



## Development of Research on Continuous usage Intention of M-Wallets: A Systematic Review of Literature from 2011 to 2021

Denish Badaik<sup>1</sup>, Kavitha Tirupattur Chinnaraju<sup>1</sup>, Sagarika Kamath<sup>2</sup>, Vani Lakshmi Ramesh<sup>2</sup>, Rithu Sathiyamoorthy<sup>2</sup>, Lokesh Namachivayam<sup>2</sup>, Rajesh Kamath<sup>2,\*</sup>

<sup>1</sup> Department of Commerce, Manipal Academy of Higher Education, 576104 Manipal, India

<sup>2</sup> Prasanna School of Public Health, Manipal Academy of Higher Education, 576104 Manipal, India

### ARTICLE INFO

#### Article history:

Received 10 July 2023

Received in revised form 25 November 2023

Accepted 4 December 2023

Available online 15 December 2023

#### Keywords:

Mobile wallets or M-wallets;  
Continuance intention; Service quality;  
Perceived security; Perceived usefulness;  
Perceived ease of use; Trust; Flow and  
satisfaction

### ABSTRACT

Mobile payment usage must be maintained for mobile wallet companies to survive. Long-term user relationships can assist businesses in lowering costs and increasing profitability to retain customers which ultimately will lead to continuance intention. Despite M-wallets' relative maturity, a study in this sector has been limited to first acceptance/rejection. No study has particularly evaluated the technology's post-adoption impacts. Existing studies mostly examine the initial adoption of mobile wallet users and their antecedents. Though many people use M-wallets regularly, consistency is rare. Thus, both academic researchers and practitioners must investigate mobile wallet users' continued usage behaviour. This research conducts a thorough evaluation of the systematic review of literature on M-wallet continuous usage intentions from 2011 to 2021. The authors of this study employed systematic review methods to analyse the current state of continuous usage of M-wallet research. They identified current research streams and offered ideas for future research. The review identified the Geographic representation of mobile wallet continuous usage research, methodological approaches to investigate continuous usage intention of m-wallets, and popular theories adopted to investigate continuance intention. Through research synthesis, predictors and moderators/mediators of mobile wallets were also identified. The authors then discovered various service quality characteristics that demonstrated how trust, flow, and satisfaction—which have primarily been studied—had a direct impact on behavioural intentions as a result of service quality. The authors recommend the direction of potential future research in mobile wallets. This paper is a systematic review of the continuance usage of mobile wallets based on the dimensions of service quality and is one of the very few papers to offer a systematic review of continuous usage.

\* Corresponding author.

E-mail address: [rajesh.kamath@manipal.edu](mailto:rajesh.kamath@manipal.edu)

<https://doi.org/10.37934/araset.35.1.156172>

## 1. Introduction

For over a decade, M-wallets have been a central focus of service marketing research which evolved in 1997. Despite the importance of this topic, few studies consider the fundamental question of how mobile wallets evolve in the service marketing discipline. The following chart provides a clear view of the evaluation of its study. Scopus analysis retrieves 2946 papers till 2023 using the keywords: Mobile wallet or M-wallet, e-wallet, digital wallet, mobile payment or mobile payment applications, and digital payment.

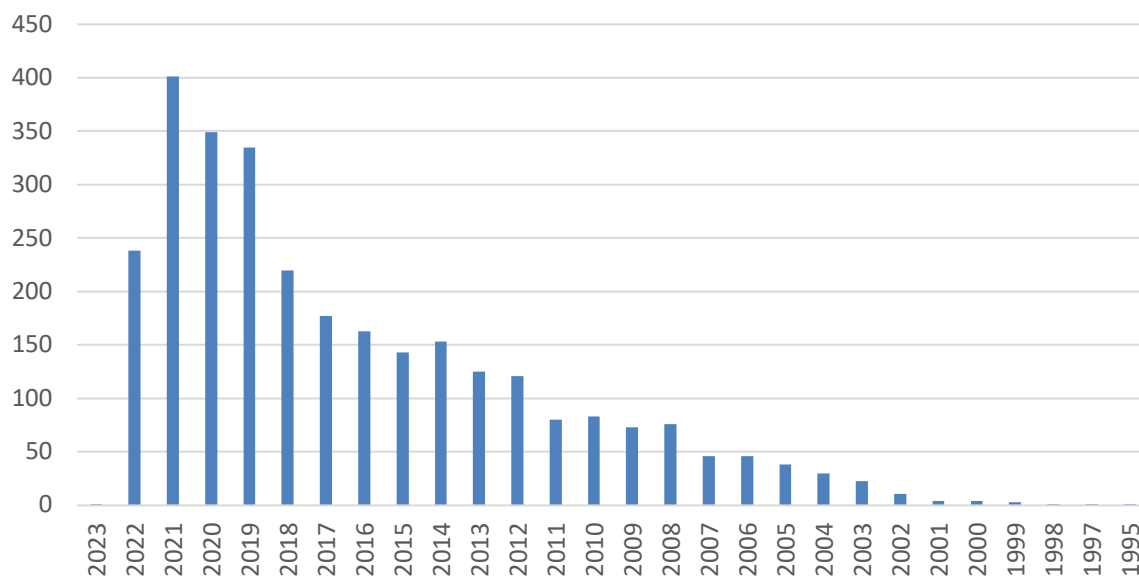


Fig. 1. Number of studies on M-wallet till 2023 (Scopus)

M-wallet, a component of MDS (mobile device service) refers to "mobile devices that can access digital content on the internet wirelessly. MDS provides a range of application services, including m-government, financial, entertainment, information and communication, and apps for spatial and financial data Kumar *et al.*, [1]. Kim, Choi, and Han [2] define Mobile Wallets as "wireless access to digitalised contents on the internet via mobile devices"

M-wallet is a programme that makes MDS-based fund transfers and purchases easier. In simple terms, a mobile wallet is a virtual payment service which works as a cashless system. Its adoption is gradually replacing traditional payments like cash and cards across the globe. In industrialised nations, payment through mobile is one of the most transparent and common forms of payment Kumar *et al.*, [1].

M-wallet is a digitalised version of a traditional wallet that provides quick payment, hassle-free transactions and a safe mode of payment system to the customers is taken from the previous study [3].

M-wallets provide an opportunity to reach a sizable demographic in developing economies is taken from the previous study [4].

The Economic Times said that Paytm, the top mobile wallet provider, saw an annual growth of 435 % in 2019. The National Payments Corporation of India developed the Bharat Interface for Money (BHIM) software to enable direct cash transactions between bank accounts taken from the previous study [5]. In fact, it is predicted that 1.31 billion mobile payment transactions will take place globally in 2023, up from 950 million users in 2019. Applications for mobile wallets, include PayPal, Apple Pay,

Android Pay, Samsung Pay, Google Pay, WeChat Pay, Ali Pay, and others as reported by Statista [6,7]. PayPal and Apple Pay were the most widely used and accepted mobile wallets as per Statista report [6].

