# Perceived Value Of Mobile Payment Apps: A Literature Review

Mrs. Vidhya A Hittalmani<sup>1</sup>, Dr. Umesh B Patwardhan<sup>2</sup>

<sup>1</sup>Research Scholar for Ph.D Program, Department of Commerce and Management, Vishwakarma University, Kondhwa Budruk, Pune 411048 e-mail id- <u>vidhya.hittalmani123@gmail.com</u> <sup>2</sup>Professor, Faculty of Commerce and Management, Vishwakarma University, Pune 411048 e-mail id- <u>umesh.patwardhan@vupune.ac.in</u>

## Abstract:

Mobile wallet is a natural advance step in the development of payment methods. It is an opportunity for financial growth and is becoming a common tool for carrying out various financial transactions. It can support several transactions including consumer to consumer, consumer to business, consumer to machine, and consumer to online. The widespread penetration of mobile payment systems could drastically change the methods in which consumers purchase goods and services. The main objective of this research is to build antecedents and outcomes of perceived value in the context of using mobile payment apps. To accomplish this objective, the researcher surveyed around 50 literatures with reference to the utility of mobile payment apps. From the study it was revealed that ease of use, convenience, anytime and anywhere was the common associated value by the users with mobile payment apps.

Keywords: mobile payment, perceived value, utility, convenient.

## Introduction:

The rapid evolution of internet access has ushered in mobile payment transactions (Melissa Teoh et al. 2020) and mobile payment systems are probably to be the most commonly used cashless payment method (Melissa Teoh et al. 2020; Cocosila and

Trabelsi 2016). Mobile payment (MP) is, "any payment where a mobile device is used to initiate, authorize and confirm an exchange of financial value in return for goods and services" (Au and Kauffman, 2008). It is any wireless means to initiate, activate or confirm a payment. (Geva, 2012). Mobile payment systems are either done remotely (far-end) or locally (proximate payments) (near-end) (Kumar, et al. 2020; Flavian et al., 2020). There are five types of Mobile payment (Kumar, et al., 2020) that is SMS-based Payment, Action bill payment, Mobile device network payment, Wireless Application Protocol (WAP), Application payments (APP), and Contactless payments (Tap and Go).

Given the rich landscape of commercially available mobile payment solutions in the India, Krithika Ramani (2021) in her blog discussed about Top 10 Digital Wallets In India & UPI Payment App – 2021 Edition and the top pick mobile payment app is Google Pay, followed by Phonepay, Dhani, BHIM Axis pay, PayTM, Mobiwik, YonobySBI, ICICI pockets, HDFC PayZapp and lastly AmazonPay. Also, in TechCrunch (American online newspaper focusing on high tech and startup companies), Manish Singh (2021) adds a blog and reported about some of the facts produced by Narendra Yadav, vice president of Paytm, in his statement that, "Paytm claims top spot in India's mobile payments market with 1.2B monthly transactions".

Pai, n.d. (2018) revealed that majority of the respondents surveyed preferred using digital-wallets for Recharge purpose (92.22%) followed by Online Shopping (63.33%). Also 60% of the respondents surveyed prefer using digital-wallets for Food/Movie tickets respectively. About 50.56% of the respondents surveyed prefer using digital-wallets for utility bill payments and 42.22% for transportation while 37.78% preferred to Transfer money. In another study by Anitha K M (2019), it was revealed that respondents prefer using E-wallet for recharge purpose (68.3%) followed by money transfer (61.7%), bill payment (61.7%) and online purchasing (58.3%). So it can be seen that preference for mobile payment apps for paying bills and transfer purpose is on the higher side.

Many theories from consumer behavior literature assume that the consumers' choice is determined by the perceived value of a given product in comparison with different options (Sheth, Newman and Gross, 1991). As the concept of value is highly subjective in nature,

there is a need to understand it deeply with regards to mobile payment. On one side, various previous studies points the fact that there is low penetration of mobile payment solutions to consumers' perceptions, since consumers believe that mobile payment provides little or no value over existing traditional payment methods (Ondrus, Lyytinen and Pigneur, 2009; Pham and Ho, 2015). On the other side it was also evident that, Several aspects that may be considered important for using mobile payment apps were not studied such as product novelty (Karjaluoto et al., 2019), perceived useful (C. Wang, 2014) and the role of perceived value in driving the use of mobile payment apps. So, it becomes interesting for the researcher to understand about the mobile payment apps with reference to its value.

## **Significance of the Study:**

A mobile phone furnished with utilities from bank cards, credit cards, membership cards is considered as m-wallet, which is the replacement of a regular wallet (Shin, 2009). It is apt for different types of businesses and integrates various payment methods to help users to make payments (Singh et al., 2020). Mobile payment can be used in a range of payment situations such as payment for digital content (e.g. ring tones, logos, news, music, or games), concert or flight tickets, parking fees, and transportation such as bus, underground, train, and taxi fares (Dahlberg et al.,2006)

As per Statista 2022, total value of digital payments in India from financial year 2018 to 2022, is 0.91, 6.26, 18.78, 41.11 and 86.72 (in billion Rs.) which shows increasing trend and the estimate for 2023 is 92.3. Times of India (2022) reports about various payment methods used in 2021, prepaid card (1%), Prepay (2%), Buy now pay later (3%), cash on delivery (9%), Bank transfer (12%), Credit card (13%), Debit card (15%) and Digital mobile wallet (45%) which shows that digital wallets are the leading e-commerce payment methods.

