

# Consumers' Digital Wallet Adoption: Integration of Technology Task Fit and UTAUT


Chinmay O. Baxi, V.M. Patel College of Management Studies, Ganpat University, India

Kiran J. Patel, V.M. Patel College of Management Studies, Ganpat University, India

Kundan M. Patel, V.M. Patel College of Management Studies, Ganpat University, India\*

Vipul B. Patel, V.M. Patel College of Management Studies, Ganpat University, India

Vishal A. Acharya, V.M. Patel College of Management Studies, Ganpat University, India

 <https://orcid.org/0000-0001-8936-2769>

## ABSTRACT

This empirical study aims to examine what drives consumers' behavioral intention to adopt digital wallet by integrating task technology fit theory into UTAUT model. For this purpose, 700 samples were approached through emails, out of which 479 valid responses were solicited. To test and validate the proposed research model, CFA and SEM were performed using AMOS 20. The results of this study highlighted that task technology fit emerged as one of the significant factors among all factors included in the model with direct and indirect effect on behavioral intention. More interestingly, effort expectancy, hedonic motivation, and cost are found to be other significant predictors of consumers' digital wallet adoption. The outcomes of this study provide valuable insights for digital wallet service providers, system developers, and governments for their strategic decision to enhance the adoption of digital wallet in the upcoming digital era. This study contributes specifically in the area of digital wallet adoption and information system acceptance in general.

## KEYWORDS

Adoption, Confirmatory Factor Analysis (CFA), Digital Payment, Structural Equation Modeling (SEM), TTF, Unified Theory of Acceptance and Use of Technology

## INTRODUCTION

Rapid expansion and penetration of the Internet and smartphones has provided new dimensions to the banking and financial services industries. Digital transactions across countries are increasing due to the high rate of adoption of smartphones, high availability of low-cost Internet, and favorable government policies. Mobile phones have evolved from primarily tools for making calls to multi-tasking devices that take care of routine tasks for individuals. The banking and financial industry is experiencing change, including sliding from digital payments to mobile payments. This change is

DOI: 10.4018/IJABIM.334016

\*Corresponding Author

This article published as an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>) which permits unrestricted use, distribution, and production in any medium, provided the author of the original work and original publication source are properly credited.

mainly fueled by mobile-wallet technology. According to Manikandan and Chandramohan (2016), a mobile wallet is an application that links a user's bank account with their mobile phone to carry out a digital payment. According to the Zion Market Research Report (2018), the "market share of mobile wallets in the digital transaction is expected to reach \$3,142.17 billion by 2022."

According to the Reserve Bank of India (2018) report, there are more than 50 mobile-wallet service providers in India. This indicates that there is growth in terms of mobile-wallet adoption. Based on the payment system indicators used by the Reserve Bank of India (2019), there has been a growth of 21% in the number of digital transactions. In India, mobile-wallet growth has still not reached its full potential. This raises the questions: What drives users to adopt mobile wallets? What factors influence mobile wallet adoption? These questions require scientific inquiry and are addressed in the present study.

Recently, mobile-wallet adoption has been one of the developing areas of study across social science research. It has been studied from various dimensions, including consumer, technology, financial and socio-economic perspectives, but the root of all these studies is in information system (IS) science domain—technology adoption. The IS literature has identified the common drivers of technology adoption. These are performance expectancy, effort expectancy, facilitating condition, social influence and habit (Dahlberg, Mallat, & Öörni, 2003; Ondrus & Pigneur, 2006).

There are several reasons behind the selection of the unified theory of acceptance and use of technology (UTAUT) theoretical model. First, it provides a unified view of theory. Second, it integrates eight dominant theoretical models, which were used to check technology adoption. Third, it has covered all the common factors that drive the behavioral intention to adopt technology (Venkatesh et al., 2003).

According to Apama et al. (2015), unavailability of stable Internet and scant knowledge of technical aspects among consumers in many places in India are the major issues that adversely impact the adoption of digital wallets among Indian consumers. Prior research also indicates that India's socio-economic environment and culture plays a very important role among consumers in deciding to adopt technology (Erumban & Jong, 2006). Issues related to technology adoption in the Indian context have been highlighted with limited scope and context.

