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ABSTRACT

Users may continue to use or abandon a technology even after adoption. India's historic demonetization of cash, which had forced users to adopt mobile payments, was followed by the return of cash to circulation after two years. This offers a setting to investigate users' continued usage of mobile payment technology, since a majority of users continued using payment apps. We develop a research model that utilizes technology affordances and constraints theory (TACT) to study technology as contextually-embedded objects with respect to their capabilities perceived by humans. We identify the affordances and constraints that act as influencers or barriers to continued usage of mobile payment technology. We further analyze the effect of merchant and payment app companies on continued usage. We propose a survey-based methodology to gather empirical evidence for the developed research model. This study has important implications for IS research and practice since affordance theory, a novel theory for the field of mobile payments, provides a valuable lens for understanding action potential of a technology as an interplay between user and environment.

Keywords: Mobile Payments; Payment Apps; Mobile Wallets; Continued Usage; Affordances

INTRODUCTION

Historically, India as a nation has preferred cash over digital forms of financial transactions (Thakur & Srivastava, 2014). However, the demonetization policy introduced by the government of India on 8th November 2016, rendered 86% of existing banknotes invalid, and created a cash crisis that led to the inevitable transformation from ‘physical cash to digital cash’ (Mehta, et.al., 2016, p. 47). A few months into the crisis, in March 2017, one of the leading mobile Internet service providers, Reliance Jio, announced a drastic drop in Internet access prices. This resulted in an immediate surge in Internet usage all over the nation (Mehta, 2017). Subsequently, existing mobile payment apps, like Paytm and Mobikwik, started launching attractive discounts and ‘cashback’ schemes to compete against new players like Amazon Pay and Google Tez, who were equally aggressive in their offers to secure new customers (Sen, 2017).

Nearly two years after the demonetization, when cash is back in circulation, anecdotal evidence shows that there is a tendency for citizens to abandon the adopted digital payment services (Menon, 2018). A bulk of citizens have reverted to cash usage for daily transactions, and the total number of digital transactions, mainly consisting of debit/credit card payments, have reportedly dropped to levels almost the same as pre-demonetization (Kishore, 2017). Mobile payment usage has also witnessed a minor drop in the growth rates, however, over sixty percent of the new adopters still continue the use of mobile payment apps. Reports show a steady increase in the volume of digital transactions, though at a slowing rate (Sangwani, 2018). The question that emerges is why people continue to use mobile payments even when the factors that pushed them to adopt digital payments have been removed from the environment. This leads to the first research question for this paper.

Research Question 1: Why do users, who have adopted mobile payment services, continue using the technology, instead of cash?

The setting in India where mobile payment users, who have the freedom to abandon the technology and migrate back to cash, offers an appropriate setting to study the factors influencing continuance or discontinuance of a technology. IS literature has an abundance of work on technology adoption but studies on IT discontinuance are comparatively fewer (De Guinea & Markus, 2009), of which most are on intention to use (Bhattacharjee, 2001), (Zhou, 2013, 2014). Here, we focus on actual continuance, since it has not been explored in the previous works, and

study users who have chosen to continue or discontinue mobile payments. In this case of mobile payments usage in India, post demonetization, other conditions have appeared that both enable and constrain its usage, such as the cheap availability of the Internet, supporting regulations, etc.

The theory of affordances provides a lens to study technology as environmental objects with respect to the capabilities perceived by humans (Markus & Silver, 2008). The usage behaviour of distinctive cash-based users is best captured through technology affordances and constraints theory (TACT) as proposed by Majchrzak and Markus (2012). TACT overcomes the limitations of technology studied as immutable objects independent of the environment's influence, and provides perspectives related to different users, as it dynamically interacts with the context (Majchrzak & Markus, 2012). While affordances are valuable in understanding the action potentials of the technology that the users perceive, it is also essential for us to observe the constraints that result in limiting mobile payment technology use.

Research Question 2: What are the affordances and constraints influencing the continued usage of mobile payment services?