For market share, India is home to many domestic and international mobile wallet providers. Worldwide mobile wallet transactions in 2019 totalled 2 trillion Indian rupees, and the surveys showed that 83.6% of respondents in India use mobile wallet transactions. According to the Global market analysis despite the widespread use of mobile wallets, some obstacles, such as the lack of knowledge about their advantages and cybercrimes related to the mobile wallet business, may limit the market's expansion throughout the forecast period is taken from the previous study [7]. Only a few among the many studies on the use of m-wallets focused on the criteria for evaluating the quality of m-wallet services. They found that there are numerous businesses that provide m-wallet services, and customers have been using them for a substantial period of time is taken from the previous study [8]. But up until now, very little research has looked at the variables influencing the calibre or quality of m-wallet services. Therefore, it is essential to look at the m-wallet service quality.

## 2. Service Quality

In the last two decades, service quality has gained scholarly interest and has been acknowledged as a critical component in differentiating services and creating competitive advantage Zeithaml, Berry and Parasuraman [9]. One of the major determinants of e-commerce success or failure is service quality Yang Z [10]. The rising use of e-services has increased the need to develop criteria and instruments for assessing and ensuring quality. A critical first step toward improving living conditions in our fast-paced culture is investing in e-services. Perceived security and utility are the major factors influencing people's intentions to use mobile wallets Routray *et al.*, [11]. They suggested that to retain users, service providers should focus on the quality of m-wallets. By presenting and ranking various service quality metrics in the context of mobile wallets, the current study aimed to address this gap and assist service providers in improving the quality of their services and retaining clients.

## 3. Service Quality Dimensions

While e-service quality dimensions are infrequently seen to be directly influencing e-loyalty is taken from the previous study [12]. The majority of research sees them as antecedents of e-satisfaction Ribbink *et al.*, [13]. As yet, there is no consent on the exact nature or number of quality dimensions that customers consider when evaluating e-services are taken from the previous studies [14,15]. For the present study, some commonly used e-quality dimensions were chosen and were presented in Table 1 i.e., system quality, information quality, perceived usefulness, perceived ease of use, perceived security, perceived value, trust and so on. Out of which perceived security is the major determinant which influences satisfaction and ultimately leads to continuance Intention.

One of the main factors influencing customer adoption of e-payment technologies is security perception. As per previous study [16] describes a scenario in which a customer is protected against possible damage that could occur during a transaction or financial activity. Prior studies have confirmed the impact of perceived security on the adoption and continuous usage of mobile wallets Routray *et al.*, [11], and taken from the previous study [17].

#### 4. Continuance Intention

The willingness of a user to continue using a technology-based service or product after the adoption is known as continuation use intention is taken from the previous study [18].

Continuance usage intention fosters long-term relationships between the service provider and the users. These relationships can lead to trust and loyalty, which are essential for sustaining a business in the long run. And for that reason, customer retention is much more important in any business than creating a new customer. Creating a new customer is a costly affair so companies give much emphasis to retaining customers.

Customer retention is one of the most crucial problems that leisure managers must address since it requires detailed knowledge of behavioural aspects of customers' decision-making process is taken from the previous study [19]. When implementing any kind of system meant to increase process efficiency and effectiveness and ensure customer loyalty, it is crucial to measure consumers' perceptions of service quality and satisfaction in order to ascertain users' experiences and sentiments. This is essential when implementing any type of system aiming to improve process efficiency and efficacy and secure customer loyalty is taken from the previous study [20]. Previous research has shown that consumers' Continuance Intention to use technology in the future is influenced by how satisfied they were with their earlier usage in different IS contexts is taken from the previous study [21].

One of the significant developments in mobile technology that positively impacts businesses and customers is the creation of mobile payment systems, sometimes known as mobile wallet applications. The different client types and their differing needs make it particularly challenging for service providers to understand why clients are loyal, despite the widespread use of mobile wallets. this study examines the factors that affect mobile wallet users' intentions to adhere to a certain service provider and how this behaviour differs based on the client categories is taken from the previous study [22].

Some other benefits the e-wallet companies provide to their customers are explained below. E-wallet providers have made large investments to improve the ease, security, and safety of their services to draw customers. For instance, user data stored in an e-wallet account is normally encrypted and not saved on a mobile device. All payment transactions are automatically stored to make it simple for customers to access the history ledger. E-wallet users also save time by not having to search around for and count coins and bills. Additionally, travelling can save time and physical strain on the users. for example, users of Touch n Go cards, can connect their smart cards to the e-wallet and top up their accounts online instead of physically standing in queue at certain retailers. Reducing paper use encourages a lower risk of environmental waste and pollution from an ecological standpoint.

Most of the existing studies focused on the initial adoption, exploring the antecedents and the behavioural intention of customers towards M-wallet services. But up till now, very little research has been conducted on the service quality dimensions of m-wallets which affect continuous intention to use M-wallet services Yang *et al.*, [23]; and is taken from the previous study [24].

Along with that as per Gupta *et al.*, [25], and Alhassan *et al.*, [26] there is still a dearth of research on the post-adoption stage in the context of mobile wallets. So, there is a need to investigate the determining factors of mobile wallets' continuance usage intention.

As per Kapoor *et al.*, [27], there has been a scarcity of research focusing on the factors for assessing the quality of M-wallet services. However, till date, there has hardly been any research that has explored the dimensions influencing M-wallet service quality. Therefore, it is essential to explore the service quality dimensions of mobile wallets.

According to earlier research, there are several issues that pose a threat to the business's sustainability including tough competition among service providers, security concerns, and low switching costs for M-wallet services that result in low customer retention. Therefore, it is imperative for organisations to devise conducive strategies that lead to customer retention. In the case of mobile wallet services customer retention is possible through continuance usage of this technology or service is taken from the previous study [28] Bhattacharjee *et al.*, [29].

Despite the enormous growth potential of mobile wallets, there hasn't been much research that provides a thorough synthesis and analysis of the factors influencing the intention to use mobile wallet services continuously. This study aims to address this gap by providing a comprehensive review of the related literature retrieved from Scopus, Web of Science, and PubMed databases.

## 5. Methodology

The systematic review technique recommended by Tranfield *et al.*, [30] was adopted. The documentation, assessment, and synthesis of all pertinent research on a given subject can be aided by a systematic review Petticrew and Roberts [31] which also aids in identifying any gaps in the body of existing knowledge. We initially chose the Web of Science (WOS) database, Scopus, and PubMed. With many more characteristics compared to other databases, Scopus is a practical, popular, reliable database Thürer *et al.*, [32].

Additionally, a comparison of the journal coverage provided by Scopus and WOS indicated that 97% of WOS articles are also included in Scopus, and only a small fraction of journals is exclusively indexed in WOS is taken from the previous study [33]. Scopus has developed a strong reputation for performing systematic reviews is taken from the previous study [34] author and peer recommendations were used to choose keywords, using synonyms. As the focus of this work was to review the field of Continuance Intention of mobile wallets there could have been some articles that may have used keywords such as "Continuous usage intention," "Continuance intention to use" or "customer loyalty" or interchangeably, whereas the focus of those articles might be built on CI. Thus, we used various combinations of keywords and applied them in the Title, Abstract and Keywords sections of Scopus and Web of Science databases, which resulted in more than 375 articles. The selection of research papers was conducted in several stages.

