

AN IN-DEPTH ANALYSIS OF THE LEVERAGING OF THE 2016 INDIAN DEMONETISATION- PAYTM ESTABLISHING ITSELF AS A DOMINANT PLAYER IN THE DIGITAL PAYMENT INDUSTRY

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INTRODUCTION

There is a recent increase in the smart phone penetration in the Indian market. According to Analysis firm Canalsys¹, India is now the World's second-largest smart phone market, overtaking the USA, second only to China. This is a massive paradigm shift which shows how fast Indians are adopting new technology.

In November 2016, India experienced demonization where all 500 and 1000 rupees notes were no longer an accepted form of currency. This was done to curb the inflow of fake currency from various sources. But this also caused a big shortage of cash in the following days. People had to look for other means for their daily transaction and the solution came in the form of Mobile payment systems.

Mobile wallets are apps that can be used to pay and receive money, after an initial amount is added to them. There were many players in this market, growing slowly. But demonetisation forced a lot more people to go forward and adopt the various options available in the economy. These ranged from Paytm, Free charge to phone brand solutions like Apple Pay. Notably, the biggest market capitalisation was of Paytm, which will act as the subject of this entire research.

Mobile payment apps work with an active data connection, and money can be transferred through the app using the receiver's mobile number, unique code, OTP, email ID etc. This was as fast as sending a message to someone. Within a minute, any amount of money could be transferred. Samsung and Apple took these step further and enabled Near Field Communication portals to make this process even faster. All you had to do was tap your phone at the checkout counter, and authenticate the transaction.

Historically, India had been slow in adopting newer ways to transfer money. Net banking solutions have been gaining traction only recently. Mobile payment apps not only made the process much simpler, but also more users friendly. And demonetisation acted as a major push, as people were left with no other option.

Paytm, which stands for Pay through Mobile, has been the market leader, even before the demonetisation fiasco, and then it got even bigger. There were other firms with very similar offerings viz. free charge, Oxigen, Zeta etc. The differentiating factors were exclusive partnerships

and acceptance by the vendors. Paytm was able to scoop in the best brands and retailers, giving it an early edge. Paytm operates only in India as of now, and is a daughter concern of One97 Communications. It was launched in August 2010. It employs 14000 people, and has over 3 million offline merchants and vendors. It recently crossed the 200 million mobile wallet user bases.

Also, with the influx of cheaper smart phones, Digital India and Jio, many more Indians (also called as The Next Billion) got access to the internet, which also added to these Mobile Wallets' user base. Overall, there has been a big positive trend in the adoption of newer forms of money.

LITERATURE REVIEW

- Abhijit M. Tadse, Harmeet Singh Nannade in their paper “**A Study on Usage of Paytm**” have discussed the usage of Paytm and their satisfaction level based on different parameters such as age, frequency, purpose, average monthly spending. They conclude that Paytm is a good app to use due to its wide network of partners, ease of use, and privacy. However they have to improve on the payment gateway to improve transaction efficiency, transaction time, and discounts offered.[2]
- Dr Poonam Painuly, Shalu Rathi in their paper “**Mobile Wallet: An upcoming mode of business transactions**” have studied the concept of mobile wallet and its growing importance in varied field of businesses. This paper also explains the application and usage of wallet money endorsed by different companies for various purposes. It also provides the suggestive guidelines for the cautious usage of the mobile wallet that supports the functioning of financial transactions.
- Sandeep Puri, Siddharth Kumar Agarwal, Shivani Upadhyay and Debasish Chatterjee studied in their paper “**Paytm: Targeting more Pockets for its Mobile Wallet**” about the various strategies adopted by Paytm to increase their customer base and whether the strategies and plans of Uber (Paytm's biggest client) are a matter of concern for Paytm. They analyze and infer that in order to increase their market share and maintain their position at the top, Paytm needs to “recharge and reinvent” themselves. They also mention that big players in the financial industry entering into the m-wallet arena pose a threat to Paytm's supremacy.
- Prof. Trilok Nath Shukla in his paper “**Mobile Wallet: Present and Future**” carried out research to determine the current state of mobile wallets and future directions for growth. He concludes by stating that based on current developments mobile wallets will be a self reliant industry and complement existing mode of payment instead of replacing them. He further states that mobile wallets are going to go beyond just payments and become a path-breaking social experience.[6]
- Javed Anwer in his article published in India today on November 23, 2016, talks about how the usage of mobile wallets and more significantly Paytm, have increased their market

share and user base just 2 weeks after demonetization. He explains how Paytm has taken advantage of the cash crunch to expand its customer base.[3]