Since payment apps have tie-ups with retail merchants, there is a strong third-party influence on usage. Also, E-commerce and ride-sharing firms are responsible for the major bulk of mobile payment transactions in India (Sangwani, 2018). Mobile payment users in these two mega segments have driven mobile payments to prominence, even before demonetization. The leading merchants in these sectors offer mobile payment options from various app providers, like Paytm, Mobikwik, BHIM, and Freecharge. These merchants offer distinctive monetary discounts and features to customers for payments made through their individual payment app partners (NDTV Gadgets360.com, 2017). Certain merchants, like Uber and Ola in the ride-sharing industry, Amazon and other e-commerce websites, and other sellers, provide easy linking to payment apps. In fact, the QR-code for mobile payments available at certain merchant PoS terminals provides rapid transactions through simple scanning, using a basic phone camera, and gives an additional edge to attract consumers (Skinner, 2018). This leads to the third research question.

Research Question 3: How do the mobile payment companies and their merchant partners influence the continued usage of mobile payment services?

The rest of the paper is organized as follows. The next two sections discuss the motivation for the research and review the mobile payment literature. This is followed by the model

development using affordances and constraints as the theoretical background. The methodology and results sections consist of details of the survey to be conducted. This is followed by the discussion and conclusions.

RESEARCH MOTIVATION

The government of India has introduced various measures for greater financial inclusion. Reserve Bank of India (RBI), the central banking institution controlling national monetary policies, proposed a plan for financial inclusion in 2005 to enable micro-finance institutions as banking facilities to the rural population, followed by provision of Electronic Access Payment Points to address the issue of citizens' inaccessibility to savings accounts (Singh et al., 2014). The issue of access to bank account credits was addressed partially when in 2016, a sequence of major events, like demonetization of currency notes and cheaper Internet, caused the citizens to be pushed to adopt digital payments. About a year post the peak for digital payment adoption, 99% of the demonetized currency notes were back in circulation, providing an opportunity for users to migrate back to cash (Kishore, 2017). Study of the continuance of mobile payments would be interesting at this stage when the crisis has ended, and usage would thus result from factors beyond only the gigantic policy shock.

Continuance of IS use cannot be studied in isolation of the environment (De Guinea & Markus, 2009). Technology adoption studies have focused on the behavioral, environmental and technological factors as independent influencers (Legris, Ingham, & Collette, 2003). While current continuance usage models, evolving from adoption models (Bhattacharjee, 2001), are valuable in generic settings. When technology usage is context-specific, and affordance theory offers contextual and user-specific lenses to study a technology (Seidel, Recker, & Vom Brocke, 2013). We study the continued usage of mobile payments by historically cash-dependent users, by examining the affordances and constraints of technology.

LITERATURE REVIEW

Post-adoption continuance of usage is essential for ensuring the success of any technology in contrast to initial acceptance since users may decide to discontinue its usage (Thong, Hong, & Tam, 2006). Research in IS literature has extensively focused on adoption and acceptance in the past, but recently there is a growing body of knowledge on continuance and usage after the technology has been accepted (De Guinea & Markus, 2009). The IT usage model developed by

Bhattacharjee (2001) is the most popularly used by continued usage researchers. However, continued usage for mobile payments got less attention. The exceptions are two studies on continuance usage intentions for mobile payment users (Zhou, 2013, 2014).

While continuance of usage is a recently developing area of IS research, the other side of the coin is discontinuance or abandonment of technology (Furneaux & Wade, 2011). There is a need for research on technology discontinuance at the individual user level, to understand why users cease to continue using an IT artifact after they have accepted it. Borrowing from the literature on assistive technology for users with disabilities, we observe that critical variables leading individuals to abandon a technology in use, are inconsistency or change in user needs or requirements (Phillips & Zhao, 1993) as well as cost and selection of payment type (Humphrey, Kim, & Vale, 2001).

Technology affordance and constraints theory (TACT), as termed by Majchrzak & Markus (2012) “holds great promise for contributing to the scholarly management literature” (p.4) to explain the uses and consequences of technology through the dynamic influences between people, context, and technology. TACT has been studied in mobile phones in relation to communicative affordances (Schrock, 2015). This paper utilizes TACT as a lens to make contributions to the field of mobile payments.

THEORETICAL BACKGROUND

We use TACT to identify the influencers of the continued usage of mobile payments. Conole and Dyle (2004) provide the basic framework for TACT. We additionally derive from theories of abandonment of assistive technology, existing technology continuance, and mobile payment to build constructs for the research model.

