

Challenges and Opportunities in Mobile Money and Payment Services for Indian Business Environment

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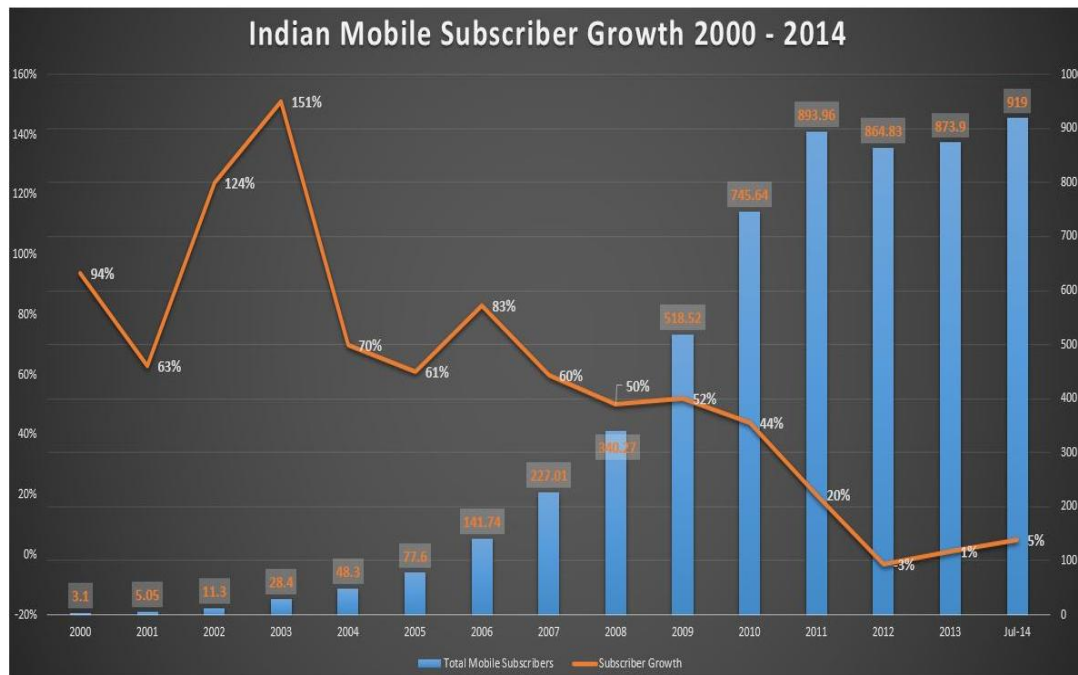
Abstract

It is very important to understand the market behavior, perception and need towards “Mobile money transfer and Payment services”, presently offered by operators like Airtel, Vodafone, etc. This paper presents business scope of the “Mobile money transfer and Payment services” in terms of the challenges and opportunities in this domain w.r.t. Indian business environment and suggests some methodologies to improvise the overall mobile money ecosystem. It is very essential to understand the overall flow of these services and understanding the various issues faced by all the major players in the eco-system.

Keywords: Mobile money, Mobile payment, Money transfer, Payment services

I. Introduction

Today, in 2014, India’s telecommunication is the fastest growing telecom market in world, only behind China. As per July 2014 TRAI report, India has close to 920 million total mobile subscribers. Just 6 years back that number was 250 million, whereas 10 years back in 2004 the same number was 48.3 million. That is a as huge a jump as it could. With growth in numbers, our Telecom Industry has also evolved. We now have 4G too. Mobile internet speeds are increasing, and more and more people are now coming on the Internet thanks to growth in Smartphones. [1]



Telecom services are considered to be very important for the social and economic development of a country and have been recognized globally. Over the past few years India has recorded excellent growth in the telecommunications market and at present is ranked as second-largest in the global telecommunications market. Telecommunication service is considered to be very crucial support service which is essential for quick development and modernization of numerous segments of an economy.

There is heavy adoption of data usage by customers on handheld devices which is going to play key role in enhancing revenues [2]. As per their report, the entire Indian mobile services market revenue is expected to touch US\$29.8 billion in 2014 and is expected to reach US\$37 billion in 2017, with a compounded annual growth rate (CAGR) of 5.2 per cent. The speedy progress in the telecom sector can be attributed to the liberal policies of the Government of India. Due to these policies and the regulatory framework, access to telecom equipment market has become easy and telecom services are being offered at reasonable prices.

According to Telecom Regulatory Authority of India [3], the number of telephone subscribers in India is 946.40 million (Wireless- 918.72 million and Wire line- 27.68 million). According to the data released by Cellular Operators' Association of India., in the month of July 2014, there has been an addition of 2.10 million rural users for GSM operators, resulting in a total of 302.73 million. Increasing earnings has been a key factor of demand growth in the telecommunication sector in India. The IMF forecasts income to expand at a CAGR of 5.7 per cent to US\$ 1,869.3 during 2013-18.

II. Mobile Money Service in India

Most of today's mobile service providers are seeking creative ways to collaborate with value-added and revenue generating partners to generate new revenue streams. Meanwhile, as mobile subscribers become more dependent on mobile communications to connect with their world, they are also looking for convenient ways to connect with the information and tools that make life a bit more accessible, simpler and easier. [5]

By connecting their subscribers to smarter & more practical services, service provider can reap the financial benefit for that they need a stored wallet or mobile money solution designed to make every day financial transactions fast, cashless and mobile [4]. This type of solution gives subscribers a safe, easy to use and secure virtual wallet and provided the multiple new revenue opportunities.

Following are the Mobile Money Service Providers (MMSP) in India:

- Vodafone m-pesa
- Airtel Money
- Aircel ICICI Bank Mobile Money Services
- mRupee- Mobile Money Order
- Oxigen e-Paisa
- Indian Post Offices in association with BSNL

Vodafone m-pesa

ICICI Bank and Mobile Commerce Solutions Limited (MCSL), a company from the Vodafone Group, incorporated the idea of "m-pesa" a money transfer service using mobile device, for Vodafone subscribers. For using the m-pesa service, MCSL issues a mobile wallet to customers called "MCSL Wallet" and also an account with ICICI bank called "Mobile Money Account". Both the account and the wallet are interoperable and the customers can transfer their money to the mobile bank account[6]

Airtel money

Airtel M-Commerce Services Limited (AMSL) is a fully owned subsidiary of Bharti Airtel Limited. One of the flagship products of AMSL is called semi-closed wallet. This semi-closed wallet branded as 'Airtel Money', is a prepaid payment which can be redeemed at various stores or establishments who have a contract with AMSL to accept the payment instrument. These instruments, however, do not allow cash withdrawal or redemption by the customers.