- In the November 21, 2016 article in Business Insider India, it mentions how Paytm has witnessed business worth Rs 120 crore per day since announcement of demonetization and crossed \$ 500 billion GMV sales.[4]
- In the December 25, 2016 article published in Scroll, Itika Sharma Punit talks about Paytm being the biggest beneficiary of demonetization which caused a cash crunch in India. However, he goes on to elaborate on the various problems faced with regards to this sudden growth. Some of the problems faced by them are inappropriate television advertisement, getting caught in politics by publicly thanking PM Modi, claims of customer fraud, and numerous complaints of technical difficulties.[5]
- According to the article published by live mint in Nov 2016, PayTM had seen an overall increase of over 700% in online traffic and 1000% growth in the value of money added on the platform. In addition, the average transaction value has increased by 200% and the number of mobile app downloads by 300%. [7]
- Mugdha Variyar in her article published in The Economic Times states that PayTM, one of the largest e-wallet companies has crossed over 200 million users in line with its vision of transforming India into a 'cash-free' economy. The current balance of PayTM wallets is over 899 crores INR and the company adds about 7,00,000 users in a single day.[9]
- Pranjal Dixit, Ashu Prakash, Tushar Tiwari from IIT, Kanpur, on 4th April, 2017, have presented "Heuristic Analysis of 'Growth of PayTM'." This research paper entails the growth trajectory of PayTM post demonetization. The primary focus to be addressed, is the effect of a transition to a credit based economy and how companies like PayTM have flourished because of it. Initially limited to smartphone metro users, post 2016, PayTM found a place on every single smartphone throughout tier I, II, and III, cities. Here, the manifold impact demonetization had on the customer base and usage of PayTM in India, is being discussed. After the government started promoted a cashless economy, consumers quickly opted for PayTM for day-to-day transactions like paying the rickshaw fare along with larger transactions like paying telephone bills. The approach used to fill the data gaps is to analyze the user patterns and increase in customer base pre and post demonetization. This step taken by the government is a landmark for the Indian economy and for companies like PayTM especially. There was lack of data tracking and explaining the growth pattern, which this paper aims to solve. The entire process of demonetization was so sudden and quick, there no hardly any time to assess to peripheral impact. Taking a step back, the aim is to now track and collect data to have information on its impact of beneficiaries like Paytm. The objective and motivation to study this change in trend was to understand technology penetration and the rate at which its growing since the past few years. Experimentation along the lines of understanding the consumer mentality has helped to determine that the government's inadequacy to provide with fresh cash inflow diverted consumers towards Paytm. The solution offered through this study has helped bridge the

gap of knowledge in explaining the transition towards a cashless economy. The research conducted states that Paytm is prevalent in all kinds of trade, B2B, B2C, and mobile-commerce. Although the internet penetration in India is only about 36%, there is big scope of growth in the future. Questions pertaining to accessibility and reach of Paytm are answered and the authors defend speculations by showing data of Paytm wallet users alone which grew to 200 million post 2013. Paytm had a steady growth until 2016, after which, the company experienced a giant leap. Today, after IRCTC, it has the highest number of transactions in the country. Findings of the data show brilliant performance of PayTM. The company was one of the first 11 out of 41 entities to get a license from RBI to run payment banks in 2015. This today is known as PayTM bank, the largest commercial market on the web. PayTM has raised 4637 cr. Rupees with over 40% stake of One97 Communications, Alibaba Group. The study points out that PayTM have beaten a lot of its competition due to its ability to collaborate with other financial services to expand its customer base. The process came with its challenges. Between 10th November and 20th December, PayTM added over 20 million new users making its total customer base 170 million. The company was not structurally ready for such influx. Technology and capacity wise PayTM faced a huge turn to handle the situation. Along with the economic crisis, there was a huge political upheaval in the country. PayTM got sucked into this. Arvind Kejriwal, Chief Minister of Delhi accused the company to have been affiliated with the Modi government for which they received huge backlash. This resulted in people questioning their patents and a series of law suits coming their way. But eventually, PayTM came out strong. The road ahead for PayTM is extremely bright. India's compound annual growth rate is about 60%, the largest in the entire Asia-Pacific region. This means, PayTM is at the right place in the right time. The business model of PayTM has adapted to the economic instability of the country very well as has worked greatly to reduce it for the common man. [8]

RESEARCH METHODOLOGY AND DESIGN

Research Objectives

The objectives of the following research paper are

1. To understand the effects of demonization on Paytm, and see if they are still prevalent 1 year later.
2. To see the fluctuations in the user base of Paytm, over the past 12 months.
3. To understand the factors that affect the Indian Mobile wallet sector, apart from demonization

Research-based towards the Objective 1 is Explanatory in nature as it attempts to clarify why and how there is a relationship between the adoption of Mobile wallets and demonization.

Research-based on Objective 2 is Descriptive in nature as it attempts to describe systematically the increase or decrease in the users of Paytm over a period of almost 12 months.

Objective 3 is Exploratory in nature as it is undertaken to explore and understand the other factors that may affect the Indian Mobile wallet sector.

India is slowly moving towards a cashless economy, and wallets like Paytm pave the path to facilitate this shift. Every day newer wallets pop up in the market and pose new threat to the existing players, thus the companies need to constantly upgrade and enhance their performance.