The pandemic accelerated the use of contactless mobile payment systems and laid a foundation for continued adoption of these systems even post pandemic. However, in a post-pandemic world, users that used a mobile payment system during the pandemic may opt to return to using traditional payment methods after the pandemic. Retaining these consumers as continual mobile payment system users is vital for contactless mobile payment service providers (Bhattacharjee, 2001) as contactless mobile payment technology has become a vital part of business growth (Al-Qudah et al., 2022).

The main objective of the present paper is to identify the factors that influence Digital-wallet adoption. A second objective is to integrate the drivers from other theoretical models into the UTAUT model. Third, we aim to enhance the body of knowledge of technology adoption by testing the UTAUT theoretical model. Finally, we empirically test the UTAUT model specifically in the Digital-wallet context.

In the first section of the paper, the literature review is carried out. The second section develops the relevant hypotheses. In the third section, we discuss the research methods and design, and we present the results of a confirmatory factor analysis and path analysis. This is followed by a discussion of the limitations of the study and future directions for research.

## **THEORETICAL BACKGROUND**

UTAUT is one of the most widely accepted theoretical models in the domain of IS. It was developed by combining eight theories of information systems. To summarize, UTAUT includes:

*A review and synthesis of eight theories/models of technology use, namely, Innovation Diffusion Theory (IDT) adopted by Moore and Benbasat (1991); Theory of Reasoned Action (TRA) by Fishbein*

21 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/article/consumers-digital-wallet-adoption/334016](http://www.igi-global.com/article/consumers-digital-wallet-adoption/334016)

## Related Content

---

### Agricultural Productivity in Indonesian Provinces

Khee Giap Tan, Nurina Merdikawatiand Ramkishen S. Rajan (2016). *International Journal of Asian Business and Information Management* (pp. 26-39).

[www.irma-international.org/article/agricultural-productivity-in-indonesian-provinces/159910](http://www.irma-international.org/article/agricultural-productivity-in-indonesian-provinces/159910)

### The Evidence of a Thai Restaurant's Mass Customization Implementation for Firm Survival During the Pandemic Crisis

Intaka Piriyakul, Nart-Anong Nambuddee, Rapepun Piriyakuland Montree Piriyakul (2023). *International Journal of Asian Business and Information Management* (pp. 1-19).

[www.irma-international.org/article/the-evidence-of-a-thai-restaurants-mass-customization-implementation-for-firm-survival-during-the-pandemic-crisis/323797](http://www.irma-international.org/article/the-evidence-of-a-thai-restaurants-mass-customization-implementation-for-firm-survival-during-the-pandemic-crisis/323797)

### Serving Local Produce in Homestays for Socio-Economic Development in Uttarakhand

Ashish Dhyani, Vinay Rana, Garima Dimri, Rajat Praveen Dimri, Archana Dhyaniand Sunil Kumar Lal (2025). *Global Practices and Innovations in Sustainable Homestay Tourism* (pp. 259-268).

[www.irma-international.org/chapter/serving-local-produce-in-homestays-for-socio-economic-development-in-uttarakhand/377566](http://www.irma-international.org/chapter/serving-local-produce-in-homestays-for-socio-economic-development-in-uttarakhand/377566)

### First African Female to Manage a Global Crisis: Liberian President Ellen Johnson-Sirleaf Management of 2014 Ebola Epidemic

Matthew Waritay Guah (2020). *Cases on Global Leadership in the Contemporary Economy* (pp. 31-58).

[www.irma-international.org/chapter/first-african-female-to-manage-a-global-crisis/237819](http://www.irma-international.org/chapter/first-african-female-to-manage-a-global-crisis/237819)

### Determinants of Sustainability of the Micro-Finance Sector in India

Sodi Jasbir Kaurand Jehangir Bharucha (2023). *International Journal of Asian Business and Information Management* (pp. 1-11).

[www.irma-international.org/article/determinants-of-sustainability-of-the-micro-finance-sector-in-india/332004](http://www.irma-international.org/article/determinants-of-sustainability-of-the-micro-finance-sector-in-india/332004)