The 1st stage was to discover 2499 research papers from "PubMed", Scopus" and "Web of Science" (WOS). Then the selection process excluded papers based on the title and abstract. 2200 research papers were selected. The third stage was choosing the research papers relevant for further review using the inclusion criteria that found 961 research papers. The next stage was to exclude the research paper based on the full text and 50 research papers were retrieved. The final stage used the exclusion criteria and obtained 20 research papers.

We used the following criteria to determine whether an article should be included or excluded from the review:

### 5.1 Inclusion Criteria

- i. Studies from any geographic location were considered.
- ii. Only publications published in scholarly journals were taken into account.
- iii. Research articles published between 2011 and 2021 were considered.
- iv. Articles considered are within the Social Science domain.

## 5.2 Exclusion Criteria

- i. We chose papers based on their abstracts. Articles that appeared to be unrelated to our study aim were manually removed from the list.
- ii. The study's goals and outcomes must be within the scope of our research.
- iii. Non-English language studies were not considered.
- iv. Duplicate papers were excluded.
- v. Student's theses or dissertations were excluded.

In this study, Figure 2. PRISMA flowchart summarises our methodological procedure which is presented below.

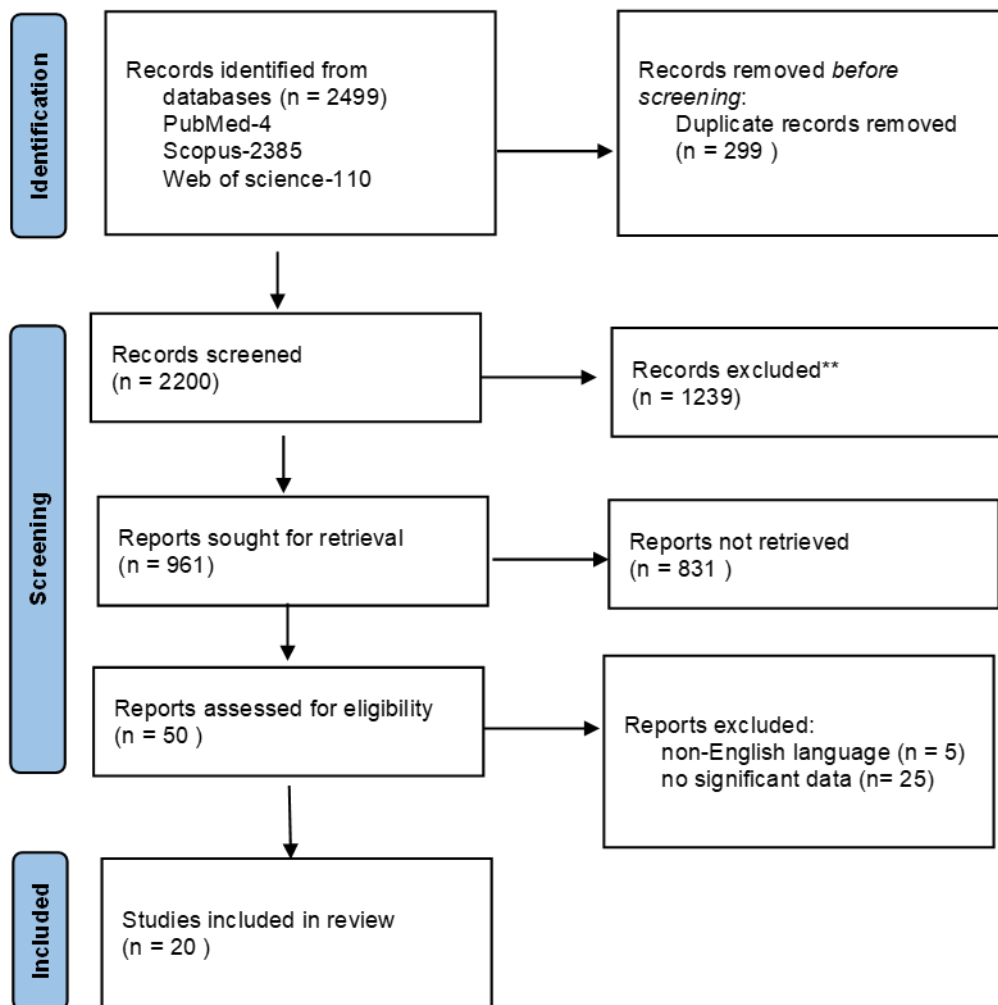


Fig. 2. PRISMA flowchart

The published research articles in scholarly publications are given priority in this study. 20 articles were successfully collected following the screening procedure, which was deemed sufficient for the review. The results showed that the majority of research on proximity-based mobile wallets was quantitative. A quantitative technique was used to write the 20 papers. Table 1 below provides a summary and presentation of the specifics of the earlier studies.

**Table 1**

Quantitative inferential studies on mobile wallet continuance usage intention in different countries from 2011 to 2021

Sources	country	Context	Theory	Predictors	Mediators/ Moderators/ (if any)	Outcome
Azizah <i>et al.</i> , [35]	Indonesia	405 Mobile wallets users	combination of an information system success model with flow theory	Trust, Flow, satisfaction Information Quality system Quality, Service Quality,	Trust, Flow, and satisfaction	The result shows that trust, flow, and satisfaction directly influence customer continuance intention to use m-wallets. Service quality factors like system quality, service quality, and information quality directly affect trust, flow, and satisfaction. Continuance Intention (CI) is indirectly affected by trust, flow, and satisfaction.
Lingling <i>et al.</i> , [36]	China	219 mobile payment users	The information systems (IS) Success model	Trust and satisfaction	satisfaction	The results indicated that the trust transfer process positively influences the CI of mobile payment through satisfaction. Satisfaction is an important factor affecting continuance intention. Moreover, trust in online payment, perceived similarity, and perceived entitativity between online and mobile payments can positively influence trust.
Gupta <i>et al.</i> , [37]	India	574 users	Extended Expectation–Confirmation Model (EECM)	Performance expectancy, effort expectancy, facilitating conditions & and individual mobility are crucial antecedents to the confirmation that leads to CI.	Confirmation and satisfaction	The findings indicate that pre-adoption performance and effort expectancies impact consumption-driven confirmation, which in turn affect the post-adoption perceived usefulness, post-adoption perceived security and user satisfaction. Further, satisfaction, post-adoption self-efficacy, and post-adoption perceived usefulness were found to be strong antecedents of the user’s continuance intention (CI).
Tao Zhou [38]	Eastern China	200 mobile payment users	Integrating both the information systems success model and flow theory	Trust, flow, and satisfaction are the predictors of CI.	Trust, Flow, and satisfaction	The results indicated that system quality, information quality, and service quality affect CI through trust, flow, and satisfaction. In addition, trust affects flow, which in turn affects satisfaction. The results imply that service providers need to deliver quality systems, information, and services to facilitate users' post-adoption usage of mobile payment.
Nobukhosi Dlodlo [39]	South Africa	269 experienced Mobile payment users	The information systems (IS) success model	Service quality, trust, and satisfaction are the predictors of CI.	Trust and satisfaction are mediators.	The study provides strong support for positive and significant relationships between service quality with trust. Both trust and satisfaction demonstrated a positive and significant influence on the users’ decision to continue using M-payment services.