Digital wallets provide not only convenience in making payments but also give the consumers to enjoy faster transactions, cash-back incentives and safer alternatives to hard cash.

Hypotheses

A hypothesis is a proposition formulated for empirical testing.

The hypotheses hypothesized are Causal in nature as demonetization leads to a specified effect on the growth of Paytm usage.

The following hypotheses are constructed:

1. The usage of Paytm would increase post demonetization
2. Mobile wallets would be more prevalent in the Indian markets post demonetization
3. There will be a plateau in the growth of users in the 2017, Q3, as the effects of demonetisation wear off.

Research Design

A research design is a comprehensive plan guiding researches to achieve its objectives. It is a detailed blueprint of the research.

Definition of Problem

Demonetization took place in India on November 8, 2016, had many effects on the Indian economy such as:

- A lower GDP rate
- Strengthening of Tax administrative measures against black money
- Social shakeup of Indian society
- Boosting of digital payments
- Major suffering faced by low-income groups and daily wage earners

Mobile wallets like Paytm came to the rescue and the following research paper aims to understand the impacts of Demonetisation on the performance of the same

Sources of Data

The study employed both primary and secondary data sources. Majority of the data was collected through an online questionnaire that was circulated amongst the target audience. Significant information was also collected through related research papers, online articles, case studies etc.

The links to the same are attached at the end.

Methods of data collection

The major chunk of data was collected by the participation of respondents on the online questionnaire that was circulated amongst the target audience. The rest of the data was collected via online research. The study undertaken consists of a few variables, but the two major variables are

1. Demonetisation
2. Paytm Usage

The first is an Independent variable as the research paper aims to study its effect on the other variable. Also, it does not get affected by any other variable taken into consideration. The other variable is a Dependent variable as it gets affected by the change in the Independent variable.

Based on the nature of the two variables the type of research design adopted in this research paper is Causal in nature.

It aims to examine the cause and effect relationship between the observed variable (Dependent) and its possible causes (Independent variable)

Sample Selection

The sample considered for the research paper was collected through an online survey. The respondents recorded their response on the survey conducted as a part of the primary research. The survey was created on an online portal and then circulated amongst the audience.

We received 103 responses out of which 80 were considered as the rest have never used the mobile wallet (Paytm) that was taken into consideration. The sample majorly consists of college students around the age of 15-24 and some adults falling in the age group of 25-40.

The sample was collected via both **Simple Random Sampling method** as no respondent was declined a response and every element in the population had an equal chance of being included in the sample and **Snowball Sampling method** as each respondent also acted as a reference to another respondent.

Data Collection

We conducted a survey for our primary research. We prepared a questionnaire and asked our target audience to fill that questionnaire. We do not have any specific target audience. So, we got responses from 103 people out of which only 80 were relevant. The responders are mainly student body (around the age of 18-21) and adults from many different states in India. Through this survey we have answered questions like what the age group of our customer base is, what is the frequency of usage, what is the acceptance level, what purpose Paytm is used for, has the usage of paytm reduced over the last 12 months etc. We have also prepared graphs to show these figures in a more comprehensive manner.

For our secondary research we referred to past research papers on Paytm and mobile wallets in general, as well as news articles published during demonetization and post thereafter. The conclusions and assumptions made are based mainly on the secondary data available to us.

DATA ANALYSIS

Q1. Age

Age

100 responses

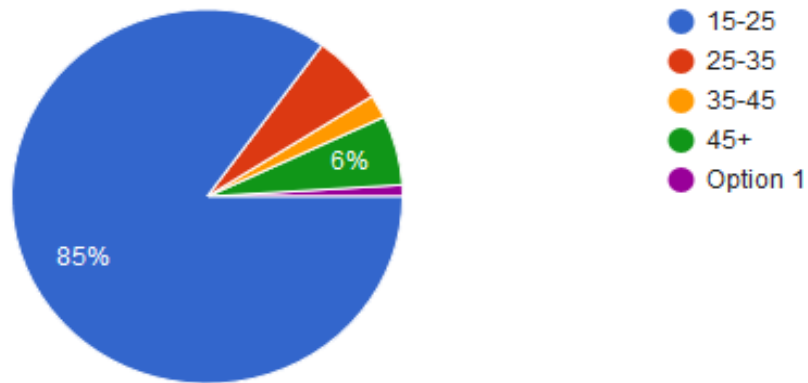


Figure- 1

The primary audience for our survey has been of an age less than 25. This is also the target audience for E-Wallets such as PayTM and the main focus for all their strategies. This group happens to be the most comfortable with incoming change, especially in the sector of Technology and innovation.