Aircel ICICI Bank Mobile Money Services

ICICI Bank and ASML, a Aircel group of company jointly offer Aircel ICICI Bank Mobile Money, a prepaid account for Aircel subscribers through which they can instantly transfer funds, pay from their mobile phones.

mRupee- Mobile Money Order

A money transfer service presented by mRupee. It is brought by Mobi Wallet Payment (MMP) Systems Ltd, a 100% subsidiary of Tata Teleservices Limited, in

association with ICICI Bank. With this facility any customer with an active mobile connection can transfer money to any scheduled commercial bank account (in India) by visiting the authorized mRupee agents.

Oxigen e-Paisa

Subscriber can send their money through Oxigen e-Paisa, a money transfer service brought to you by Oxigen India Pvt. Ltd in association with ICICI Bank. With this facility any customer with an active mobile connection can transfer money to any scheduled commercial bank account (in India) by visiting the authorized Oxigen e-Paisa agents.

Indian Post Offices in association with BSNL

Department of Posts (DOP) Mobile Money Transfer is a service which allows instant transfer using mobile phone. For this purpose consumer has to carry his mobile and initiate the transfer whereas the while the actual money transmission is initiated by the Postal Assistant, who uses his/her handset for the same. For this initiative, Bharat Sanchar Nigam Limited, has provided mobile connectivity to selected officials of DOP and the post office officials have been provided with a mobile handset which contains pre-loaded application provided by Maverick Mobile Solutions.

III. Role of Government and Regulation

In the area of money transfer where credibility is very important, government support can add credibility for such services which offer benefits to end users.[7] These services involve various entities, varied expectations and exclusive technological concerns hence government backing can play an important role in helping set up new mobile payment channels. Governmental support can play an important part for incentivizing at various levels of the value chain. Retailers require superior incentives whereas consumers require new types of security and safeguard majors.

Government needs to work collaboratively with mobile operators and card issuers for a uniform set of guidelines. In near future, regulations will play a key role for effective transition of payments through new channels and also for mobile service providers and end customers..

As a result of financial crisis, it is important for banking regulators to ensure better stability given the fact that the mobile channel is being increasingly although consumers are preferring remittances through mobile channels, the country lacks banking infrastructure for ensuring customer protection and security.[8] As a result, although demand or greater inclusion and at the same time a need for more financial stability are not able to go hand in hand. This calls for a need to achieve a balance between fostering the mobile payment channel to flourish on one hand and the need to provide better security for both service providers as well as customers.

Issues related to regulations will become more complex in future. For example, mandates for telecom regulators and mandates for the payment regulators are different which creates complexities. For telecoms regulators, it is mandatory that

operators ensure that competing networks are interconnected, but this is not mandatory case for payment systems regulators.

Another unique challenge with respect to regulations is virtual currency. The issues of virtual currency allow its users to redeem the currency with third party vendors in full cash. As a result of this, virtual currency is being accepted as proxy for real-world money. This increases the challenges for the regulatory authorities.

Another regulatory concern related to security regarding mobile money payments is the challenge which regulators face in identification of originator and the recipient of a particular payment transaction.[9] This assumes more importance in case of vulnerabilities such as theft or identity fraud. So apart from technological breakthroughs and marketing campaigns, it is essential to address these regulatory concerns related to security issues.

IV. Research Methodology

Data was collected from a heterogeneous sample comprising of 529 respondents. The research was primarily focused on “mobile money transfer and payment services” across India as this is a new service for Indians who are non-banked, however we also took people in the survey who has banking facility to understand the scalability of the service in future for the banked people. We focused to understand the customer interest, opinions, perceptions, ecosystem, technology and challenges for this service. As part of the research we have created an online survey using and we used channels like Face book, Twitter, Google contacts, linked in and online forums to get the responses from the market on customer interest, opinions and perception of the service.

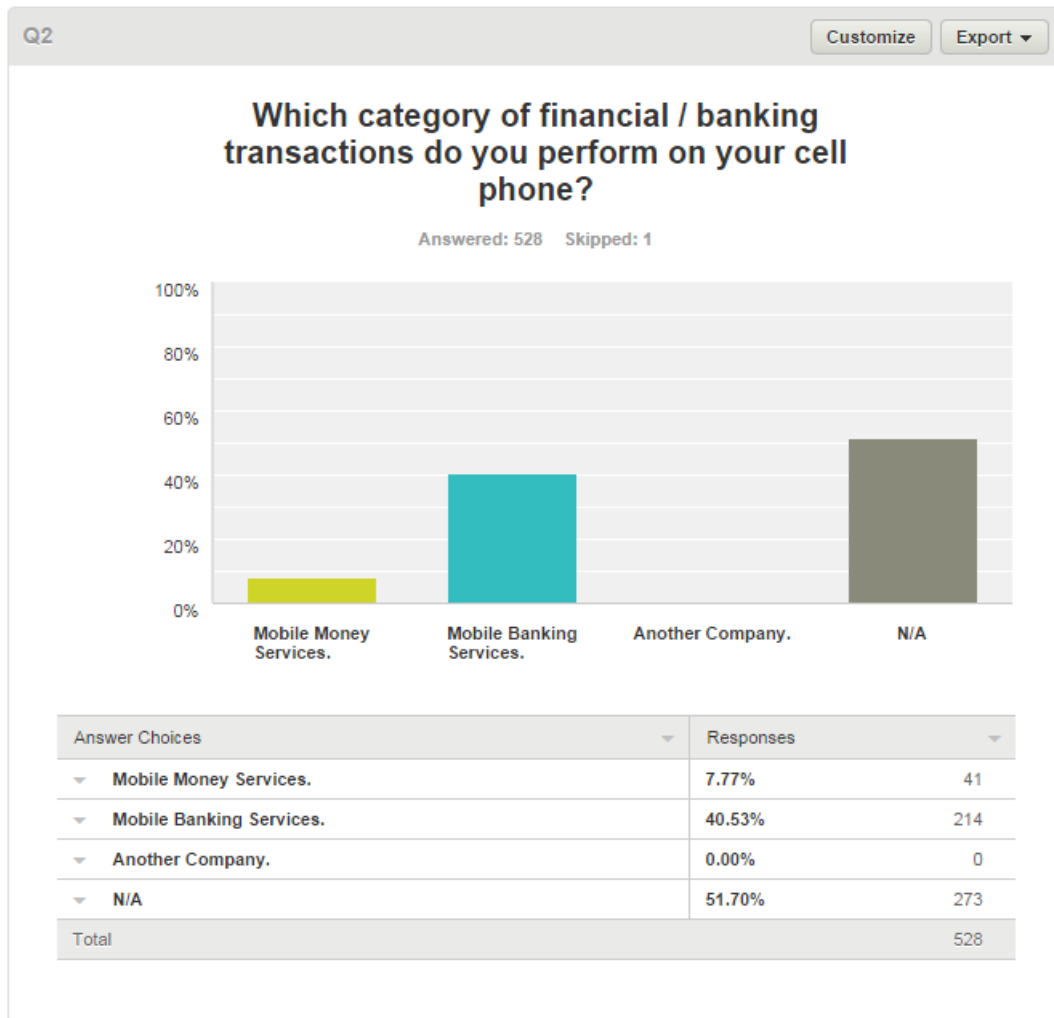
This survey included all the major categories of a standard telecom survey like:

1. Usage of Mobile Banking and General Use of Money.
2. Payment Behavior, Marketing & Advertising.
3. Financial Literacy.
4. User Interface.
5. Benefits of Mobile Banking (Utility).
6. Future Demand & Willingness to Spend.
7. Demographic Information.