Tao Zhou [40]	China	226 valid Respondents	TAM & IDT (Technology acceptance model and innovation diffusion theory).	Trust in online payment, information quality, system quality, Trust in Mobile Payment, Flow in using mobile payment (MP), and Performance expectancy.	Trust, Flow, and Performance expectancy are mediators.	The results indicated that performance expectancy, trust and flow affect continuance usage. Among them, the flow has a relatively larger effect on mobile payment. In addition, System Quality (SQ) has a stronger effect on performance expectancy and flow. Trust in online payment affects continuance Intention. SQ strongly affects performance expectancy and flow. (IQ) Information Quality has a significant effect on trust, which in turn affects performance expectancy and flow. These three factors determine Continuance Intention (CI).
Liébana-Cabanillas [41]	Spain	500 mobile wallet users		Perceived trust, social value, convenience satisfaction, service quality, effort expectancy, and perceived risk are the predictors of CI. Effort expectancy and satisfaction significantly influence CI. Perceived risk negatively influences CI.	Trust and satisfaction are mediators.	The results show that Perceived trust, social value, and convenience influence Satisfaction. Satisfaction, service quality, effort expectancy, and perceived risk are determining factors of the CI. service quality significantly influences perceived trust, satisfaction, and CI. The results are important for the new area of research regarding the adoption of mobile payments, as well as its continued use over time by users of urban public transportation. This study contributes valuable knowledge regarding the determination of factors that affect the decision to continue using a mobile payment system within the context of frequent use with the same provider.
Raman and Aashish [42]	India	612 M-payment respondents	Innovation diffusion theory	Service quality, attitude, and effort expectancy are the predictors of CI. Perceived risk negatively influences Continuance Intention.	Satisfaction, effort expectancy, and attitude are mediators.	The outcomes of the research suggest that service quality, attitude, effort expectancy and perceived risk act as influencing antecedents of continuance intention (CI) to use Mobile payment services. Determinants like perceived trust, convenience, and social value have no influence on users' CI.
Tamara et al., [43]	Jakarta, Indonesia	268 mobile payment users	Technology Continuance Theory (TCT) and Technological Personal Environmental (TPE) model	Additional value, government support, system quality and satisfaction are the predictors of CI.	Satisfaction is the mediator.	The results showed that user satisfaction, as a mediator, significantly influenced the continuance intention of mobile payment during COVID-19. User satisfaction is directly influenced by environmental factors, which contain additional value, government support, and system quality. Moreover, system quality shows the most significant influence followed by adding



Halim <i>et al.</i> , [44]	Malaysia	379 respondents	Technology continuance theory (TCT)	Perceived usefulness, satisfaction and attitude, price benefit, trust, habit, and operational constraints are the predictors of CI.	Perceived usefulness, satisfaction, and attitude are mediators.	value and government support and system quality can increase customer satisfaction and the continuance intention to use mobile payments. There is a significant influence of perceived ease of use, Perceived usefulness, and satisfaction toward users' attitudes on the users' intention to continue to use an e-wallet. Results also verified that CI to use e-wallet was positively influenced by satisfaction, attitude, price benefit, habit, and operational constraints.
Humbani and Wiese [45]	South Africa	426 users of mobile payment apps	integrated modified TRI and E-ECM-IT models.	All driving factors, Perceived usefulness, Perceived ease of use, and satisfaction are the predictors of CI.	Perceived usefulness, Perceived ease of use, and satisfaction are mediators.	"Drivers" were better predictors of adoption than "inhibitors" while satisfaction emerged as the strongest predictor of continuance intentions. Perceived usefulness and perceived ease of use have a significant impact on Continuance intention (CI) through satisfaction. The emphasis should be placed on important issues, such as reliable connectivity and security to bring about a sense of satisfaction that would lead to the continued use of mobile payment apps.
Lim <i>et al.</i> , [46]	China	350 eligible responses	Cognitive absorption theory	Perceived ease of use, Perceived usefulness, Perceived security, Subjective well-being, and Attitude are predictors of Continuance Intention.	Attitude and Subjective well-being	The intention to continue using an e-wallet app was positively predicted by attitude and subjective well-being. The findings reveal how implementing money-gift functions promotes various positive outcomes that influence the intention to continue using an e-wallet app.
Shao <i>et al.</i> , [47]	China	740 mobile wallet users.	Innovation Diffusion Theory (IDT),	Mobility, customization, security and reputation are the predictors of CI.	Gender moderator, Trust and perceived risk mediators.	The statistical analysis indicates that security is the most significant antecedent of customers' trust, followed by platform reputation, mobility, and customization. Customers' trust influences Continuance Intention [47].
Samar Mouakket [48]	United Arab Emirates	416 university students.	Information systems success model,	Satisfaction, Effort expectation, Performance expectation,	Satisfaction mediates between Effort expectation,	This study of (m-payment) identifies individual characteristics (personal innovativeness) and (self-efficacy) and m-payment quality characteristics (system quality, information quality, and service quality) that can influence

				Personal Innovative, Self-efficacy, System Quality and Service quality are the predictors of CI.	Performance expectation & continuance Intention	expectations about the performance and effort of this technology. These two outcome expectations may affect user satisfaction with m-payment, which will in turn influence users' continued intention to use this technology. However, the quality characteristics only system quality significantly affected users' expectations of the ease of use and usefulness of m-payment.
Verma <i>et al.</i> , [49]	India	387 users of mobile payments.	The extended TPB model	Attitude, moral norms and merchant pro-activeness of the society are the predictors of CI.	Attitude and subjective norms are the mediators.	The study revealed that subjective norms (in contradiction to what the theory claims) were important predictors of intention. The findings validated the influence of subjective norms on decision-making by Indian citizens after demonetization, as respondents gave importance to the thoughts and recommendations of persons in their social circle before moving ahead with mobile payment services.
Kumar <i>et al.</i> , [1]	India	400 MBA students	Expectation–Confirmation Theory.	Grievance redressal, trust and satisfaction are the predictors of the CI.	Grievance redressal, trust and satisfaction are the mediators of CI.	The analysis reveals that perceived usefulness and perceived ease of use significantly affect user satisfaction and intention to continually use M-wallets. The effect of perceived security on user satisfaction is significant, and grievance redressal mediates the effect of perceived security on the intention to continually use M-wallets. grievance redressal, trust and satisfaction affect M-wallet continuance intention positively. Among these characters, trust was found to have the highest effect on M-wallet continuance intention.
Karim Garrouch [50]	Saudi Arabia	382 users of mobile wallets	TAM, (UTAUT and UTAUT2) model	The provider's reputation, ease of use, trust, perceived value, and security of mobile wallet applications are the predictors of the CI.	Trust and perceived security are the mediators.	Findings confirm that the provider's reputation has a significant impact on trust & perceived security and both of which are antecedents of CI. Also, the provider's profession moderates the impact of reputation on trust [50].
PHUONG <i>et al.</i> , [51]	Vietnam	276 M-wallets respondents.	TAM and UTAUT model	mobile application quality, mobile wallet familiarity, situational normality, payment security, and feedback mechanism	Trust and satisfaction are the mediators.	The findings suggest that familiarity and high-quality mobile applications can have a considerable impact on perceived ease-of-use (PEOU) and perceived utility (PU), which in turn affect satisfaction. On the other hand, client trust is impacted by payment security and feedback systems.