Q2. Gender

Gender

99 responses

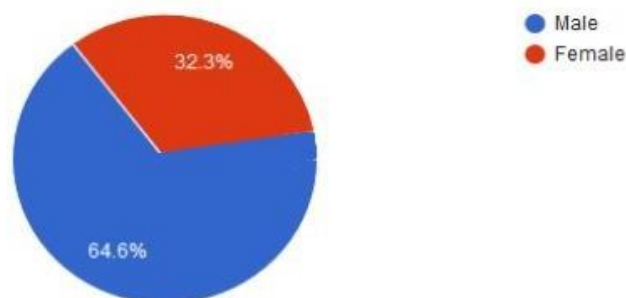


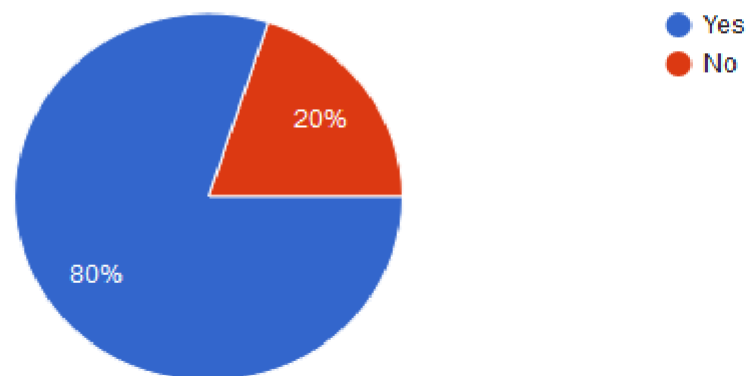
Figure- 2

Figure- 2

The survey results have a 2:1 Male to Female Ratio. Implications of this shall be explored further across the survey and its results.

Q3. User Base**Have you ever used Paytm?**

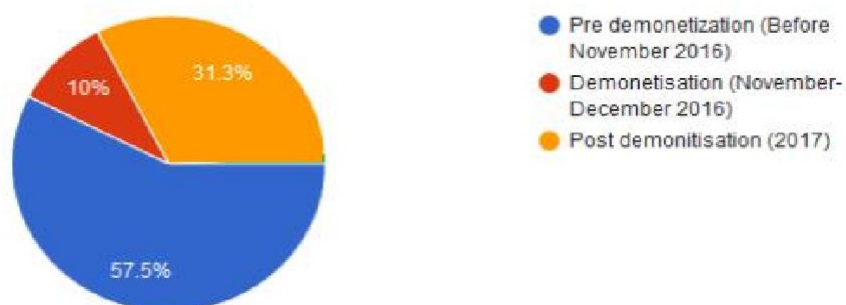
100 responses

**Figure- 3**

Almost 80% people covered in the survey have or are using PayTM as an E-Wallet. Those who aren't using PayTM have not been included in further findings of the study.

Q. 4**When did you first use Paytm?**

80 responses

**Figure- 4**

The purpose of this study was to analyse the effect of and growth after Demonetisation that happened in our Nation on 8th November, 2016. The sudden lack of liquid currency in the economy had pushed the people of the country towards adapting to plastic currency in terms of

Debit Cards and Credit Cards and also towards Digital Transactions, a sector which saw 400-1000% growth a month after Demonetisation. However, our survey found out that almost 60% people had already been using PayTM even before Demonetisation happened while only 10% started using PayTM as an E-Wallet during the Demonetisation phase. This is a startling revelation as although there has been a tremendous rise in terms of volumes of currency being traded over digital platforms, the overall userbase has not grown to a very great extent for PayTM.

Q5. Frequency

How often do you use Paytm?

80 responses

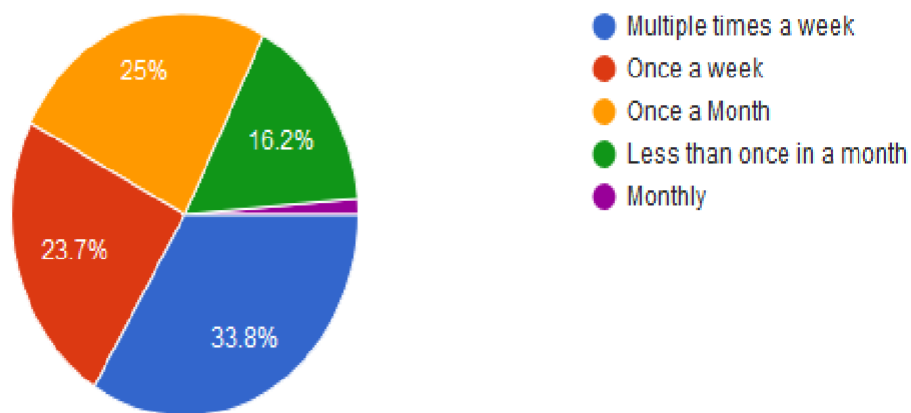


Figure- 5

PayTM today has 225,000,000 Daily Active users against 166,000,000 of Snapchat which goes to show the rate of acceptance in the Indian Market. It also has 5,000,000 Merchants accepting payments through it which is 5 times the total number of merchants accepting payments through Credit Cards in India. In our survey too, almost 60% people have claimed that they use PayTM at least once a week which shows the extent to which it has percolated into our society. 93% of those who have been surveyed have also admitted that PayTM was not an alien concept to them as they had already heard of it and its uses, even before Demonetisation happened.