We have created 21 questions covering all the above topics which include multiple choice and rating questions also considered survey respondents who choose options “not applicable”. We have also included questions related to mobile banking to understand if customer is not interested to mobile money services or any financial transactions using mobile.

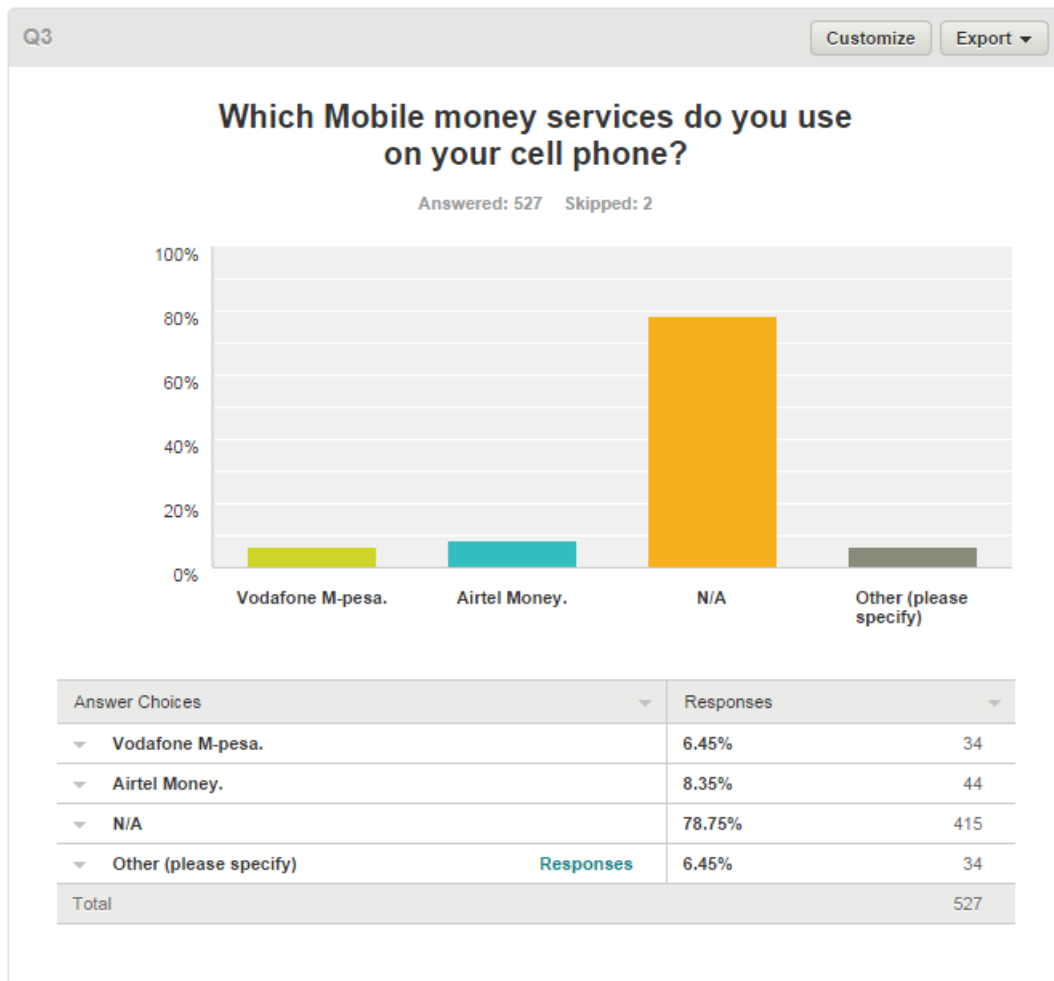
V. Findings

It is very important to understand if the respondent actually uses mobile phone for any financial transactions, this gives an understanding of the potential market size of non-banking mobile phone users. Close to 53% of our sample does not do any financial transactions using mobile.



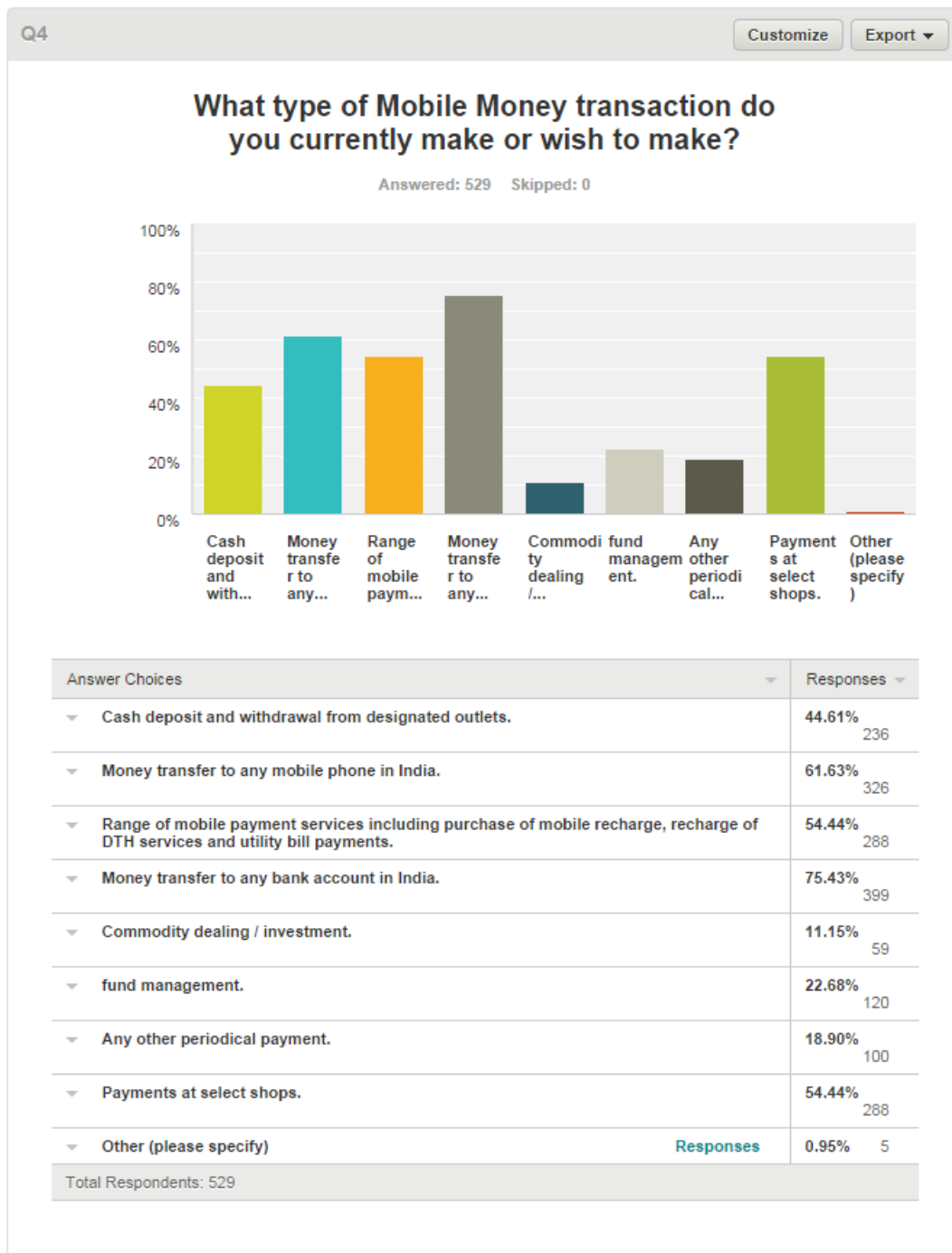
This question tries to understand bit insights of the users who perform financial transactions through mobile phones. As Mobile money is in early stages in India the result from the sample also tells the same.