On one side Kothari (2018) mentioned that people do not use digital payment due to lack of trust. On the other side it was revealed that customer will use the product or service to determine the expected value if the expected benefits are greater than its risk (Ryu, 2018). So to explore the value associated with mobile payment apps, in this research, the researcher tried to explain about perceived value for the use of mobile payment apps.

It could be argued that there is a need for understanding the factors affecting consumers' decisions to take advantage of mobile payment market. It was found that ease of use, convenience and time saving, anytime and anywhere are the dominant factors as considered by the consumers in adopting mobile payment apps.

**Objectives of the Study:** To identify the value in using mobile payment apps.

## **Research Methodology:**

Secondary data is used by the researcher by downloading and reviewing several research papers, articles, proceedings, case studies and thesis. Some of the blogs on mobile payment apps were also taken for understanding the value perceived by the users. Researchers have studied the contribution made by different scholars/ researcher across various countries such as Vietnam, China, Georgia, UK, Ghana, South Africa, etc. which helped in generating the document about the perceived value of consumers with mobile payment apps.

Literature was reviewed from various journals such as International Journal in Management and Social Science, Emerald Insight, International Journal of Engineering and Management research, Economic Research, International Journal of Operations & Production Management, International Journal of Research and Analytical Reviews. Cogent Business & Management, UK Academy for Information Systems (Conference Proceedings 2019).

Data collected is based on the consumers' intent for using mobile payments with respect to perceived value / utility. Methodological Review is used in the study by reviewing the literature from the year 2000 to 2021. Rational for choosing this method was to understand the importance of the value and its influence on the consumers' while using mobile payments.

#### **Review of Literature:**

- 1. Convenience is one of the main value-adding features offered by mobile commerce applications (Anckar and Dincau, 2002)
- 2. Pihlstrom and Brush (2008) suggest that all mobile services save time and money, hence a monetary value could be attached to its use.

- According to a study of Pihlstrom (2008), emotional value positively affected word of mouth behavior in the mobile service context.
- 4. Consumer finds convenient factor which facilitates in using the technology transaction (Truong, Simmons, McColl, & Kitchen, 2008) through mobile payment app.
- 5. More is the benefit, greater is the perceived value and the greater is the satisfaction (Hsu et al., 2010).
- Kotler and Keller (2012) defined customer perceived value as the difference between the customer's evaluation of all the benefits and all the costs of an offering and the perceived alternatives.
- 7. The omnipresence of mobile payment has been considered as the main benefit as against other online and offline payment methods (Zhou, 2013)
- 8. Thakur and Srivastava (2013) revealed that perceived usefulness, perceived ease of use and social influence are found to be significant dimensions to adopt mobile commerce in India.
- M-wallets are handy and can easily be accepted. Therefore, mwallets can clearly add value and bring benefits to users (Wang, 2014)
- 10. Slade, E., Williams, M. D., Dwivedi, Y., & Piercy, N. (2015) explored about consumers proximity to mobile payment systems using UTAUT2 model which shows performance expectancy strongly influential for behavioral intention.
- 11. Pham and Ho, 2015 low penetration of mobile payment solutions exist as consumers' perceive little or no value over existing traditional payment methods
- 12. Cocosila and Trabelsi (2016) have investigated the adoption of proximity MP through an integrated value risk model, where determinants of value included utilitarian, enjoyment and social values as benefits while the sacrifices side incorporated multiple facets of risk.
- 13. De Kerviler, Demoulin and Zidda (2016) found a positive relationship between the economic benefits of money saving and using a smartphone for information search and payment for shopping.
- 14. Earlier studies have also found that there is significant positive relationship between enjoyment perception and the perceived