Q6. Average Balance Maintained

How much balance do you maintain, approx?

79 responses

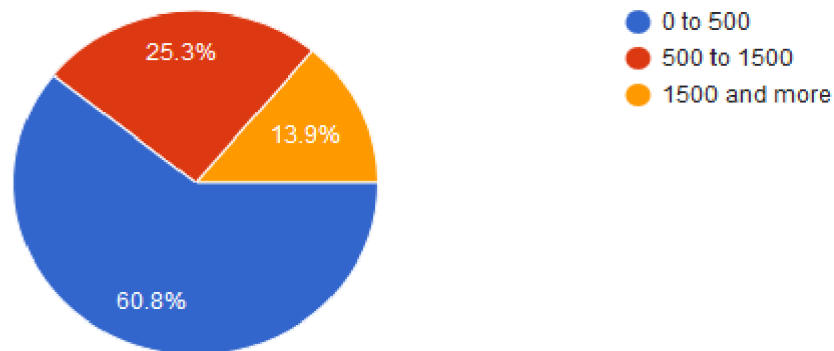


Figure- 6

Has the balance maintained by you reduced, in the past few months?

79 responses

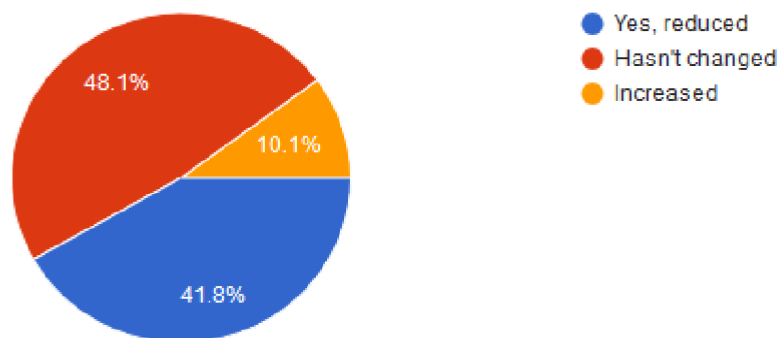


Figure- 7

PayTM does not mandate its users to maintain any types of minimum balance as opposed to banks which always have a Minimum Monthly Average Balance to be maintained by all their users. This is an extremely smart move keeping in mind their target audience which mainly comprises of those who don't have a steady source of income and thus shall struggle to maintain any minimum balance. The survey shows that most people have only running amounts as minimum balance in their PayTM wallets which they keep refilling as it gets used. This shows how well PayTM is being used by their target audience. Another point to notice here is how the money being kept by users in their PayTM wallets is increasing. Less than 40% have claimed the amount in their PayTM wallet as having decreased. This shows that people are using this wallet more in the present days and are probably less reluctant in trusting an E-Wallet with their money.

Q7. Vendor Coverage

Has the number of establishments/vendors accepting Paytm reduced over the past 12 months?

80 responses

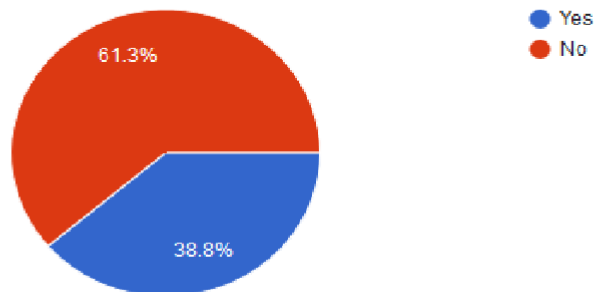


Figure- 8

Statistics have shown that the number of vendors accepting Paytm as a mode of Payment has increased to the extent that today more vendors accept payment through PayTm than through Credit Cards. This is a tremendous success for PayTM showing the reach that they have at the end of the food chain of money. Those who have been surveyed also admit that the number of establishments/ vendors accepting PayTM as a mode of payment has increased in their opinion.

Q8. Convenience

Do you find Paytm convenient?

80 responses

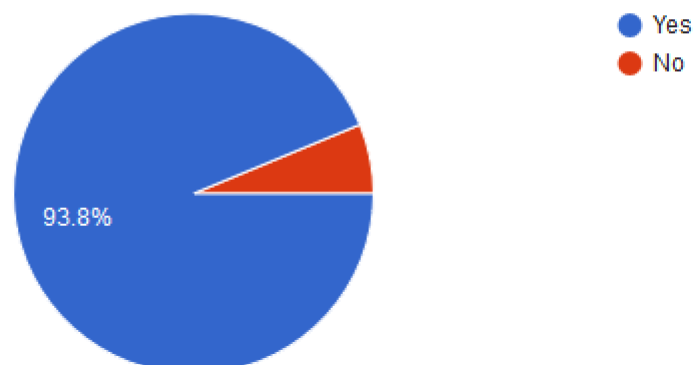


Figure- 9

94% of those who have been surveyed admit to PayTM being a convenient alternative to cash and other forms of Payment. This can also be substantiated by the fact stated above that PayTM today has more Daily Active Users- 225 million than Snapchat's 165 million. The app has an extremely easy to use interface which further helps those who have decided to use it. The integration of services such as Utility Payments, One Click Mobile Payments and the PayTM Mall has further increased the appeal of PayTM against all other E-Wallets available for the users today.