Almost 41% respondents use Mobile banking services using their handsets.

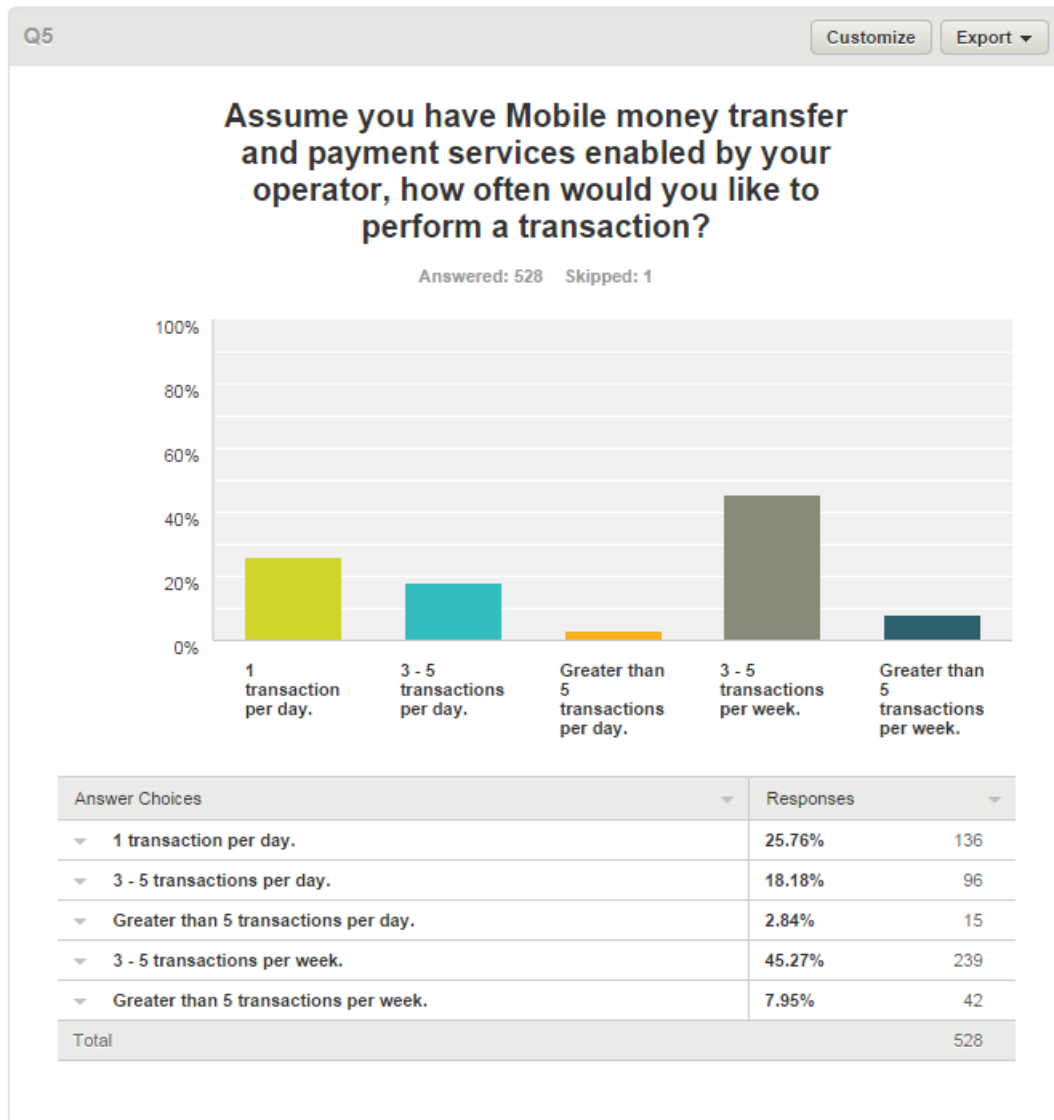


This question tries to understand how many people use the major mobile money services like Vodafone M-pesa, Airtel Money or both or even some other financial services offered by Tata Docomo or BSNL which we found in the others section.

