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# DO THE MOBILE WALLETS ARE EFFECTIVE? AN EMPIRICAL ANALYSIS AMONG THE RURAL USERS IN THE STATE OF TELANGANA

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#### Abstract

	The recent Indian mobile wallet market is in high
	diffusion stage and witnessed for an exponential growth.
	It is anticipated that the wallet market is going to incline
Keywords:	by 2020 to US\$6.6 billon. The augmented smartphone
Mobile Wallet;	usage rate, high penetration of internet and the continuous
Perceived value;	strong support by the government after the
Ease of use;	demonetization are the various reasons to embellishment
Trust;	of the mobile wallet market in India. The attractive offers
Perceived security;	of the mobile wallet companies are also another major
Self-efficacy customer	reason, which facilitates to establish the mobile wallets'
satisfaction and customer	market. Variety of applications such as, money or
loyalty.	banking transactions, mobile recharge or bill payments,
	ticket bookings, utility applications have been attracting
	the new customers in the rural area and caused for the

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rapid growth in this segment. The ease of use and the useful ness of the concerned applications are retaining the existing customers too. This paper aimed to explore the factors affecting the mobile wallet acceptance in rural India and how the explored factors, perceived value, ease of use, trust, perceived security and self-efficacy impact the customer loyalty through customer satisfaction.

## 1. Introduction

The Indian mobile wallet market is populated with various player which is driven by the mobile centric internet penetration as the reserve bank of India (RBI) issued license to different companies to provide wallet-centric services (RBI Report, 2016). Most of the mobile wallet operators are concentrated on urban areas and only few companies looking beyond the comfortable boundaries (Counterpoint research.com, 2015). Mobile devices bought the revolutionary changes in the lives of mankind at the fastest rate and to the deepest level of any consumer level technology. Mobile payments have become a hot topic in recent years, it has thus far failed to attract critical levels for mass adoption by consumers and merchants (Mallat, 2006; Pousttchi et al., 2009). Furthermore, this phenomenon is witnessed for the gradual shifting from traditional environments to virtual environment (Jack and Suri, 2011).

Mobile wallets are the instruments which enables the consumers to do the payments electronically through mobile device instead of physical wallet at the merchant's location (Shin, 2009). Mobile payment devices are usually registered with the concerned banks and enabled with high security transfer of funds from the payer's bank to the payee's bank account through irrespective of the device and payment service provider (Ng and Yip, 2010). The inclined consumption of mobile wallets is witnessed not only in India but also in many countries (Flodd et al., 2013, Chen and Nath, 2008). After the demonstration, the payments scenario is changed in India, as earlier non-cash payment transaction system is very nascent, and majority of the

retail market does not have much POS installations to offer card-based payments but now there is a huge change in cashless payment system. Even the small and large merchants also started accepting mobile wallet payment (ASSOCHAM Report, 2017).

#### 2. Research Gap and Research Problem

The existing literature towards the mobile payments shows that technology acceptance model (TAM) and unified theory of acceptance and use of technology (UTAUT) (Davis,1989; Venkatesh et al., 2003) are considered as mostly accepted framework. There are several studies on understanding the factors affecting usage intentions towards the mobile wallets (Chung and Kwon, 2009; Kleijnen et al., 2004; Laurn and Lin, 2005; Yu and Fang, 2009). There are some recent studies based on technology acceptance model (TAM) and studied about the factors of ease of use and usefulness which are affecting the mobile wallet payments (Wei et al., 2009; Dahlberg et al., 2003). There are some other studies investigated the impact of performance expectancy, effort expectancy, social influence and facilitating conditions based on the UTAT model (Yu, 2012; Zhou, 2012; Amoroso and Magnier – Watanabe, 2012).

The research on mobile wallet payments in India is still nascent and there is a need for better understanding of the factors affecting the adoption of mobile payments. The problem is existed with in both the parties, the merchants are unwilling to invest in the systems needed to enable the mobile payments and consumers will not use mobile payment systems unless merchants accept them (Begonha et al., 2002; Contini et al., 2011; De Bel and Gâza 2011). The recent past research was done on the various critical areas of mobile wallet usage such as, adoption, simplicity and usability, security, privacy and trust, cost effectiveness (Antovski and Gusev, 2003; Dahlberg et al., 2007; Karnouskos and Fokus2004; Pousttchi, 2003). But there is no a comprehensive study which reveals about the customer satisfaction and loyalty towards the usage of mobile wallets. Hence this study focused on the factors such as, perceived value, ease of use, trust, perceived security, self-efficacy impact over customer loyalty through customer satisfaction.