Affordances and Constraints

Originating from the study on ecological psychology by Gibson (1986), affordances theory has been utilized for understanding perceived properties of artifacts. Humans do not perceive objects for their physical properties but the ‘affordances’ or goal-oriented use of the objects in relation to a specific environment (Markus & Silver, 2008). Users may thus perceive a set of features or capabilities beyond what designers incorporate in the technology artifact (Majchrzak & Markus, 2012). Affordances are primarily perceived by the user, and subsequently may be actualized

depending on the capabilities that the system-human context offers. These are the functional affordances offered by the system as possibilities perceived by users (Markus & Silver, 2008; Seidel et al., 2013).

An essential part of affordances, in addition to the human capability for perception and actualization, is the environment that offers meaning to the artifact. “Affordances are properties of the environment but taken relative to an animal [or, human]” – (Chemero, 2003, p—182). When studied in the backdrop of the post-demonetization environmental conditions of India with parallel occurrences of events like reduction in Internet options, heavy discounts by competing mobile payment companies, and multiple mobile payment options by merchants, affordances of mobile payment technology would enable a comprehensive perspective.

Technology affordance and constraints theory (TACT) suggests, that along with the action potential that affordances offer, there are constraints that limit an individual from realizing the desired goal using the technology (Majchrzak & Markus, 2012). Mobile payments will have various constraints or, “ways in which an individual or organization can be held back from accomplishing a particular goal” (Majchrzak & Markus, 2012, p.1). Information technology has historically posed constraints to its users, since often the language or content is limited, as seen in educational usage (Ryder & Wilson, 1996), but constraints have been often neglected in the mainstream IS research. In the case of mobile payments, the perception of risk for digital options, using a mobile phone in comparison to cash, and connectivity would pose constraints. Conole and Dyke (2004) develop a framework for the affordances of information and communication technologies and list the most important and recurring affordances. Using this framework as a starting point, we identify the affordances applicable to mobile payment users, in an Indian economic environment.

Assistive Technology

Due to the lack of applicable studies on technology abandonment, we borrow from assistive technology literature since some findings would be relevant to mobile payment technology abandonment. While the personality trait based impacts of using assistive technology are entirely dissimilar (Bühler & Knops, 1999), the intentional technology adoption and usage are alike – assistive technology purchasing decisions are based on four factors which are parallel to constructs for IT adoption. These include functional effectiveness in parallel to perceived

usefulness, affordability or cost of technology, ease of operability or use, and dependability which may be considered parallel to trust (Phillips & Zhao, 1993). We use this literature to understand abandonment behaviour. Among the factors stated for assistive technology abandonment, ‘change in user needs and priorities’ is an accurate reason for discontinuing mobile apps or IT due to the fast-changing digital world (Tapscott, 1996). We include the construct ‘ability to respond to changing needs’ to understand its impact in discontinuing or abandoning mobile payment. Following assistive technology literature (Bühler & Knops, 1999), we suggest that technology adoption and usage are based on four factors which include functional effectiveness, perceived usefulness, affordability or cost of technology, ease of operability or use, and dependability (Phillips & Zhao, 1993). We use this literature to understand abandonment behaviour and include the construct ‘change in user needs’ to understand its impact in discontinuing or abandoning mobile payment.

RESEARCH MODEL

Affordances facilitating Continued Usage

The following affordances are identified from affordance literature, chiefly from Conole & Dyke’s (2004) framework, and further suggested by technology and mobile payment models.

Accessibility

ICTs offer access to vast amounts of information to users from different locations offering accessibility as an affordance for usage of technology (Conole & Dyke, 2004). Telemedicine offers access to doctors located in distant places (Thapa & Sein, 2017) Accessibility for various sustainability-related information has been identified as key affordance (information democratization) by Seidel et al., (2013) (Seidel & Recker, 2012). Mobile payment services, with the availability of cheap Internet in India, now offer affordances in terms of access to information about mobile payment by various companies with features useful for specific purchases by users. Customers prefer technologies that have a bundling of services where they get various payment services bundled together (Banerjee, 2015). Most payment apps offer multiple features like bill payments, ticket bookings, paying ride-sharing drivers, e-commerce payments and transaction to individuals and shop owners. Accessibility of purchase information and methods through features and functionalities offered by the technology will shape the affordances of payment apps.