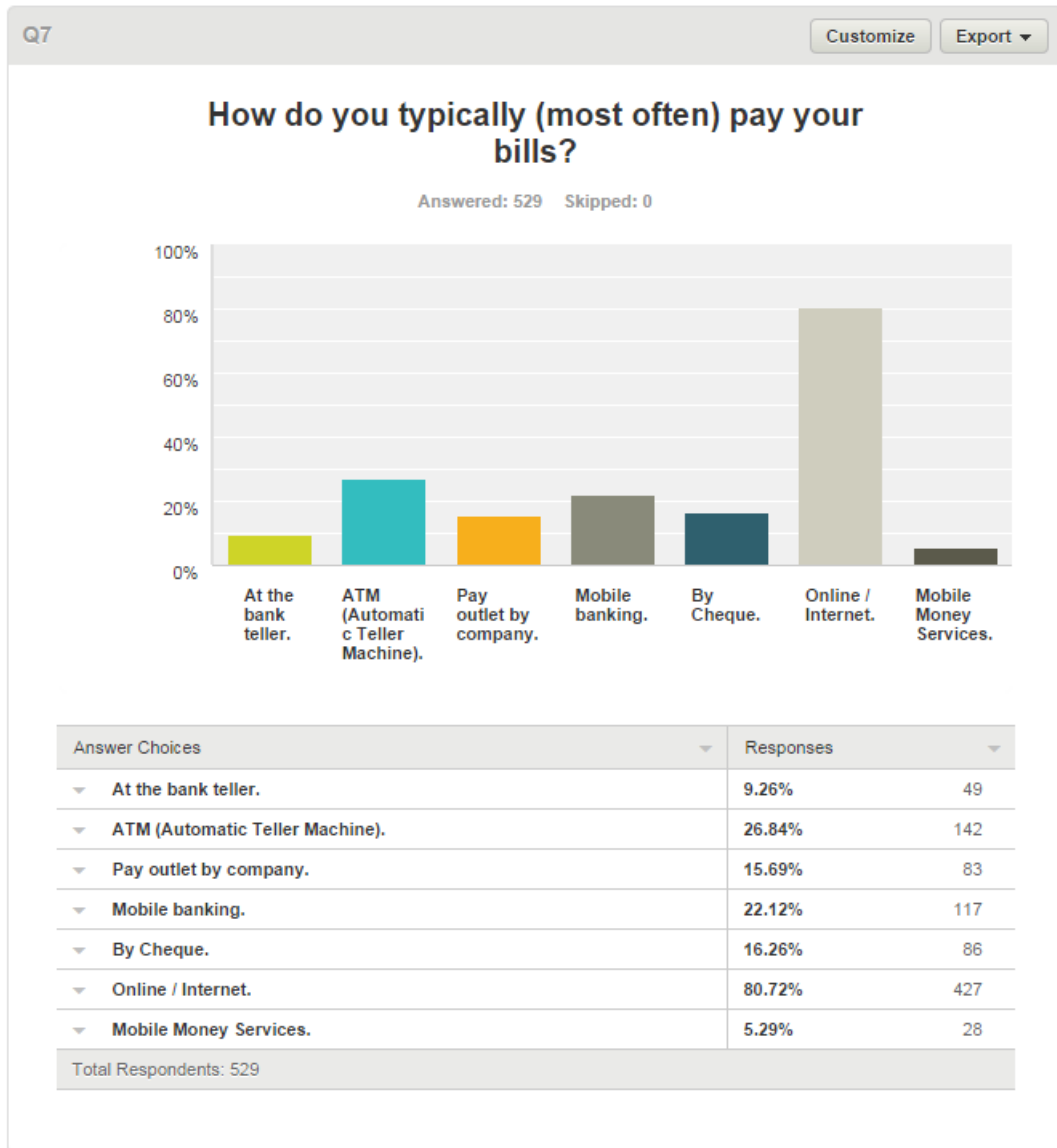
Here respondents might have multiple connections or maybe they have considered their family members as well whose mobile bills are paid by respondents.



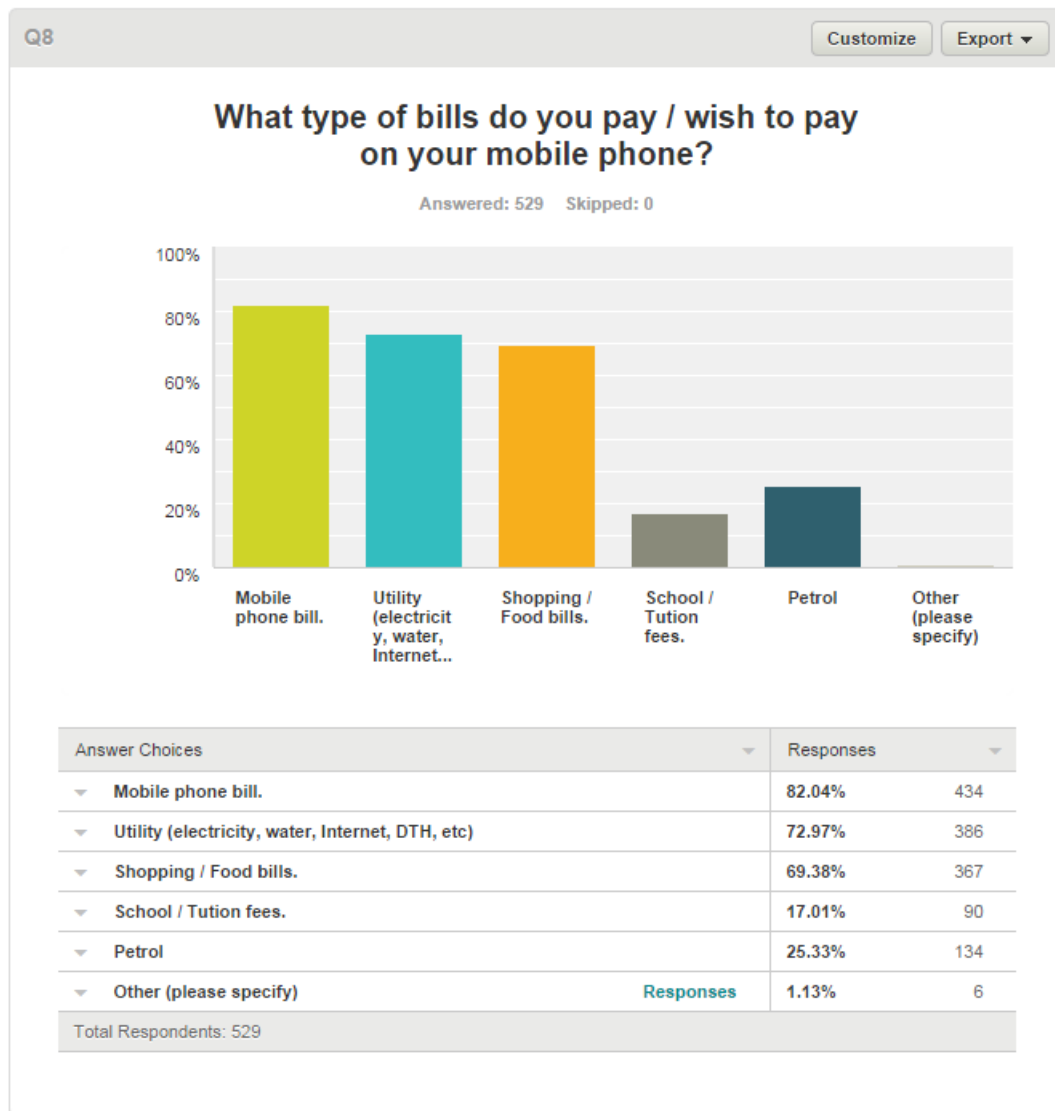
This question focuses on present and future transactions done or expected to be done by people who are presently connected or wish to get connected with mobile money services. This question gives clear information on customers' interest and willingness to perform financial transactions using mobile money in wide varieties. Customers have shown major interest towards money transfer using mobile numbers, money transfers to bank accounts and shopping.



This question tries to understand the frequency of financial transactions done / expected from the customers. This gives the operator an idea about his network traffic and scalability of the network to accommodate if the traffic increases. Most of the customers perform financial transactions using internet so operator has to create strategies majorly focusing on bringing the internet users to mobile money services. Mobile banking also has a major market, operator may even want to consider this and come up with more user friendly applications and process to perform financial transactions using mobile money.