Q9. Usage

Has your usage reduced over the past 12 months?

80 responses

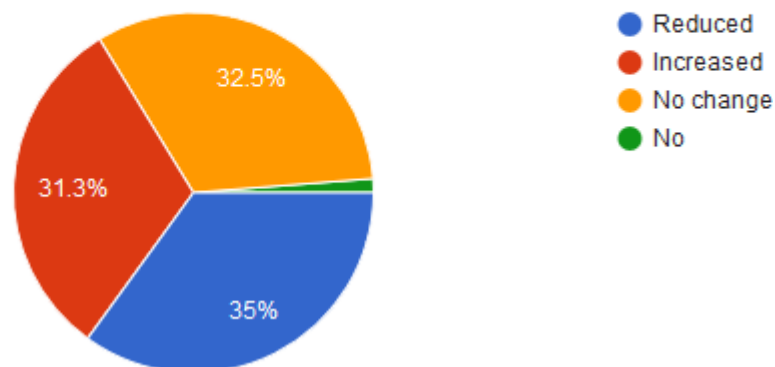
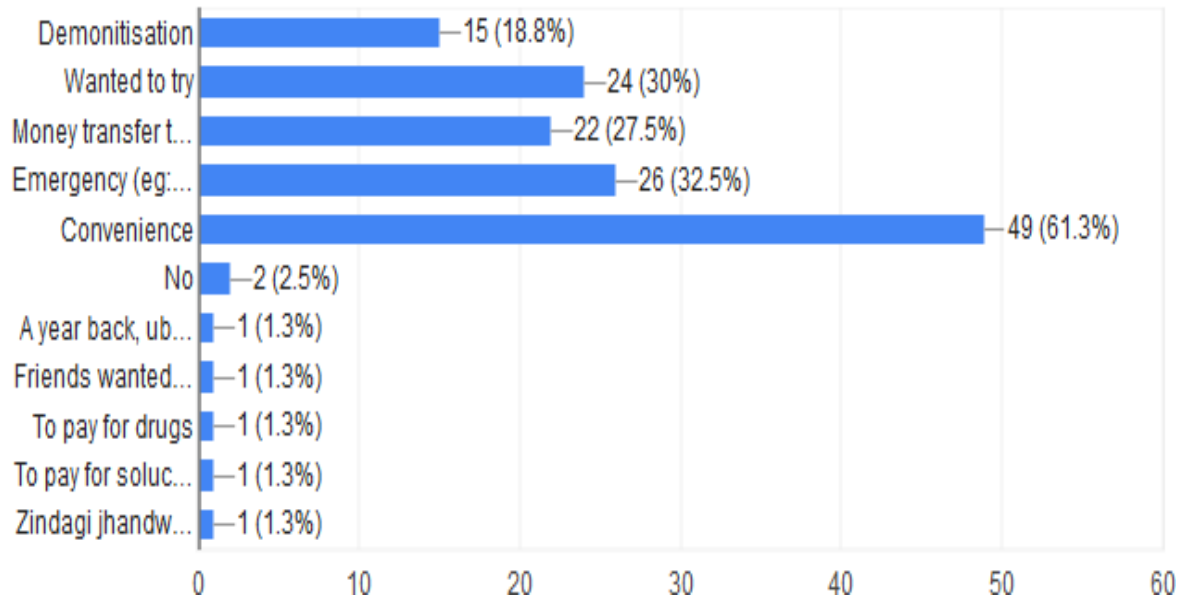


Figure- 10

35% of the respondents admit that their usage of Paytm has reduced over the last 12 months. About 31% have stated that their usage has increased while about 33% have noted no difference over the last 12 months. Paytm still remains popular irrespective of the circumstances.