H1a: 'Accessibility' will positively influence continued usage of mobile payment technology.

Usability

Closely connected to the previous affordance, accessibility, is usability since “the challenge is not in *accessing* material, but rather in knowing how to use what is available” (Conole & Dyke, 2004, p. 116). Therefore, post accessing the available options, users should be able to decide to choose the suitable one and use it efficiently. Usability forms the core of cognitive and physical affordances (Hartson (2003)) as its ISO 9241-11 definition includes: “usability is the extent to which a system ... can be used by specified users to *achieve specified goals* ... in a specific *context*” (Jokela, Iivari, Matero, & Karukka, 2003). The capability of achieving goals differentiates usability from simple artifact related design issues. Seidel et al., (2013) point out how technology usage decisions are driven by affordances like usability.

H1b: 'Usability' will positively influence continued usage of mobile payment technology.

Ability to Respond to Changing Needs

Information technology is characterized by rapid change and thus, the ability to respond to the speed of change is a significant affordance (Conole & Dyke, 2004). Leonardi & Barley (2008) study the interplay between organizational change and the role of technology through affordances and constraints. Mobile payments apps are capable of handling market changes, building in options based on environmental conditions. For instance, as soon as the government passed the requirement of knowing your customer (KYC) ((a customer identification system), Paytm and other payment apps incorporated the KYC option. As demonetization and KYC introduced a major change, mobile payments offer affordances to meet the changing user needs. While this variable has not been identified by mobile payment studies, we borrow from assistive technology literature on technology abandonment which states, “change in user needs and priorities” is a core impact factor for continuing adoption or abandonment of technology (Phillips & Zhao, 1993).

H1c: The ability to respond to changing user needs will positively influence continued usage of mobile payment.

Pricing Discounts

While ICT has been associated with incurred cost, in multiple contexts it affords benefits in comparison to alternatives available. Wellman et al. (2003) discuss the affordance offered by Internet due to the major cost reductions it has brought to communication. Banking apps and other electronic payment systems, across the globe, offer price advantages through discounts to promote new payment systems, resulting in positive usage results (Humphrey et al., 2001). Mobile payment services offer various price discounts as many payment app companies compete to capture the market (Sen, 2017) and users perceive the cost advantage as an affordance associated with mobile payments over the other payment options.

H1d: Price discounts will positively influence continued usage of mobile payment services.

Network Externalities

The rapid spread of IT has evolved into our networked society (Castells, 1997). Conole & Dyke (2004) recognize the collaborative networking abilities of ICT as a key affordance that helps users in engaging with others. When the technology is enabled through a network, shared affordances evolve (Leonardi, 2013), and a social affordance of Internet usage (Wellman et al., 2003). Mobile payments create a networked environment where people can transfer money to each using their mobile phone number. Network externality is actualized when there is social influence by others, and this drives technology adoption (Zhou, Lu, & Wang, 2010). Network externality in this context is the ability to transact financial amounts easily across a community of peers when they share the same payment mode. We propose that the ability of one-click money transfer across network people also using mobile payments results in network externality as an affordance to continued usage.

H1e: Network externality will positively influence continued usage of mobile payment services.

Reflection

ICTs offer the potential of reflection on past interactions with the technology and critically analyze it (Conole & Dyke, 2004). Seidel et al., (2013) explain reflective disclosure as a functional affordance with users able to assess alternative actions. Mobile apps provide 'reflection' as an affordance in e-learning (Leinonen, Keune, Veermans, & Toikkanen, 2014). E-receipts of transactions are easily available through the various application features in apps

(Herzberg, 2003). Reflection allows mobile payment users to view past transactions at ease. In contrast, it is very difficult to track cash transactions. We theorize that the ability of payment apps to offer the reflection on past expenses through tracking the transactions provide an edge to mobile payment apps, thus making reflection an affordance for usage.

H1f: Reflection will positively influence continued usage of mobile payment services.

Constraints for Mobile Payment Technologies

Technology is not only perceived as the set of opportunities it offers, but the constraints or barriers it can create to perform the action towards a desirable goal (Leonardi & Barley, 2008). Based on the existing typology of affordances and constraints, we identify the following constraints perceived by mobile payment users.