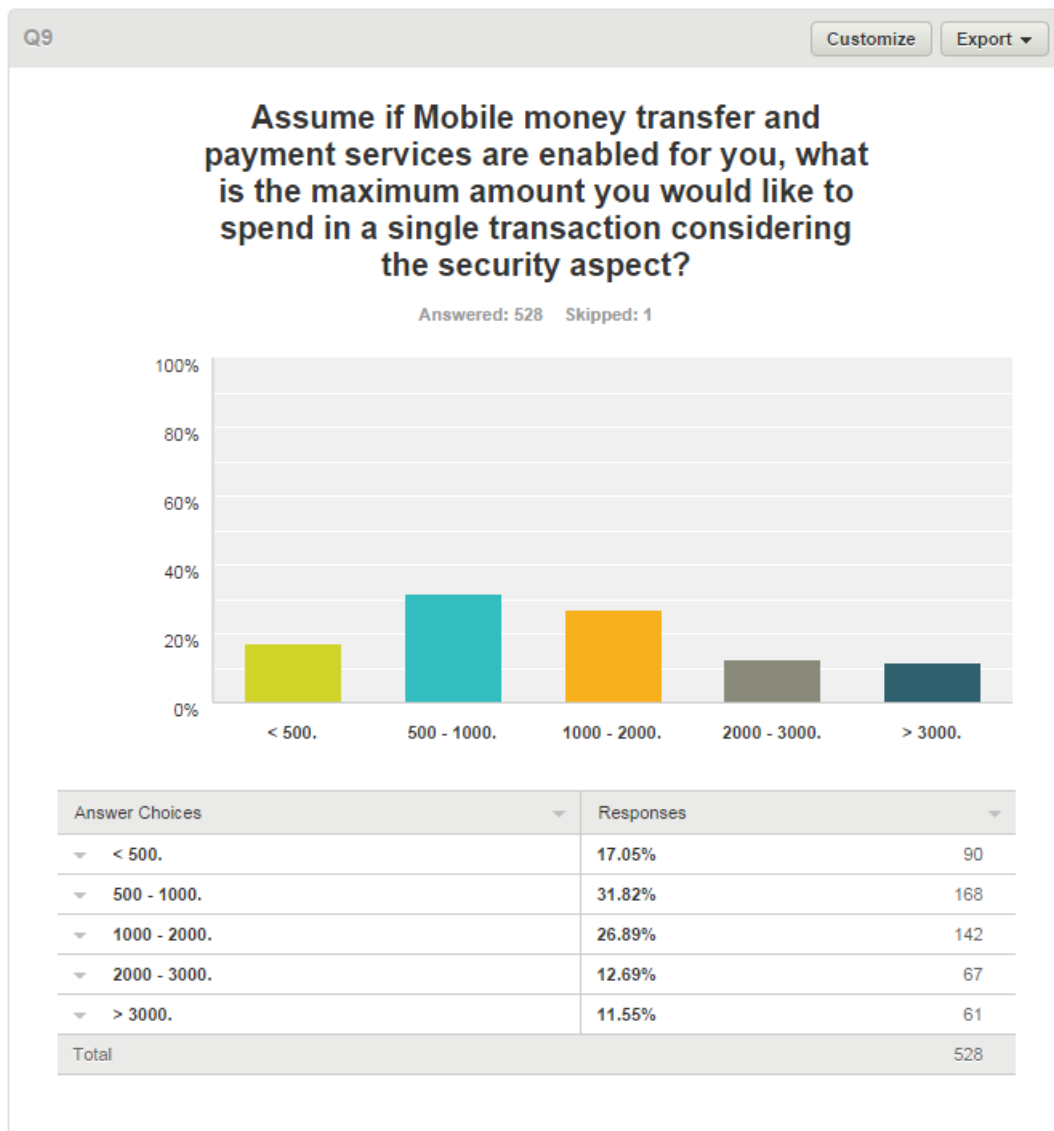


Bill payments under financial transactions segment has a major number, most of the people majorly perform bill payments like shopping bills, credit card, mobile and utility bills. Above question address how customers pay those bills, as you can see major number is using internet and mobile banking also has a good share so operator has to come up with plans or services which can help the customers pay all the types of consumer bills.



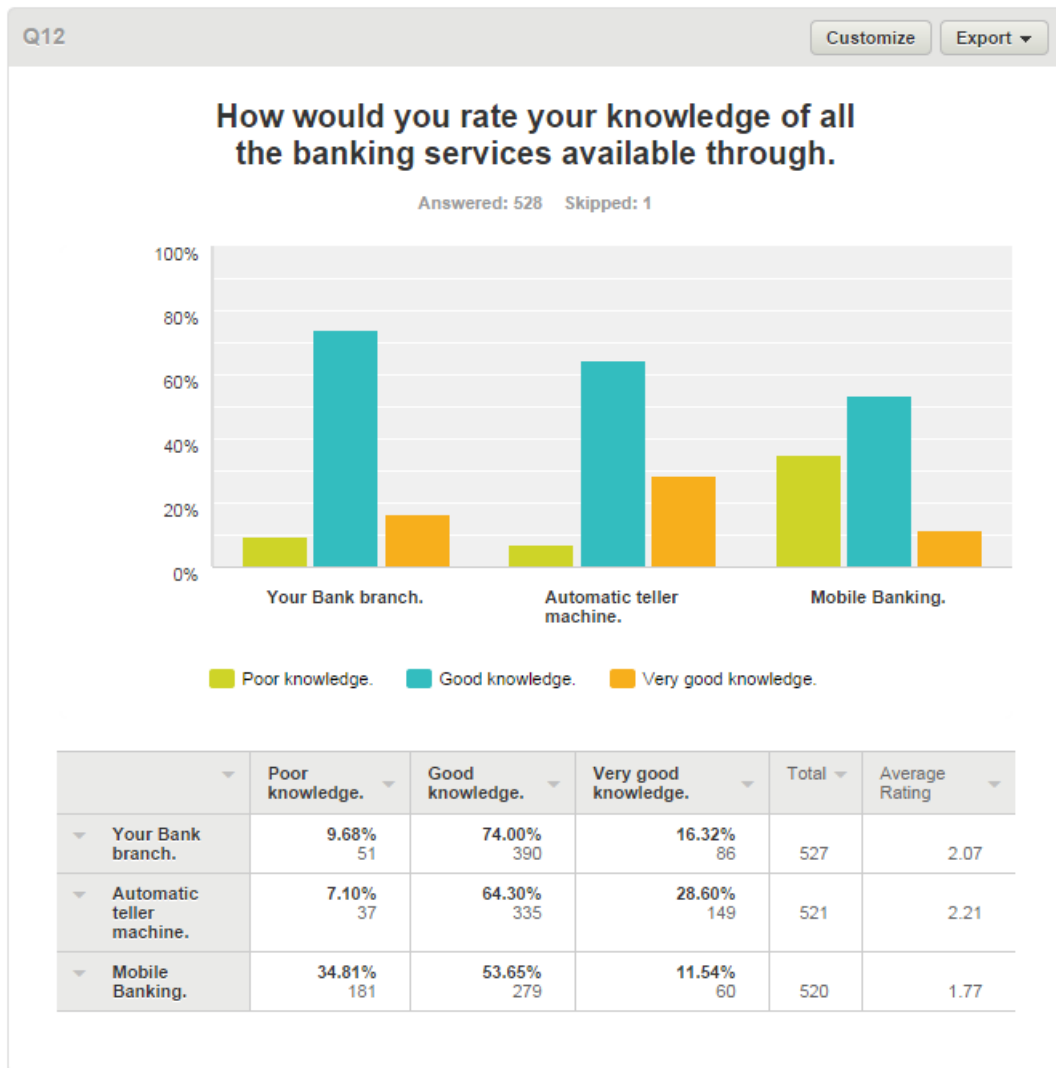
This question is an extension of the previous question, here we try to get details like exactly what type of bills customers would like to pay.