Q10. Reason for Installing**Why did you install Paytm?**

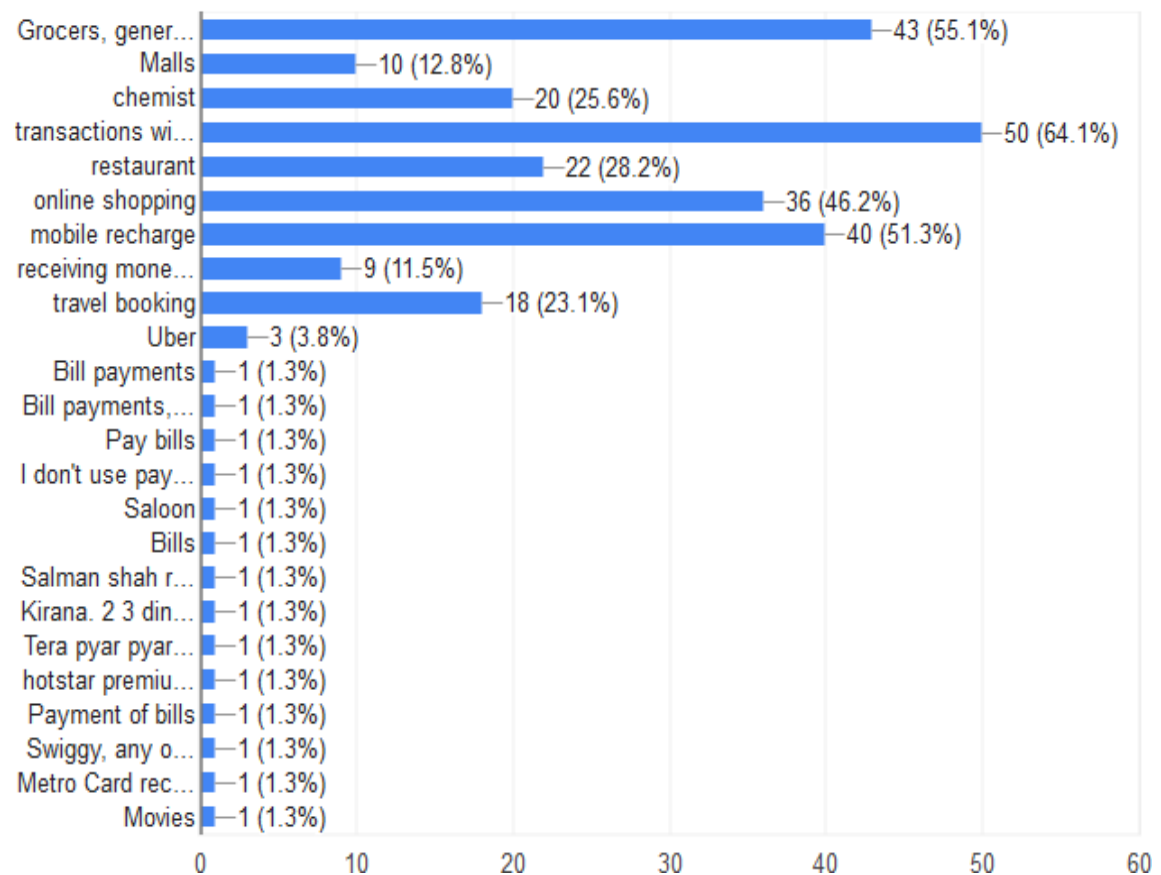
80 responses

**Figure- 11**

Only 19% of the respondents installed the Paytm app due to demonetization. About 61% opted to install for convenience, 32.5% installed for an emergency, 30% installed out of curiosity, and 27.5% installed to transfer money.

Q11. Coverage**Where do you pay using Paytm?**

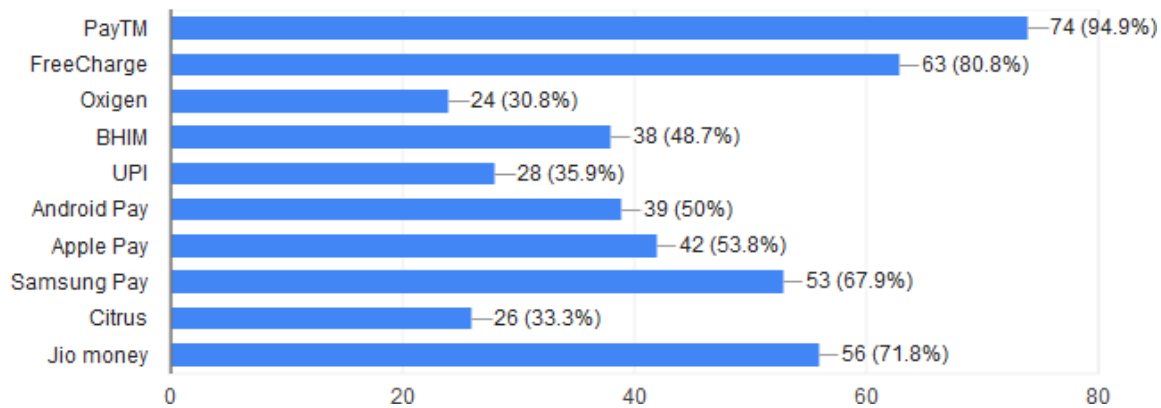
78 responses

**Figure- 12**

64% of those surveyed stated that they used Paytm to conduct transactions with friends. 55% said they used it to buy groceries at the general store, about 51% to recharge mobiles, 46% in online shopping, 28% at restaurants, about 26% at the chemist and about 12% used it to receive money from home.