Talwar <i>et al.</i> , [52]	India	914 M-wallets respondents.	Dual Factor Theory	Perceived information quality, perceived ability, and perceived benefit drive positive word of mouth (PWOM), while the inhibitors' perceived cost, perceived risk, and perceived uncertainty drive negative word of mouth (NWOM).	Positive word of mouth and Negative word of mouth are mediating variables	Therefore, satisfaction and trust have a favourable impact on the intention to continue using an electronic wallet. NWOM is known to negatively impact a company's potential and existing customers to the point that it makes them have a bad attitude or even abandon the brand. At that time the PWOM is the only factor driving m-wallet users' plans to continue using the service. Thus, the study shows that the antecedents of PWOM are distinct from those of NWOM [52].
Chen and Li [53]	China	243 m-payment users	The ITC theory	Institution-based trust (IBT), trusting beliefs (TBS), Post-PU, Post-PR, Disconfirmation of pre-PU (DPU), Disconfirmation of pre-PR (DPR) and satisfaction are predictors of Continuance Intention (CI).	Satisfaction	According to the findings, CI for mobile payment services is significantly influenced by customer satisfaction. Institutional trust has a positive impact on post-adoption perceived utility and a negative impact on post-adoption perceived risk; customer satisfaction positively influences both institutional trust in mobile payment technologies and beliefs in service providers. The finding implies that trusting beliefs (TBs) might either directly or indirectly influence the intention to continue using mobile payment services (MPS) through influencing mediating factors (flow). This also suggests that the substantial correlation between TBs and customer satisfaction may still have theoretical value [53].
Mensah [54]	China	M-wallets users	Technology acceptance model and diffusion of innovation theory	perceived usefulness, perceived ease of use, perceived service quality, social influence, internet self-efficacy, relative advantage, compatibility, and complexity are the predictors of mobile payment.		The results demonstrated that internet self-efficacy is a predictor of perceived ease of use. Relative advantage, compatibility, complexity of mobile payment services, perceived ease of use and social influence were found to have a significant impact on the perceived service quality of WeChat mobile payment.

## 6. Result

Mobile internet has penetrated even the remotest corners of the world, especially in countries like India and China with huge populations. This has led to an exponential increase in e-commerce in these countries and the adoption of mobile wallets for making payments. The current study was aimed at studying the perception of consumers towards continued mobile wallet service usage. Perceived Usefulness (PU), Perceived Ease of Use (PEU), Perceived Service Quality (PSQ), Social Influence (SI), Trust in the Internet (TI), Internet Self-Efficacy (ISE), Relative Advantage (RA), Compatibility (C), Complexity (Com), and Continuance Intention to Use (CIU) were examined in a study. They found that PU, PEU, PSQ, SI, ISE, RA, C, and Com were all significant predictors of consumers' proclivity to utilise WeChat payment services on a regular basis. According to the findings, PEU and PSQ had a beneficial influence on the use of mobile payment services. It also supplied first-hand statistics demonstrating the major impact of SI on the PSQ of mobile payment services taken from the previous study [54].

When structural equation modelling to uncover the factors that impact the continuation of mobile wallet usage in Indonesia, it was found that characteristics such as trust, flow, and contentment affected the continued use of mobile wallets. Furthermore, quality considerations included system quality, service quality, and information quality, all of which have a direct impact on trust and flow is taken from the previous study [35].

Many developing countries, such as India, have concentrated on removing the scourge of black money from their economies, emphasising a transparent online payment facility such as M-wallets. The impact of perceived utility, perceived security, perceived simplicity of use, trust, grievance redressal, and contentment on the intention of young users in India to continue using M-wallets was studied. According to the findings, perceived utility and perceived simplicity of use have a substantial impact on user satisfaction and the desire to continue using M-wallets is taken from the previous study [55].

A study in China with 219 mobile payment users, evaluated parameters such as Trust in online payment (TOP), Perceived similarity (PS), Perceived entitativity (PE), Trust in mobile payment (TMP), Satisfaction (SAT), and Continuance intention (CI) Lingling *et.al* [36].

These findings further highlighted the significance of satisfaction as a factor determining continuation intention. Furthermore, confidence in online payment, perceived resemblance, and perceived entitativity between online and mobile payments were found to have a significant influence on trust in mobile payment is taken from the previous study [35].

In the Chinese population, structural equation models were also used to investigate the influence of initial trust on mobile payment user uptake. Their research demonstrated the significance of perceived security, perceived ubiquity, and perceived convenience in establishing early trust, which influences perceived utility and usage intention is taken from the previous study [8].

The Technology Acceptance Model (TAM), the Unified Theory of Acceptance and Use of Technology (UTAUT), and the more current UTAUT2 are the two key theoretical frameworks for understanding how consumers adopt technology. These models have been applied to the studies on mobile payment uptake are taken from the previous studies [56-58]. The Theory of Reasoned Action has been adapted into TAM. TAM's goal is to give a broad explanation of the determinants of computer acceptance that may explain user behaviour towards a variety of end-user computing technologies and user demographics while being both parsimonious and theoretically justifiable. TAM defines perceived utility and perceived ease of use as two characteristics of acceptance behaviour Slade *et al.*, [59]. UTAUT is based on four fundamental constructs: performance expectation, effort expectation, social influence, and enabling conditions is taken from the previous

study [17]. The first three are factors of usage intention and behaviour, whereas the fourth is a user behaviour determinant. This theory was developed and reviewed using eight previous models: the theory of reasoned action, technology acceptance model, motivational model, social cognitive theory, personal computer use model, diffusion of innovation theory, methods of planned behaviour, personal computer use model, and a combined theory of planned technology/behaviour acceptance model. TAM and UTAUT2 were used to study variables influencing user recommendations to utilise mobile wallets. The following factors were shown to have a substantial impact on user intention: ease of use, usefulness, perceived risk, and attitude Slade *et al.*, [59]. A study was conducted on the French population to discover the characteristics influencing the intention to make purchases using a mobile phone using the Technology acceptance model (TAM). Concerns about the influence of pleasure on the desire to make purchases using smartphones and the effect of perceived happiness on the intention to do transactions using smartphones is taken from the previous study [58].

A study investigated factors influencing non-users' intentions to accept Remote Mobile Payment (RMP) in the UK, employing the Unified Theory of Acceptance and Use of Technology (UTAUT) It can be changed to improve adoption and encourage the continued acceptance of mobile payment Slade *et al.*, [59]. A study investigated the factors that influence users' post-adoption continuance intention (CINT) for an M-wallet using a novel Extended Expectation-Confirmation Model (EECM) that amalgamates features of the unified theory of acceptance and use of technology (UTAUT) is taken from the previous study [37], a pre-adoption model, and the expectation-confirmation model (ECM), a post-adoption model is taken from the previous study [56]. The technology acceptance model (TAM) is taken from the previous study [57] and the unified theory of acceptance and use of technology (UTAUT) is taken from the previous study [41], were also applied to study the drivers of intention to use P2P M-pay among Spanish smartphones. The results showed that usefulness, subjective norms, and personal innovativeness had particularly strong direct effects on intention to use. It was also noted that perceived trust, individual mobility, and perceived risk had significant effects. A study evaluated e-wallet usage among Malaysian hospital clients. The following theories were used: Mobile Technology Acceptance Model (MTAM), Critical Mass Theory, Self-efficacy Theory, and Flow Theory. The study found that technical self-efficacy and perceived critical mass had no influence on the intention to use a mobile wallet in Malaysia is taken from the previous study [60].