It gives operator an idea of services to include in the offer, and the wide diversification like under utility bills we have electric bill, water bill, tax, municipality, DTH, etc. Operator should focus majorly on mobile payments, Utility bill payments and hopping bill payments to attract more customers.

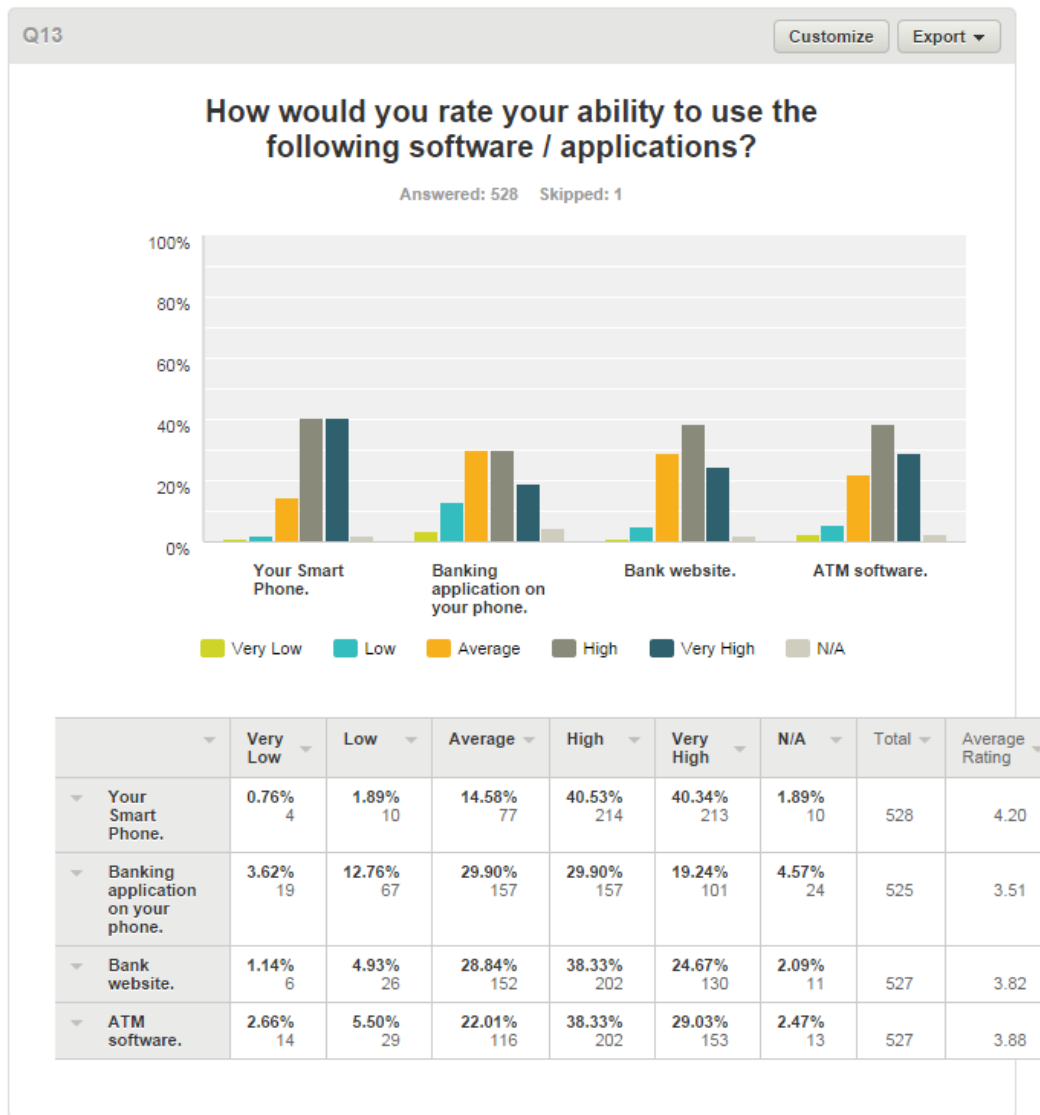


This question focuses on the actual money which gets transferred / paid to the other party using mobile money. Keeping the security concerns what the maximum amount a customer would like to perform in a single transaction. Customers have responded positively as 50% of the population would like to perform transactions between 500 – 2000.