Q12. Competitor Awareness**Which of these other Mobile payment apps are you aware of?**

78 responses

**Figure- 13**

95% of the respondents have heard of Paytm, while 80% have heard of Free Charge making these two the most popular mobile wallets in India. 72% have heard of Jio money, 68% have heard Samsung Pay, 54% are familiar with Apple Pay, 50% with android pay, 49% with BHIM, 36% with UPI, 33% with Citrus, and 31% with Oxigen. The audience has good knowledge when it comes to mobile wallets.

LIMITATIONS

This research paper was done on a very micro scale and can only be treated as a small representation of the actual scenario.

Primary data was collected via surveys sent out to our associates. Hence, the sample can be said to be skewed and not heterogenous. Adding to that, the sample size is only of around 100 people, which doesn't give an accurate idea of the actual Indian demographic. Most of our respondents live in urban area with above average incomes. This is not a perfect representation of India and hence the inferences must be observed cautiously.

In terms of secondary data, we have referred to a lot of other research papers, statistics and news articles. However, some of those are not recent, and might show figures which are not accurate as of today. Wherever possible, such errors have been avoided. Since all of this is secondary data, the accuracy can also be questioned, but has been taken to be the best of our knowledge

Also, not all the effects can be associated just with demonetisation, and the fluctuations can arise due to other factors also.

There are other mobile wallets in the market too, which can also have an effect on the statistics of Paytm. Since this research takes into consideration only the statistics of Paytm and the industry averages, some of the minor details might have been overlooked finally; the analysis done here is not conducted by professionals, which opens the paper to human error. All the conclusions and inferences were made to the best of our capabilities still we apologies for any errors present.

ASSUMPTION

Our main assumption comes in the form of knowledge of the subject, as we assume that all of our Target audience knows about Paytm and its functioning, and are aware about the market.

SCOPE

Through this research paper we have learnt how Mobile wallet companies such as Paytm have grown after demonetization, cut down cash transactions by almost 86% in India.

We conducted primary research by asking users to fill up a questionnaire and studied the results. We asked the users various questions in order to complete our main objective. According to the data collected, more than half the respondents started using Paytm before demonetization. This means that most of the public already knew or had a hint about the uses of Paytm and most of this user base belonged to the 15-25 age gap. Most people as we learnt used Paytm to pay rickshawalas and grocery stores or had transactions with friends. We studied various articles and have done a review on them so as to understand the effects of demonetization on Paytm and as we expected we found a 700% increase in online traffic after demonetization. It has become the second largest online payment gateway just after IRCTC. The company was one of the first 11 out of 41 entities to get a license from RBI to run payment banks in 2015. This today is known as PayTM bank, the largest commercial market on the web. The company manages to convert 106 million users out of their over 200 million users into proper accounts which means that a user on average maintains a balance of 59rs. With its collaboration with the Alibaba group, Paytm has managed to maintain dominance in this sector with over 94% of our responders knowing about it. Also to increase customers, Paytm played smart by not mandating their users to maintain a minimum balance like most banks do. Also stats have shown that Paytm being as convenient as it is, a lot of vendors and restaurants have started accepting this as payment method. Even though our primary research had limitations, we learnt that according to other surveys and facts, after uncertainty from the government front, people have reverted to safer cashless options like Paytm which have managed to grow humongously in India.

FINDINGS AND SUMMARY

Through this extensive research, we got to learn about how the Mobile wallet sector in India has been growing over the past few years, with major emphasis on the past 12 months.

India had been a sleeping giant for the adoption of newer forms of currency. But due to a forced move like Demonitisation, this entire sector got a big boost. India's move towards a cashless economy came as a by-product of the move of curbing unaccounted money.

Paytm had 1000% growth in the Demonitisation quarter which was super normal. However, it was not sustained. Not only did the growth rate and transactions reduce, but also the number of retailers and vendors dropped. As seen in the survey, a majority of the respondents too felt that the places where they could pay using Paytm had gone down. From the business side, it was becoming increasingly difficult for firms to handle all the different Mobile wallets, and end up opting out.

Paytm had a very big lead, and they need to take more steps to sustain this position. India is fast evolving and potentially has a lot more users. If they want to achieve their target of 500 million users by 2020, they have to make major changes in their strategy such as

- Increasing vendors
- Lighter app
- Better servers
- Better product offering on their store
- And marketing to be able to penetrate and reach the next Billion.

There were also other factors that affected the user base of Paytm, apart from demonetization such as:

- High penetration of Mobile internet in rural areas
- Availability of cheaper smart phones
- Influx of Reliance Jio
- Paytm mall and Paytm bank
- Increase in advertising
- Funding from Alibaba

Post Demonetization, PayTM has been significantly impacted. With uncertainty from the government front, people reverted to safer cashless options like Paytm

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