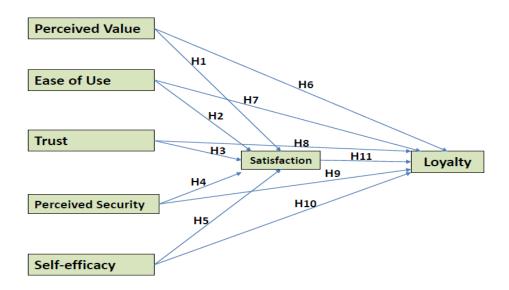
# 3. Objectives of the study

This research paper attempts to answer the following questions.

To explore the factors affecting the usage of Mobile wallets.

To examine the mediating impact of factors affecting the usage of mobile wallets on customer loyalty through satisfaction.

To address the above said questions, a hypothesized conceptual model was constructed (shown in Fig.1) based on available literature on factors affecting mobile wallet usage, customer satisfaction and loyalty.



## Fig.1 Hypothesized conceptual model

# 4. Research methodology

The primary data was collected from 140 mobile wallet users from both offline and online. A self-structured and self-administered questionnaire was used to collect the samples from the above said respondents. Totally 35 measures were derived from the past literature and all the items were measured on 7-point Likert scale. The measures for Perceived value -6, Ease of Use -4, Trust -4, Perceived Security -5, Self-efficacy -4, Satisfaction -6 and Loyalty -6 were adopted from the past literature.

#### 5. Data Analysis and Results

Results should be the major findings of your experiment. You have to compare the results with previous studies done in same. Hayes and Preacher Mediation analysis was used to test the hypotheses of  $H_1$  to  $H_{11}$ . The impact of perceived value over customer loyalty through satisfaction was tested with the hypotheses of  $H_1$ ,  $H_{11}$  and  $H_6$ . The impact of ease of use over customer loyalty through satisfaction was tested with the hypotheses of  $H_2$ ,  $H_{11}$  and  $H_7$ . The impact of trust over customer loyalty through satisfaction was tested with the hypotheses of  $H_3$ ,  $H_{11}$  and  $H_8$ . The impact of perceived security over customer loyalty through satisfaction was tested with the hypotheses of H<sub>4</sub>, H<sub>11</sub> and H<sub>9.</sub> The impact of self-efficacy over customer loyalty through satisfaction was tested with the hypotheses of  $H_5$ ,  $H_{11}$  and  $H_{10}$ . The results indicated that the  $\beta$  coefficient of total effects (C) are total effect of the concerned model are 0.784, 0.672, 0.509, 0.516 and 0.327 respectively with the standard errors of 0.034, 0.039, 0.045, 0.046 and 0.044. The  $\beta$  coefficient of direct effects (C') are total effect of the concerned model are 0.684, 0.538, 0.236, 0.262 and 0.047 respectively with the standard errors of 0.044, 0.041, 0.056, 0.054 and 0.049. The  $\beta$  coefficient of indirect effects are total effect of the concerned model are 0.207, 0.220, 0.363, 0.341 and 0.293 respectively with the standard errors of 0.022, 0.024, 0.031, 0.030 and 0.027. Based on the thumb rules of mediation analysis such as all the paths should be significant, and the direct effect should be less than the total effect we conclude that there is a partial mediation among all the variables of the proposed model. Hence the hypotheses of H<sub>1</sub> to  $H_{11}$  are considered as valid.

#### 6. Implications of the study

The findings of this study provide the insights for the small and large-scale retailers regarding the impact of different mobile wallet usage factors over the loyalty through the mediating role of satisfaction. Findings of this study revealed the scope and importance of attaining customer satisfaction in the mobile wallet consumption in their business transaction. The retailers may have the analytical information on each of the mentioned independent variables on customer loyalty through customer satisfaction. This study also provides the information to the retailers for the better understanding of the customer and the factors provoking mostly to use the mobile wallets. Hence, we can conclude that undoubtedly this article will add some knowledge to the existing literature with empirical evidence how to retain the existing customers as well as to attract the new customers.

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