Artificial Neural networks were used to study the reasons for mobile wallet resistance in the Malaysian public using the Innovation resistance theory (IRT) model. M-wallet resistance was influenced negatively by education and perceived novelty Leong *et al.*, [61].

The COVID-19 pandemic has caused immense fatalities globally. The WHO report [62] says the first case of the outbreak was reported in Wuhan, Hubei, China, in December 2019. The spread of the disease was through social interactions. By 18<sup>th</sup> April 2020, more than 2.1 million cases were reported all over the world Kidam *et al.*, [63]. Technology has played a significant role in facilitating social distancing in payment systems, especially in response to the COVID-19 pandemic. Technology, particularly mobile wallets, has been instrumental in promoting social distancing in payment systems by reducing physical contact and enabling contactless transactions. These innovations have not only provided convenience but have also contributed to public health and safety during the COVID-19 pandemic and beyond.

Therefore, multiple stakeholders must work together to persuade consumers to switch from conventional payment methods to mobile wallet apps. Although the consumer plays a significant role, other parties need to work together as well, including the government, financial institutions like banks, mobile providers, and retailers. Governments, banks, and network operators need to create an environment that encourages the use of mobile applications while retailers must urge customers in that direction, resulting in a seamless customer experience. Users are also encouraged to use the

mobile wallets continuously for longer periods of time if constant innovations and developments are going on.

This study aimed to create a model to investigate the dynamics of trust development in third-party mobile payment systems. They studied the possibility of major disparities in trust-building processes between female and male consumers in the context of mobile payment. An empirical study was carried out, and responses were obtained from 740 Chinese Alipay and WeChat pay users. A multi-group analysis revealed that the relative importance of trust-building strategies varies by gender. In particular, male consumers were more influenced by mobility and reputation while creating trust, whereas female customers were more influenced by security and customisation Shao *et al.*, [47].

## 7. Conclusion

This systematic review clearly reveals that perceived utility, perceived familiarity, satisfaction and trust are the primary elements affecting customer behaviour toward continuous use of mobile payment services. As a result, mobile wallet service providers must continue to endeavour to improve the system, service, and information quality of their m-wallet applications. Enhancing the quality can increase the user experience and contentment, which will lead to a continued intention to use M-wallet services.

Future studies in this domain should consider the cultural differences between the various study populations included in the studies, as well as the inclusion of appropriate cultural dimensions in their research models aimed at studying factors influencing the continued use of mobile payment services. As a result, mobile wallet service providers must continue to endeavour to improve the system, service, and information quality of their m-wallet applications. Enhancing the quality can increase the user experience and contentment, which will lead to a continued intention to use M-wallet services.

## Acknowledgement

This research was not funded by any grant.

## References

- [1] Kumar, Anup, Amit Adlakaha, and Kampan Mukherjee. "The effect of perceived security and grievance redressal on continuance intention to use M-wallets in a developing country." *International Journal of Bank Marketing* 36, no. 7 (2018): 1170-1189. <https://doi.org/10.1108/IJBM-04-2017-0077>
- [2] Kim, Byoungsoo, Minnseok Choi, and Ingoo Han. "User behaviors toward mobile data services: The role of perceived fee and prior experience." *Expert Systems with Applications* 36, no. 4 (2009): 8528-8536. <https://doi.org/10.1016/j.eswa.2008.10.063>
- [3] Chawla, Deepak, and Himanshu Joshi. "Consumer attitude and intention to adopt mobile wallet in India—An empirical study." *International Journal of Bank Marketing* 37, no. 7 (2019): 1590-1618. <https://doi.org/10.1108/IJBM-09-2018-0256>
- [4] Mensah, Isaac Kofi. "Factors influencing the intention of university students to adopt and use e-government services: An empirical evidence in China." *Sage Open* 9, no. 2 (2019): 2158244019855823. <https://doi.org/10.1177/2158244019855823>
- [5] Ghosh, Arunava. "Turning India into a cashless economy: the challenges to overcome." *Available at SSRN* 2989290 (2017). <https://doi.org/10.2139/ssrn.2989290>
- [6] Statista. "Mobile Payments Worldwide – Statistics & Facts." (2019). [online] <https://www.statista.com/topics/4872/mobile-payments-worldwide>
- [7] Rabaa'i, Ahmad A. "An investigation into the acceptance of mobile wallets in the FinTech era: An empirical study from Kuwait." *International Journal of Business Information Systems* 1, no. 1 (2021): 1. <https://doi.org/10.1504/IJBIS.2021.10038422>