Unavailability of Facilitating Conditions

When users adopt a new technology they ensure that the environment and conditions support technology usage (Yang & Forney, 2013). Facilitating conditions have been identified in technology adoption research as the degree to which the users believe that there are resources and support (Venkatesh, Thong, & Xu, 2012). Mobile payments require the facilitating conditions of Internet connection and network availability. Connectivity issues have been marked as a constraint by mobile learning affordance researchers (Orr, 2010). Additionally, in spite of cheap mobile phones in the market, the cost for hardware still remains a barrier for the poorer sections of the society (Pimmer & Tulenko, 2016). In a developing country like India, where digital penetration is as low as 36.7% (reported in 2017, Thenuan, Agrawal, & Thenuan, 2018), many rural regions and smaller towns do not have mass access to smartphone or Internet, although the numbers are promising post the Reliance Jio cheap Internet options. Without basic Internet or smartphone, the vendor or customer will fail to avail mobile payments. Another essential requirement is technical smartphone usage knowledge, the absence of which acts can act as a barrier to using a technology (Gu, Lee, & Suh, 2009). The unavailability of facilitating conditions like a smartphone, Internet connectivity, and technical competency, act as a major constraint for usage of mobile payments.

H2a: Unavailability of facilitating conditions will negatively influence continued usage of mobile payment services.

Risk

Humans consciously choose actions towards taking or avoiding risk while decision making with modern technology (Giddens, 1999). Technology incorporates with it the risk of unintended consequences of actions users take (Conole & Dyke, 2004). Consumers perceive a certain amount of risk in electronic financial transactions (Lu, Yang, Chau, & Cao, 2011). Risk, a persistent factor in mobile banking adoption studies, is referred to as the user's notion that a cashless transaction opens up uncertainty (Tseng, Han, Su, & Fan, 2017). It acts as a constraint that would definitively play a role in restraining users from continuing usage of mobile payments, when an alternative historic option, cash, is once again available in the environment.

H2b: Risk will negatively influence continued usage of mobile payment services.

Surveillance

Surveillance and monitoring tools have been criticized heavily for their invasion into personal information, and are a constraint toward ICT usage (Conole & Dyke, 2004). Today, surveillance exists in all aspects of life ranging from modern video surveillance (Engineers, 2006), to the tracking of e-commerce transactions resulting in loss of consumer privacy (Lanier Jr & Saini, 2008), among others. Thus surveillance, including through social media, acts as a constraint for ICT usage (Pearce & Vitak, 2016), Dinev et.al., (2008)) In the case of mobile payments, many individuals are worried about surveillance of their transaction details by the third party mobile app vendors, and small business owners perceive digital payments as government policy in order to monitor their transactions and profits. This creates a constraint that holds back users from mobile payment apps usage.

H2c: Surveillance will negatively influence continued usage of mobile payment services.

Design Constraints

While designers build a technology, inevitably certain design-related constraints are incorporated in the artifact that the designers had not considered in the planning (Norman, 1999). However different kinds of users who are not used to the existing design conventions are likely to face physical and logical constraints with respect to using the technology. Song (2011), in her study on affordances for handheld devices in learning and education, discovers that there exist certain constraints related to use of new style of devices like touchscreen, smartphone designs are fast

changing and users would face constraints in operating the phones with touchscreen or other new features unknown to technically novice user. A bulk of the users still consist of digital immigrants with lesser digital skills compared to younger digital natives (Guo, Dobson, & Petrina, 2008).

H2d: Design constraints will negatively influence continued usage of mobile payment services.

Moderating effect of Merchant Influence

Mobile payments are particularly suitable for merchants located at a distant location and operating commerce through the Internet like all e-commerce websites (Begonha, Hoffmann, & Melin, 2002). This has led e-commerce sites to report digital payments being higher than cash on delivery transactions in India (The Financial Express, 2018). The ride-sharing industry in India, with Ola and Uber as the two leading merchants, has contributed to the bulk of the mobile payment adoption. Therefore, the influence of the merchant with who the transaction is conducted will play a moderating role on the affordances that lead to continued usage of mobile payments. For instance, the impact of affordances on continued usage will be influenced when merchants provide very easy linking with mobile payments, where customers can view account balance and spend at the merchant site. This easy linking will enhance continued usage. Merchants have discount offers for payment app users, which is often price beneficial compared to cash payments. This is very common in e-commerce transactions.