- value of mobile payment (Koenig-Lewis et al., 2015; Cocosila and Trabelsi, 2016).
- 15. Perceived value is also associated with mobile payments (Cocosila and Trabelsi, 2016).
- Matemba, Li & Elizabeth (2017) examined that consumers' willingness to adopt and use mobile wallet is significantly associated.
- 17. Zhi Zhang, Ji-Eun Choi, Moon-Seop Kim (2018) reflects that how psychological benefits mediates the relationship between the intention for using mobile payment systems and the ease of use and its usefulness.
- 18. Reena Patel (2018) aimed to find out the factors favored by users' of mobile wallet and attributes influencing the usage intention by various occupational groups. Technology adoption is dependent on the age which is highlighted in the research paper. Student-youngsters and businessmen are highly aware about mobile wallet as compared to other profession.
- 19. Pai N.D (2018) attempted to reveal the awareness about digital-wallet for rural region and surprisingly it was found to be high. Increased penetration of internet connectivity and affordable smart phones has led to an increase in the number of digital wallet users.
- 20. Prajod Sunny (2018) in his conceptual study adapted Technology Acceptance Model (TAM) and Unified Theory on Acceptance and Use of Technology (UTAUT) model which he supplemented with new constructs and proposed research framework including five independent variables namely ease of use, social influence, demonetisation, promotional offers and perceived security and four dependent variables such as behavioural intention to use, trust, perceived usefulness and intention to recommend.
- 21. (Tankovic and Benazic 2018) points out that Peer-to-peer transaction between merchants and users is allowed by mobile wallets without any geographical constraints
- 22. Susmi Routray, Reema Khurana, Ruchi Payal, Rakesh Gupta stress on the fact that information quality had a significant relationship with perceived usefulness.
- 23. In a piece of study by Tanzila Ayaz Sayed et al., (2018) private sector payment apps work more in advance form as compared to public sector payment apps like BHIM.

- 24. Aritra Brahma, Rajasi Dutta (2018) supports to the fact that incentive systems are the positive signs for the progress of cashless payments in India. However, some kind of negative perceptions or threats are holding back many from adopting the new system.
- 25. Haidong Zhao, Lini Zhang (2019) revealed about financial incentives and strong promotional activity to improve consumers' intention to adopt NFC mobile payment.
- 26. Eswaran (2019) presents that digital payment improves the quality of decision making for buying products.
- 27. Dr. Yogesh Puri and Rakesh Kumar (2019) growth of digital-wallets in India is due to the fact that consumers are relying on the digital life style to make things convenient.
- 28. (Hassan Alhallaq, Muhammad Younas, Samia Kamal, Bob Champion 2019) mentioned that ease of registration and use of MP as a service accessible anytime and anywhere is the convenience value as consumers' perceived utility.
- 29. Mobile Payment offers convenience, effectiveness and costsaving (Merhi, Hone, Tarhini, & Ameen, 2020) to the consumers.

### **Findings:**

From the above literature, it is revealed that, consumers are eager to adopt to mobile payment apps for making the payments. New of payment has its own benefits and some drawbacks as perceived by the consumers. Findings reveal that value of using mobile payment apps is more as considered by the consumers over the risk of using mobile payment apps.

Positive side of many studies is as given below:

- Young generation is adopting mobile payment apps at the faster speed as compared to older generation.
- Perceived ease of use is strong influential factor of e-wallets
- Users observe the benefit of anytime and anywhere as the value while using mobile payments.
- Monetary value that is saving of money from using mobile payments apps as the consumer's perceived as compared to other payment methods
- Convenience in buying products online, brand loyalty, security, various offers and usefulness of digital wallet are the significant variables which influence consumers.

- Recharge followed by online shopping, food / movie tickets booking along with utility bill payments and money transfer were majorly used features.
- Respondents agree that e-payments to be user-friendly and comfortable.
- Paytm was mostly preferred payment app.
- Popularity of digital-wallet is more amongst the young lots such as students and employees.
- Payments through digital platform are perceived to be more comfortable and reliable.
- Digital payment mode is highly influential because of time saving and its usefulness.
- Young users prefer discount or cash back offers
- Performance expectancy followed by habit, hedonic motivation, and social influence were strongly influential on behavioral intention.

Negative aspect / Negative side of many studies is as given below

- Respondents still prefer cash as the most convenient method of payments over any other payment
- Effort expectancy, facilitating conditions, and price value were not significantly associated on behavioral intention.
- Consumers are unaware about the different facets of cashless transactions like service tax, transaction fee, security which should be stressed upon.
- Risk associated for using technology mode of payment is the hindrance for using mobile payment apps
- Safety and the security are the concerning aspects of users.

## **Conclusions and Directions for future research:**

To conclude, previous studies showed that perceived ease of use, personal innovativeness and perceived risk are the factors that strongly influence users' adoption of a new technology (Karjaluoto et al., 2019; Lu et al., 2005; Singh et al., 2020; Wang et al., 2020). The acceptance of mobile payment influences society, supporting transforming society into cashless (Merhi, Hone, Tarhini, & Ameen, 2020). Mobile payment brings more and more technology to both the business sector and to people's lives, increasing ease and bringing speed to transactions (Sommer, 2014). Au and Kauffman

(2008) propose that since consumers choose to use a combination of payment instruments and hence mobile payments must offer higher value to compete. Perceived value can understand how valuable, acceptable, and worth the product is by comparing all benefits that the user gets and how much users spend for the product or services.

The researcher surveyed about the use of mobile payment by integrating it with the perceived value. The study was carried out by using only the secondary data from some countries. Therefore, the results cannot be generalized worldwide and might not reveal mobile payment acceptance and actual user behavior in other countries. Future study is recommended to expand the research by considering primary data and perhaps including moderators that affect mobile payment usages, such as product knowledge, securing, trust and technology.

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