- [8] Zhou, Tao. "The effect of initial trust on user adoption of mobile payment." *Information development* 27, no. 4 (2011): 290-300. <https://doi.org/10.1177/0266666911424075>
- [9] Zeithaml, Valarie A., Leonard L. Berry, and Ananthanarayanan Parasuraman. "The behavioral consequences of service quality." *Journal of marketing* 60, no. 2 (1996): 31-46. <https://doi.org/10.1177/002224299606000203>
- [10] Yang, Zhilin. "Consumers' perception of service quality in internet commerce: Strategic implications." In *American Marketing Association. Conference Proceedings*, vol. 12, p. 76. American Marketing Association, 2001.
- [11] Routray, Susmi, Reema Khurana, Ruchi Payal, and Rakesh Gupta. "A move towards cashless economy: A case of continuous usage of mobile wallets in India." *Theoretical Economics Letters* 9, no. 04 (2019): 1152. <https://doi.org/10.4236/tel.2019.94074>
- [12] Srinivasan, Srini S., Rolph Anderson, and Kishore Ponnnavolu. "Customer loyalty in e-commerce: an exploration of its antecedents and consequences." *Journal of retailing* 78, no. 1 (2002): 41-50. [https://doi.org/10.1016/S0022-4359\(01\)00065-3](https://doi.org/10.1016/S0022-4359(01)00065-3)
- [13] Ribbink, Dina, Allard CR Van Riel, Veronica Liljander, and Sandra Streukens. "Comfort your online customer: quality, trust and loyalty on the internet." *Managing Service Quality: An International Journal* 14, no. 6 (2004): 446-456. <https://doi.org/10.1108/09604520410569784>
- [14] Zeithaml, Valarie A., Ananthanarayanan Parasuraman, and Arvind Malhotra. *A conceptual framework for understanding e-service quality: implications for future research and managerial practice*. Vol. 115. Cambridge, MA: Marketing Science Institute, 2000.
- [15] Zeithaml, Valarie A., Arun Parasuraman, and Arvind Malhotra. "Service quality delivery through web sites: a critical review of extant knowledge." *Journal of the academy of marketing science* 30, no. 4 (2002): 362-375. <https://doi.org/10.1177/009207002236911>
- [16] Lai, P. C. "Security as an extension to TAM model: Consumers' intention to use a single platform E-Payment." *Asia-Pacific Journal of Management Research and Innovation* 13, no. 3-4 (2017): 110-119. <https://doi.org/10.1177/2319510X18776405>
- [17] Singh, Nidhi, Neena Sinha, and Francisco J. Liébana-Cabanillas. "Determining factors in the adoption and recommendation of mobile wallet services in India: Analysis of the effect of innovativeness, stress to use and social influence." *International Journal of Information Management* 50 (2020): 191-205. <https://doi.org/10.1016/j.ijinfomgt.2019.05.022>
- [18] Bhattacharjee, Anol. "Understanding information systems continuance: An expectation-confirmation model." *MIS quarterly* (2001): 351-370. <https://doi.org/10.2307/3250921>
- [19] Alexandris, Konstantinos, and Euaggelia Palialia. "Measuring customer satisfaction in fitness centres in Greece: an exploratory study." *Managing Leisure* 4, no. 4 (1999): 218-228. <https://doi.org/10.1080/136067199375760>
- [20] Larson, Brian V., and Ross B. Steinman. "Driving NFL fan satisfaction and return intentions with concession service quality." *Services Marketing Quarterly* 30, no. 4 (2009): 418-428. <https://doi.org/10.1080/15332960903199430>
- [21] Kim, Byoungsoo. "An empirical investigation of mobile data service continuance: Incorporating the theory of planned behavior into the expectation-confirmation model." *Expert systems with applications* 37, no. 10 (2010): 7033-7039. <https://doi.org/10.1016/j.eswa.2010.03.015>
- [22] Setterstrom, Andrew J., J. Michael Pearson, and Robert A. Orwig. "Web-enabled wireless technology: an exploratory study of adoption and continued use intentions." *Behaviour & Information Technology* 32, no. 11 (2013): 1139-1154. <https://doi.org/10.1080/0144929X.2012.708785>
- [23] Yang, Shuiqing, Yaobin Lu, Sumeet Gupta, Yuzhi Cao, and Rui Zhang. "Mobile payment services adoption across time: An empirical study of the effects of behavioral beliefs, social influences, and personal traits." *Computers in Human Behavior* 28, no. 1 (2012): 129-142. <https://doi.org/10.1016/j.chb.2011.08.019>
- [24] Qasim, Huda, and Emad Abu-Shanab. "Drivers of mobile payment acceptance: The impact of network externalities." *Information Systems Frontiers* 18 (2016): 1021-1034. <https://doi.org/10.1007/s10796-015-9598-6>
- [25] Gupta, Anil, Neeraj Dhiman, Anish Yousaf, and Neelika Arora. "Social comparison and continuance intention of smart fitness wearables: An extended expectation confirmation theory perspective." *Behaviour & Information Technology* 40, no. 13 (2021): 1341-1354. <https://doi.org/10.1080/0144929X.2020.1748715>
- [26] Alhassan, Muftawu Dzang, Emmanuel Awuni Kolog, and Richard Boateng. "Effect of gratification on user attitude and continuance use of mobile payment services: a developing country context." *Journal of Systems and Information Technology* 22, no. 4 (2020): 351-378. <https://doi.org/10.1108/JSIT-01-2020-0010>
- [27] Kapoor, Ashwarya, Rajiv Sindwani, and Manisha Goel. "Mobile wallets: Theoretical and empirical analysis." *Global Business Review* (2020): 0972150920961254. <https://doi.org/10.1177/0972150920961254>
- [28] Zhou, Tao. "Understanding the determinants of mobile payment continuance usage." *Industrial Management & Data Systems* 114, no. 6 (2014): 936-948. <https://doi.org/10.1108/IMDS-02-2014-0068>

- [29] Bhattacharjee, Anol, Johan Perols, and Clive Sanford. "Information technology continuance: A theoretic extension and empirical test." *Journal of Computer Information Systems* 49, no. 1 (2008): 17-26. <https://doi.org/10.1080/08874417.2008.11645302>
- [30] Tranfield, David, David Denyer, and Palminder Smart. "Towards a methodology for developing evidence-informed management knowledge by means of systematic review." *British journal of management* 14, no. 3 (2003): 207-222. <https://doi.org/10.1111/1467-8551.00375>
- [31] Petticrew, Mark, and Helen Roberts. *Systematic reviews in the social sciences: A practical guide*. John Wiley & Sons, 2008.
- [32] Thüerer, Matthias, Ivan Tomašević, Mark Stevenson, Constantin Blome, Steven Melnyk, Hing Kai Chan, and George Q. Huang. "A systematic review of China's belt and road initiative: Implications for global supply chain management." *International Journal of Production Research* 58, no. 8 (2020): 2436-2453. <https://doi.org/10.1080/00207543.2019.1605225>
- [33] Mongeon, Philippe, and Adèle Paul-Hus. "The journal coverage of bibliometric databases: A comparison of Scopus and Web of Science." *The journal coverage of Web of Science and Scopus: a comparative analysis*. Available online: DOI 10 (2014): 32.
- [34] Centobelli, Piera, and Valentina Ndou. "Managing customer knowledge through the use of big data analytics in tourism research." *Current Issues in Tourism* 22, no. 15 (2019): 1862-1882. <https://doi.org/10.1080/13683500.2018.1564739>
- [35] Azizah, Nadya, Putu Wuri Handayani, and Fatimah Azzahro. "Factors influencing continuance usage of mobile wallets in Indonesia." In *2018 International Conference on Information Management and Technology (ICIMTech)*, pp. 92-97. IEEE, 2018. <https://doi.org/10.1109/ICIMTech.2018.8528157>
- [36] Cao, Xiongfei, Lingling Yu, Zhiying Liu, Mingchuan Gong, and Luqman Adeel. "Understanding mobile payment users' continuance intention: a trust transfer perspective." *Internet Research* 28, no. 2 (2018): 456-476. <https://doi.org/10.1108/IntR-11-2016-0359>
- [37] Gupta, Anil, Anish Yousaf, and Abhishek Mishra. "How pre-adoption expectancies shape post-adoption continuance intentions: An extended expectation-confirmation model." *International Journal of Information Management* 52 (2020): 102094. <https://doi.org/10.1016/j.ijinfomgt.2020.102094>
- [38] Zhou, Tao. "An empirical examination of continuance intention of mobile payment services." *Decision support systems* 54, no. 2 (2013): 1085-1091. <https://doi.org/10.1016/j.dss.2012.10.034>
- [39] Dlodlo, Nobukhosi. "The relationships among service quality, trust, user satisfaction and post-adoption intentions in M-payment services." *Mediterranean Journal of Social Sciences* 5, no. 23 (2014): 165. <https://doi.org/10.5901/mjss.2014.v5n23p165>
- [40] Zhou, Tao. "Understanding the determinants of mobile payment continuance usage." *Industrial Management & Data Systems* 114, no. 6 (2014): 936-948. <https://doi.org/10.1108/IMDS-02-2014-0068>
- [41] Liébana-Cabanillas, Francisco, Nidhi Singh, Zoran Kalinic, and Elena Carvajal-Trujillo. "Examining the determinants of continuance intention to use and the moderating effect of the gender and age of users of NFC mobile payments: A multi-analytical approach." *Information Technology and Management* 22 (2021): 133-161. <https://doi.org/10.1007/s10799-021-00328-6>
- [42] Raman, Prashant, and Kumar Aashish. "To continue or not to continue: a structural analysis of antecedents of mobile payment systems in India." *International Journal of Bank Marketing* 39, no. 2 (2021): 242-271. <https://doi.org/10.1108/IJBM-04-2020-0167>
- [43] Tamara, Dewi, Catherine Widjaja, Fellia Elista, and Sarah Yassar. "Millenials endorse environment factors as continuance intention of the mobile payment technology during Covid-19 in Indonesia." *Journal of Research in Business, Economics, and Education* 3, no. 4 (2021): 126-144.
- [44] Abdul-Halim, Nurul-Ain, Ali Vafaei-Zadeh, Haniruzila Hanifah, Ai Ping Teoh, and Khaled Nawaser. "Understanding the determinants of e-wallet continuance usage intention in Malaysia." *Quality & quantity* 56, no. 5 (2022): 3413-3439. <https://doi.org/10.1007/s11135-021-01276-7>
- [45] Humbani, Michael, and Melanie Wiese. "An integrated framework for the adoption and continuance intention to use mobile payment apps." *International Journal of Bank Marketing* 37, no. 2 (2019): 646-664. <https://doi.org/10.1108/IJBM-03-2018-0072>
- [46] Lim, Xin-Jean, Phillip Ngew, Jun-Hwa Cheah, Tat Huei Cham, and Yide Liu. "Go digital: can the money-gift function promote the use of e-wallet apps?." *Internet Research* 32, no. 6 (2022): 1806-1831. <https://doi.org/10.1108/INTR-06-2021-0406>
- [47] Shao, Zhen, Lin Zhang, Xiaotong Li, and Yue Guo. "Antecedents of trust and continuance intention in mobile payment platforms: The moderating effect of gender." *Electronic Commerce Research and Applications* 33 (2019): 100823. <https://doi.org/10.1016/j.elerap.2018.100823>