H3a,b,c,d,e,f: Merchant influence will moderate the relationship between affordances and continued usage of mobile payments.

Certain merchants are trusted and popular, reducing the effect of constraints on continued usage. Some sellers have setups for users to pay offline with money from their payment app accounts (Deccan Chronicle, 2018), thus reducing the problems arising from the unavailability of facilitating conditions.

H3g,h,i,j: Merchant influence will moderate the relationship between constraints and continued usage of mobile payments.

Moderating effect of Mobile Payment App Provider Influence

Paytm is indisputably the most popular and most heavily used payment app is the market leader in the payment space, but other companies like Google Tez, PhonePe, and MobikWik are

bringing in features and offers that have promises of challenging not only the existing payment apps but also disrupting digital payment space (Business Standard, 2018, p. 5). It has been seen that consumers value digital payment technologies that have a bundling of services, i.e. she can carry out more than one kind of transactions through a single agent (Banerjee, 2015). The payment apps that provide multiple services from money transfer to bill payments, from ticket bookings to paying merchants. The payment apps will vary in the bundled services they offer, resulting in a difference in accessibility of the information, usability, and reflection. Price discounts vary for payment apps. Also, market leaders like Paytm will influence the relationship between collaboration and usage, since it will have a greater number of users using the same payment app and being able to easily exchange app account money.

H4a,b,c,d,e,f: Mobile payment app provider influence will moderate the relationship between affordances and continued usage of mobile payments.

Users would have preferences for mobile payments and would continue using a particular company's payment app, thus mitigating constraints such as security risk perceived with the particular app.

H4g,h,i,j: Mobile payment app provider influence will moderate the relationship between constraints and continued usage of mobile payments.

Dependent Variable—Continued Usage of Mobile Payment Technology

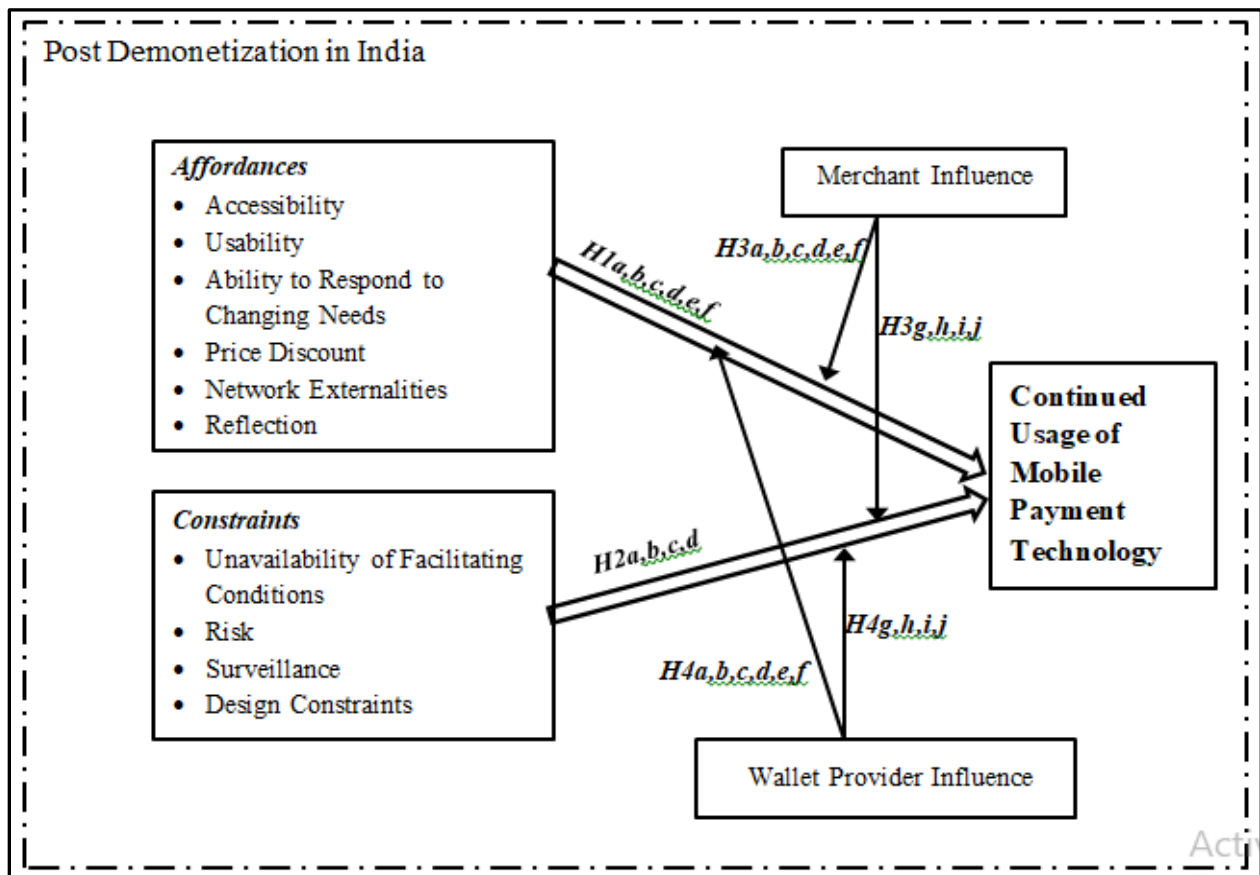
Continued usage of IT is a prominently developed stream of research in IS with two distinct dependent variables, intention to continue, and actual continuance behavior (Limayem, Hirt, & Cheung, 2007). The notable work by Bhattacharjee (2001) on continuance studies uses “intention to continue”, and it has been a frequently used DV. In this paper, however, we use actual continuance behavior, rather than intention as the DV.