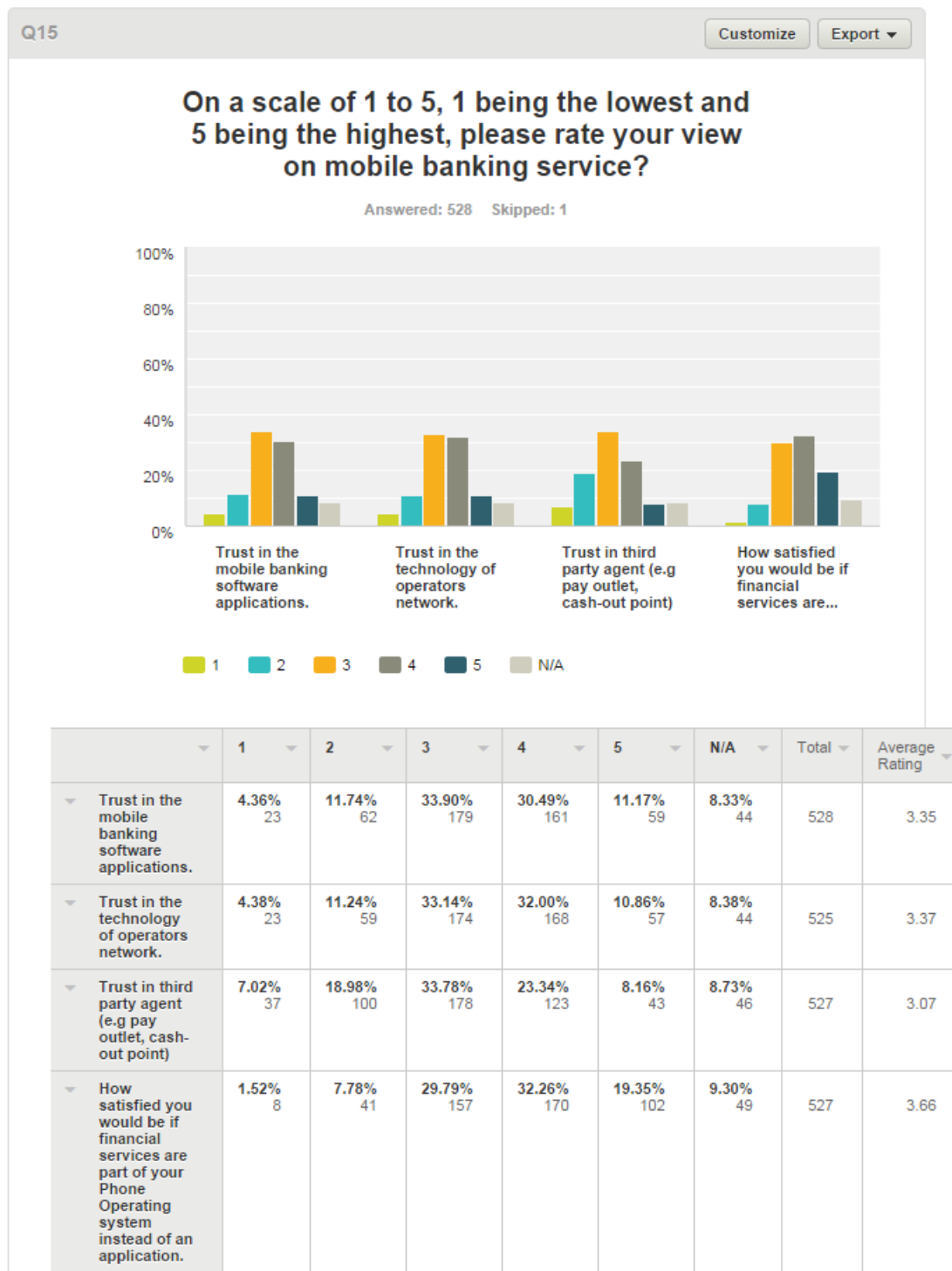
This is the segment where most of the utility bills, shopping bills and mobile recharges fall into.



This question answers the customer knowledge on all the banking services available through 3 modes: bank branch, ATM and mobile banking. Mobile banking is the one which got lesser average rating, operators may want to consider this when they are advertising the services and developing financial applications for mobiles.

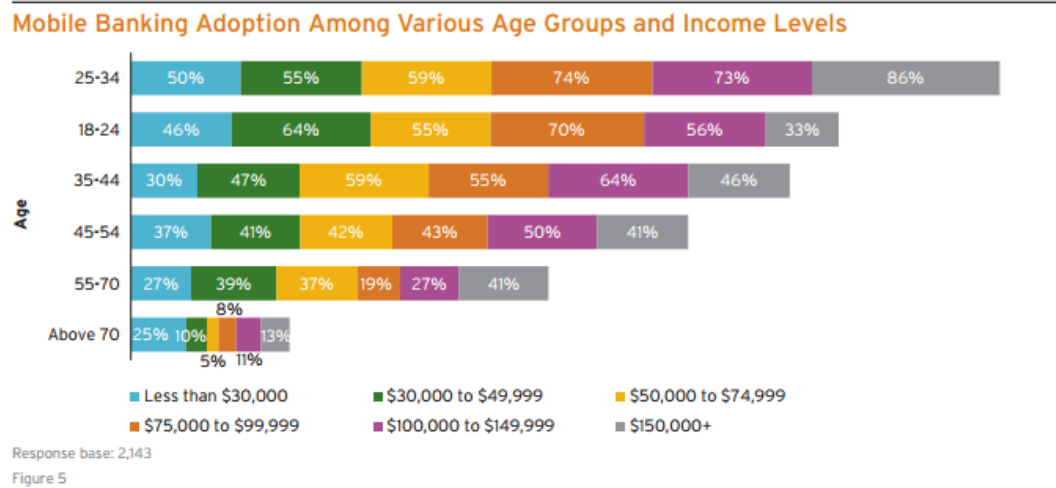


This question is an extension of the previous question, focusing on technical capabilities of the customer in performing the financial transactions. Operators should consider this in creating the financial applications as more complicated application would de-motivate the customer to go for mobile money.



This is again customer’s perception on the software, Operators network, Third party like payment gateways. And you can see as most of the customer would be happy if the mobile banking services are replaced by an operator which got the highest average.

The major focus was on to getting more responses from the age group 16-25 and 25-45. This is due to our readings in the research work conducted by Cognizant, KPMG states that major adoption of mobile money is in the young group.[10]



VI. Analysis & Recommendations

Basing on the out puts of the survey it confirms a positive response for “mobile money and payment services” in India among the employee segment of the population were half of the sample population is not using any financial services on mobile however they are interested in performing, operator should consider this and design the service so that it can work even on Basic phones to perform minimal transactions.

Mobile banking and financial transactions through internet is on high usage, it is the major challenge for the operator to convert those customers to move to mobile money services. Operator should try to include more diversified services and transactions which can be / cannot be performed by mobile banking and through internet for the rapid penetration of the service in Indian markets. Services ranging from balance check till performing trading using mobile numbers, yes this would be the future of mobile money services.

Operator should consider all the marketing and advertizing channels to take the service to the end user and give all the usage and benefits, as most of the customers wanted sms/email communication so that they can read about the service well and understand. The biggest challenge for the operator in Indian markets would be to win the confidence of the customers as it involves money transaction and strong network so that at any time the transaction should not be interrupted or cancelled because of the operator’s network.

Operator should also consider the technical usability and knowledge of the customers in using the screens or menus of the mobile money, it should be as simple as possible. User friendliness of Mobile banking and ATM should be taken as a bench mark in creating the mobile money service.

During the initial faces operator may want to consider giving some bonus points or cash back offers to customers who perform the transactions using mobile money to drive the customers in adopting the service. Operator should consider age group 16 – 35, which showed lot of interest in this service and fulfill all their requirements to drive more word of mouth and brand image. Mobile money services are in the initial stages in India if operator can take strategic decisions which benefits the society and creates a positive image, this would become the future channel for all the financial transactions done by customers.[11]

VII. Conclusion

Mobile money and payment services are in the early stages in India if the operators, banks and regulatory authorities can show interest and make policies which can help this service, this would become the future channel for all the financial transactions performed in India. It should be a collaborative effort between all the three units to promote and penetrate this service to the common man and help the countries financial transactions system to move towards perfection.

Operators may find initial challenges with the market penetration however if the right strategic decisions are taken at correct times then market may respond positive as most of the young generation is interested towards this service.

We hope with the change in the government and with aggressive and strategic prime minister “Shri Narendra Modi Ji” the future of telecom and financial services would rapidly grow and India would become a super power and bench mark in the coming years.

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