business*, 7(10), 481–489. <https://doi.org/10.13106/jafeb.2020.vol7.no10.481>
- Andrade, C. (2021). A student's guide to the classification and operationalisation of variables in the conceptualisation and design of a clinical study: Part 1. *Indian Journal of Psychological Medicine*, 43(2), 177–179. <https://doi.org/10.1177/0253717621994334>

- Arain, M., Campbell, M. J., Cooper, C. L., & Lancaster, G. A. (2010). What is a pilot or feasibility study? A review of current practice and editorial policy. *BMC Medical Research Methodology*, 10(1). <https://doi.org/10.1186/1471-2288-10-67>
- Ayaz, A., & Yanartaş, M. (2020). An analysis of the Unified Theory of Acceptance and Use of Technology Theory (UTAUT): Acceptance of electronic document management system (EDMS). *Computers in Human Behavior Reports*, 2(100032), 100032. <https://doi.org/10.1016/j.chbr.2020.100032>
- Bhandari, P. (2020, June 12). *What is quantitative research? Definition, uses and methods*. Scribbr. <https://www.scribbr.com/methodology/quantitative-research/>
- Bhat, A. (2018). *Research design: Definition, characteristics and types*. QuestionPro. <https://www.questionpro.com/blog/research-design/>
- Briandana, R., Dwityas, N.A. (2020). Conventional marketing communication tools for residential products in the digital era. *Technium: Social Science Journal*, 14(1), 193-205
- Coupon Statistics Update. (2024). *Coupon statistics: Usage stats for 2024*. Retrieved from couponfollow.com
- Daniali, S. M., Barykin, S. E., Zendehdel, M., Kalinina, O. V., Kulibanova, V. V., Teor, T. R., Ilyina, I. A., Alekseeva, N. S., Lisin, A., Moiseev, N., & Senjyu, T. (2022). Exploring UTAUT Model in mobile 4.5G service: Moderating social–economic effects of gender and awareness. *Social Sciences*, 11(5), 187. <https://doi.org/10.3390/socsci11050187>
- Data analysis chapter - Research Gateway. (n.d.). *Research gateway*. Retrieved January 9, 2024, from <https://researchgateway.in/data-analysis-chapter>
- Diaz, M. C., & Loraas, T. (2010). Learning new uses of technology while on an audit engagement: Contextualising general models to advance pragmatic understanding. *International Journal of Accounting Information Systems*, 11(1), 61–77. <https://doi.org/10.1016/j.accinf.2009.05.001>
- Geni, G.L., Briandana, R., Umarella, F.H. 2021. The strategies of television broadcast during the Covid-19 pandemic: A case study on Indonesian television. *Malaysian Journal of Communication*, 37(2), 243-256. <https://doi.org/https://doi.org/10.17576/JKMJC-2021-3702-15>
- Goli, M., & Khan, M. (2023). Online learning: Predicting student engagement and continued intention. *International Journal of Learning Technology*, 18(4), 367–387. <https://doi.org/10.1504/ijlt.2023.10061404>
- Gu, C., Liang, H., Liu, X., & Yang, D. (2023). Do electronic coupon-using behaviors make men womanish? The effect of the coupon–feminine stereotype. *Journal of Theoretical and Applied Electronic Commerce Research*, 18(3), 1637–1659. <https://doi.org/10.3390/jtaer18030083>
- Guo, G., Li, Y., & Zheng, S. (2019). *Factors influencing university students' intention to redeem digital takeaway coupons - analysis based on a survey in China*. <https://doi.org/10.1145/3377170.3377208>
- Halili, S. H., & Sulaiman, H. (2018). Factors influencing the rural students' acceptance of using ICT for educational purposes. *Kasetsart Journal of Social Sciences*. <https://doi.org/10.1016/j.kjss.2017.12.022>
- Huang, Y., & Tang, S. (2018). Covert voice over internet protocol communications based on spatial model. *Science China Technological Sciences*, 59(1), 117–127. <https://doi.org/10.1007/s11431-015-5955-4>

- Jiang, Y., Liu, F., & Lim, A. (2021). Digital coupon promotion and platform selection in the presence of delivery effort. *Journal of Retailing and Consumer Services*, 62, 102612. <https://doi.org/10.1016/j.jretconser.2021.102612>
- Karulkar, Y., Pahuja, J., Uppal, B., & Sayed, S. (n.d.). *Examining the UTAUT model to explore consumer adoption in online food delivery (OFD) services*.
