

**BEHAVIORAL INTENT OF STAKEHOLDERS
TOWARDS MOBILE PAYMENTS: A STUDY**

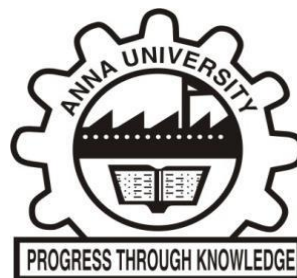
ABSTRACT
of the Thesis

Submitted by

UMESH CHANDRASEKHAR

in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY



FACULTY OF MANAGEMENT SCIENCES

ANNA UNIVERSITY

CHENNAI 600 025

APRIL 2016

ABSTRACT

Mobile-phone enabled payments will be a game changer for India as it will enable inclusive banking, financial transactions and virtual financial services across the country and generate economic efficiencies. Whilst mobile phone penetration is in excess of 80% nationally, rural India is yet to reach its potential and mobile phone adoption rate has a reflection on individual and national GDP. Several banks, mobile phone operators and third-party application providers have entered the Indian market to tap into the mobile-payment sector. The concept is to turn the mobile phone into a “virtual wallet” and replace traditional wallets which customers carry and which contains, cash, debit cards, credit cards, receipts and even paper tickets and identity card. Theoretical work has mainly focused on the Technology Adoption Model.(TAM) and its successive variants which deals with intent to use based on variables like perceived usefulness, ease-of use, prior experience of technology. The study undertaken is not in a conventional format. This is on account of the rapid developments of the mobile payment industry in India since 2012 and the changing socio-economic and technical environment of the country with the current government actively pursuing the vision of a “digital India”.

Research objectives, post literature review, were identified as examination of the stakeholders behavioural intent of stakeholders towards mobile payment, their propensity to adopt this and the difference or similarities between user perception and user profiles vis-à-vis mobile payment. The research objective also included the mapping of customer typology, assessing the adoption intent of retailers for acceptance of mobile-payments and finally enquire into the possibility of an alternative “integrative model” to improve study of behavioural intent of stake holders towards mobile payments in the Indian context

A three stage study was undertaken. The first, in January 2011 was to assess research feasibility by administering a short questionnaire to 447 respondents to understand the aware and the adoption intent towards mobile payment as it was just making inroads into India then. The second, in April 2012, was to assess retailer uptake of mobile payment mechanisms at the point-of-sale. Over 33 retailers who had registered for the scheme were interviewed. The final study was completed in summer of 2014 which covered 326 respondents from urban and rural market segments and was aimed at understanding perceptions of peer advocacy, perceived usefulness, personal suitability, trust and security and intent to use mobile payments

The first study provided insights that 54% of the respondents felt that mobile wallets were safe and 57% felt that their mobile service operator was reliable when it came to mobile payments. Significant correlation was observed between perception of the operator reliability for the transactions and intent to use mobile payments. Additional analysis also indicated that age & gender played a key role in acceptance of new technology. Consumers with prior experiences in internet payment would be more willing to adopt mobile payments than other groups. Perceived usefulness of mobile payments and safety & secure transaction capability played an important role in intent to use mobile payments. One major reason which customers who intend to use m-payments gave for their intent was the time-saving it offered. Cash was still the top option. Male customers would likely prefer using mobile payments vis-à-vis credit/debit card on specific occasions. Specific segments like Businessmen, IT professionals, students and those with prior experience in paying for ringtone/VAS to their service providers and who have spend Rs 100 or higher in a year show greater intent to adopt to mobile payments.

The second study on retailers' intent to adopt mobile payments at their retail point of sale. As to the reason to the non-use of the mobile payments at retail Point of Sale, the reasons given by respondents included no

training or exposure of using the system for retail transactions to the staff, minimal or no requests from customers for using the mobile payments for retail purchases and a lack of clarity as to refund/credit process. They also perceived risks of wrong billing or overcharging and were reluctant to its use as they were not comfortable about creating records of sales which would be available to tax authorities. They also were reluctant to implement this as it involved effort for smaller transactions. Retailers who offered credit card payments had minimum spend limits for purchases and took process and settlement time- the same was felt for mobile payments. The vendor withdrew the model later in the year

The final study was undertaken in May 2014, when mobile payments sector had made sufficient inroads in the Indian market. A self-administered questionnaire in English and Tamil languages was administered over a period of 4 days. 326 complete responses were received and analyzed. Data was analysed using SmartPLS 3 with multiple constructs using two groups – urban and rural respondents. In the final model, seven variables- ease of use, usefulness, personal suitability, lifestyle trust in provider, security and peer reference were retained and reported an R^2 value of 0.51 for the target dependent variable “intent to use”, these accounted for 51% of the variation in “intent to use mobile payments”.

There were also variations between the groups –urban respondents indicated that lifestyle, personal suitability and usefulness had significant relationships with intent to use and for the rural respondents personal suitability and security showed a significant relationship with intent to use mobile payments. Transaction intents indicated that propensity to use is based on availability and routine payments for utilities, tickets purchases feature high on the intent. For large-scale adoption of mobile payments, customers must be assured that these payments should have minimal security risk (abuse of billing and usage information, misuse, oversight), suit their lifestyle and be personally suitable to them .

In view of the proliferation of smart phones and powerful applications available, mobile payments have now migrated from the “technology” part completely and this element does not play any substantive role with intent to adopt mobile payments. Therefore, earlier and current research can fail to move from the “intent to use” stage to predicting “actual use” stage. As far as payment choices are concerned, a customer have variety of options and he/she will select one based on the user circumstances, the trade-offs and mobile payments will have to still compete with credit/debit cards, cash, electronic banking, cash on delivery and alternative forms of payment to be successful and profitable in the Indian business environment. Therefore the researcher has proposed two later models to explore for further research in the Indian context which addresses the limitation and has recommended the lazy User Model to ensure further research in multi-dimensional and addresses the current research gap.

The government of the day has introduced bio-metric identification of its residents and envisage direct transfer of welfare benefits by way of cash to banks, thus creating inclusivity and unparalleled spending power. This can also be done using mobile phones as a device for transfer. This will also mean higher risks of fraud, misuse and issues like cyber crime increased whilst at the same time expanding the market for mobile commerce substantially. In March 2016, India’s ten largest banks with the help of the central bank , the Reserve Bank of India launched a new mobile application – United Payment Interface(UPI) which can seamlessly work across all account and banking platforms and multiple ecommerce sites and even be programmed to organize cash on delivery payments and schedule payments. This initiative will be a game-changer for the industry and if adopted, will create a highly facilitative environment for mobile payment.