Mobile payment can vary across multiple domains of uses. There is evidence that pricing and cost-related factors are taken into consideration by users while choosing one of the electronic payment methods over cash (Humphrey et al., 2001; Klee, 2008). We have identified nine distinct domains where users opt to pay through mobile payment apps – (a) ride-sharing (the most popular category contributing to bulk of payment app usage), (b) paying local vendors and brick-and-mortar shops, (c) transactions with other users, (d) online retail stores like Amazon

and Flipkart, (e) online order for food and groceries, (f) mobile and TV subscription prepaid recharge, (g) bill payments (electricity, credit card, etc), and (h) ticket bookings for movies, trains, and flights. The DV continued usage includes complete continuance on the one extreme and total discontinuance on the other when the user is not using mobile payment anymore. The scale of the variable will vary depending on how users selectively discontinued some of the usage categories they previously used. This gives us the extent of the actual continuance behavior of the payment app users.

Figure-1 depicts the research model for mobile payment usage in the context of demonetization in India, with the hypotheses to be tested along with the moderating influences.

Figure 1: Research Model for Continued Usage of Mobile Payments



PROPOSED RESEARCH METHODOLOGY

This study would include a pre-test and a pilot study followed by a field test, through user surveys. Due to the absence of affordances and constraints quantitative instruments, we have developed some new instruments. The pre-test includes a round of review to ensure the validity

of the instruments and removal of ambiguous terms. The pilot would be performed on a small number of respondents from a set of colleagues and friends of the researchers. The actual field test will include a mix of respondents from various backgrounds and age groups. The survey instrument has been designed consisting of 13 constructs (including IV, DV, and moderators), 65 items for these constructs, and a marker variable. The survey includes an additional 5 demographic questions.

CONCLUSION

Understanding mobile payment usage in terms of continued or discontinued usage is a novel contribution to the field of mobile payments services. While technology acceptance and adoption studies are dominant in the field of mobile payments, we address a relative gap in the continuance related research. The Affordances literature offers an appropriate theoretical lens since it reveals (a) how users perceive a technology to be useful and (b) the constraints to achieving the goal through the technology. Since most of the previous studies had models based on existing technology acceptance models like TAM, UTAUT, UTAUT2, and IDT, some unique contextual factors have been identified through TACT. The post demonetization India provides a perfect field study environment with the ground for understanding the affordance and constraint based model. Capturing the actual continuance of the payment apps by the users, instead of their intentions, would offer better insight. Additionally, it helps us understand the nuances of economic shocks like demonetization on technology adoption and usage.

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