- Kenpro. (2012). Sample Size Determination Using Krejcie and Morgan Table. *Kenya Projects Organization [KENPRO]*. <https://www.kenpro.org/sample-size-determination-using-krejcie-and-morgan-table/>
- Li, Y.-M., Liou, J.-H., & Ni, C.-Y. (2019). Diffusing mobile coupons with social endorsing mechanisms. *Decision Support Systems*, 117, 87–99. <https://doi.org/10.1016/j.dss.2018.11.002>
- Lorenz, G., Boda, Z., Salikutluk, Z., & Jansen, M. (2020). Social influence or selection? Peer effects on the development of adolescents' educational expectations in Germany. *British Journal of Sociology of Education*, 41(5), 643–669. <https://doi.org/10.1080/01425692.2020.1763163>
- Marikyan, D. & Papagiannidis, S. (2023). Unified Theory of Acceptance and Use of Technology. <https://open.ncl.ac.uk/theory-library/unified-theory-of-acceptance-and-use-of-technology.pdf>
- N.C.H Mid-Year. (2018), Total consumer packaged goods coupon facts: at a glance scale of consumer reach -12.3% top ten largest retailers by consumer redemption four out of five coupons are redeemed from traditional print media. (2018). <https://cdn2.hubspot.net/hubfs/2574831/NCH%20Cpn%20Facts%20at%20Mid%20Year%202018%20Final.pdf?t=1539369616268>
- Nambiar, B. K., & Bolar, K. (2022). Factors influencing customer preference of cardless technology over the card for cash withdrawals: an extended technology acceptance model. *Journal of Financial Services Marketing*, 28(1). <https://doi.org/10.1057/s41264-022-00139-y>
- Nayal, P., & Pandey, N. (2020). Digital Coupon Redemption: Conceptualisation, Scale Development and Validation. *Australasian Journal of Information Systems*, 24. <https://doi.org/10.3127/ajis.v24i0.2469>
- Nielsen. (2016). The future of coupons: Trends and insights. Retrieved from Nielsen Insights.
- Nindyta, A. D., Rizki, B., Rohana Mijan, Richard, Diah W. (2021). eWOM and decision making on the use of e-wallet application by Indonesian customers. *International Journal of Economics and Business Administration*, IX(4), 181-193.
- Pandey, N., & Maheshwari, V. (2016). Four decades of coupon research in pricing: Evolution, development, and practice. *Journal of Revenue and Pricing Management*, 16(4), 397–416. <https://doi.org/10.1057/s41272-016-0076-7>
- Palau-Saumell, R., Forgas-Coll, S., Sánchez-García, J., & Robres, E. (2019). User acceptance of mobile apps for restaurants: An expanded and extended UTAUT-2. *Sustainability*, 11(4), 1210. <https://doi.org/10.3390/su11041210>
- Press, M. O. (n.d.). 10.1 What is measurement? *Uta.pressbooks.pub*. <https://uta.pressbooks.pub/advancedresearchmethodsinsw/chapter/10-1-what-is-measurement/#:~:text=In%20research%2C%20measurement%20is%20a>
- Ravikiran, A. S. (2021, July 27). *Population vs sample: Definitions and differences*. Simplilearn.com. <https://www.simplilearn.com/tutorials/machine-learning-tutorial/population-vs-sample>
- Raza, S. A., Qazi, W., Khan, K. A., & Salam, J. (2020). Social isolation and acceptance of the learning management system (LMS) in the time of COVID-19 pandemic: An expansion

- of the UTAUT Model. *Journal of Educational Computing Research*, 59(2), 073563312096042. <https://doi.org/10.1177/0735633120960421>
- Rohani, K., Rohani, L. S., & Barth, J. (2017). The impact of consumers' perception of environment and technology in redeeming e-coupons. *International Journal of Business Research and Management (IJBRM)*, 8(1), 1–12. <https://ideas.repec.org/a/aml/intbrm/v8y2017i1p1-12.html>
- Saura, J. R. (2020). (PDF) Consumer Behavior in the Digital Age. ResearchGate. https://www.researchgate.net/publication/344433621_Consumer_Behavior_in_the_Digital_Age
- Savitri, A. W., & Indrawati. (2019). Measuring factors influencing the adoption of OVO feature in grab application in Indonesia. *The International Journal of Business & Management*, 7(1). <https://doi.org/10.24940/theijbm/2019/v7/i1/bm1901-034>
- Shia, A. S., Chang, K.-F., & Huang, Y.-H. (2021). Social marketing of electronic coupons under the perspective of social sharing behavior. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.746928>
- Shiferaw, K. B., & Mehari, E. A. (2019). Modelling predictors of acceptance and use of electronic medical record system in a resource limited setting: Using modified UTAUT model. *Informatics in Medicine Unlocked*, 100182. <https://doi.org/10.1016/j.imu.2019.100182>
- Shukla, S. (2020). Concept of population and sample.