- [48] Mouakket, Samar. "Investigating the role of mobile payment quality characteristics in the United Arab Emirates: implications for emerging economies." *International Journal of Bank Marketing* 38, no. 7 (2020): 1465-1490. <https://doi.org/10.1108/IJBM-03-2020-0139>
- [49] Verma, Surabhi, Sushil S. Chaurasia, and Som Sekhar Bhattacharyya. "The effect of government regulations on continuance intention of in-store proximity mobile payment services." *International Journal of Bank Marketing* 38, no. 1 (2020): 34-62. <https://doi.org/10.1108/IJBM-10-2018-0279>
- [50] Garrouch, Karim. "Does the reputation of the provider matter? A model explaining the continuance intention of mobile wallet applications." *Journal of Decision Systems* 30, no. 2-3 (2021): 150-171. <https://doi.org/10.1080/12460125.2020.1870261>
- [51] Phuong, Nguyen Ngoc Duy, Ly Thien Luan, Vu Van Dong, and Nguyen Le Nhat Khanh. "Examining customers' continuance intentions towards e-wallet usage: The emergence of mobile payment acceptance in Vietnam." *The Journal of Asian Finance, Economics and Business* 7, no. 9 (2020): 505-516. <https://doi.org/10.13106/jafeb.2020.vol7.no9.505>
- [52] Talwar, Manish, Shalini Talwar, Puneet Kaur, AKM Najmul Islam, and Amandeep Dhir. "Positive and negative word of mouth (WOM) are not necessarily opposites: A reappraisal using the dual factor theory." *Journal of Retailing and Consumer Services* 63 (2021): 102396. <https://doi.org/10.1016/j.jretconser.2020.102396>
- [53] Chen, Xiaogang, and Shaorui Li. "Understanding continuance intention of mobile payment services: an empirical study." *Journal of Computer Information Systems* 57, no. 4 (2017): 287-298. <https://doi.org/10.1080/08874417.2016.1180649>
- [54] Mensah, Isaac Kofi, Yijun Liu, and Chuanyong Luo. "Factors Influencing the Continued Acceptance of Wechat Mobile Payments by Chinese Vendors." *Information Resources Management Journal (IRMJ)* 34, no. 4 (2021): 28-47. <https://doi.org/10.4018/IRMJ.2021100102>
- [55] Kim, Gimun, BongSik Shin, and Ho Geun Lee. "Understanding dynamics between initial trust and usage intentions of mobile banking." *Information Systems Journal* 19, no. 3 (2009): 283-311. <https://doi.org/10.1111/j.1365-2575.2007.00269.x>
- [56] Venkatesh, Viswanath, James YL Thong, and Xin Xu. "Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology." *MIS quarterly* (2012): 157-178. <https://doi.org/10.2307/41410412>
- [57] Davis, Fred D. "Perceived usefulness, perceived ease of use, and user acceptance of information technology." *MIS quarterly* (1989): 319-340. <https://doi.org/10.2307/249008>
- [58] Agrebi, Sinda, and Joël Jallais. "Explain the intention to use smartphones for mobile shopping." *Journal of retailing and consumer services* 22 (2015): 16-23. <https://doi.org/10.1016/j.jretconser.2014.09.003>
- [59] Slade, Emma L., Yogesh K. Dwivedi, Niall C. Piercy, and Michael D. Williams. "Modeling consumers' adoption intentions of remote mobile payments in the United Kingdom: extending UTAUT with innovativeness, risk, and trust." *Psychology & marketing* 32, no. 8 (2015): 860-873. <https://doi.org/10.1002/mar.20823>
- [60] Lew, Susan, Garry Wei-Han Tan, Xiu-Ming Loh, Jun-Jie Hew, and Keng-Boon Ooi. "The disruptive mobile wallet in the hospitality industry: An extended mobile technology acceptance model." *Technology in Society* 63 (2020): 101430. <https://doi.org/10.1016/j.techsoc.2020.101430>
- [61] Leong, Lai-Ying, Teck-Soon Hew, Keng-Boon Ooi, and June Wei. "Predicting mobile wallet resistance: A two-staged structural equation modeling-artificial neural network approach." *International Journal of Information Management* 51 (2020): 102047. <https://doi.org/10.1016/j.ijinfomgt.2019.102047>
- [62] COVID, Coronavirus. "dashboard, 2020 (2021)." *Publisher: Government of Bangladesh Directorate General of Health Services* (19).
- [63] Kidam, Kamarizan, Siti Aishah Rashid, Jafri Mohd Rohani, Hafizah Mahmud, Hamidah Kamarden, Fateha Abdul Razak, Nurul Nasuha Mohd Nor, and Nur Kamilah Abdul Jalil. "Development of Instrument to Measure the Impact of COVID-19 And Movement Control Order to Safety and Health Competent Person and Training Provider." *Journal of Advanced Research in Technology and Innovation Management* 2, no. 1 (2022): 22-28.