- Sreekumar, D. (2023, August 28). *What is the research methodology? Definition, types, and examples. Paperpal.* <https://paperpal.com/blog/academic-writing-guides/what-is-research-methodology>
- Steynberg, S. (2022). Subject guides: Research guide: Data analysis and findings. Library.up.ac.za. <https://library.up.ac.za/c.php?g=485435&p=4425510#:~:text=Data%20analysis%20is%20the%20most>
- Suki, N. M., & Suki, N. M. (2017). Determining students' behavioural intention to use animation and storytelling applying the UTAUT model: The moderating roles of gender and experience level. *The International Journal of Management Education*, 15(3), 528–538. <https://doi.org/10.1016/j.ijme.2017.10.002>
- Tamilmani, K., Rana, N. P., Prakasam, N., & Dwivedi, Y. K. (2019). The battle of Brain vs. Heart: A literature review and meta-analysis of “hedonic motivation” use in UTAUT2. *International Journal of Information Management*, 46, 222–235. <https://doi.org/10.1016/j.ijinfomgt.2019.01.008>
- Understanding Digital Coupons and E-Coupons* | Edge Learning Center. (n.d.). Edge. <https://www.microsoft.com/en-us/edge/learning-center/understanding-digital-coupons?form=MA13I2>
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478. JStor. <https://www.jstor.org/stable/30036540>
- Venkatesh, V. (2020). Determinants of perceived ease of use: Integrating control, intrinsic motivation, and emotion into the technology acceptance model. *Information Systems Research*, 11(4), 342–365. <https://doi.org/10.1287/isre.11.4.342.11872>
- Venkatesh, V., & Davis, F. D. (2000). A Theoretical extension of the technology acceptance model: four longitudinal field studies. *Management Science*, 46(2), 186–204. <https://doi.org/10.1287/mnsc.46.2.186.11926>

- Venkatesh, V., Sykes, T. A., & Xiaojun Zhang. (2011). "Just what the doctor ordered": A revised UTAUT for EMR System adoption and use by doctors. *2011 44th Hawaii International Conference on System Sciences*. <https://doi.org/10.1109/hicss.2011.1>
- Wolfenbarger, & Gilly. (2003). What is the minimum acceptable item-total correlation in a multi-dimensional questionnaire? ResearchGate. https://www.researchgate.net/post/What_is_the_minimum_acceptable_item-total_correlation_in_a_multi-dimensional_questionnaire
- Wong, C.-H., Tan, G. W.-H., Tan, B.-I., & Ooi, K.-B. (2015). Mobile advertising: The changing landscape of the advertising industry. *Telematics and Informatics*, 32(4), 720–734. <https://doi.org/10.1016/j.tele.2015.03.003>
- Wong, S.-M., Leong, C.-M., & Puah, C.-H. (2020). Mobile Internet adoption in Malaysian suburbs: The moderating effect of gender. *Asian Journal of Business Research*, 9(3). <https://doi.org/10.14707/ajbr.190069>
- Xing, J., Zou, E., Yin, Z., Wang, Y., & Li, Z. (2020). "Quick response" economic stimulus: The effect of small-value digital coupons on spending. *NBER Working Papers*. <https://ideas.repec.org/p/nbr/nberwo/27596.html>
- Yakasai, A. B. M., & Jusoh, W. J. W. (2015). Testing the Theory of Planned Behavior in Determining Intention to use digital coupons among university students. *Procedia Economics and Finance*, 31, 186–193. [https://doi.org/10.1016/s2212-5671\(15\)01145-4](https://doi.org/10.1016/s2212-5671(15)01145-4)