



Dataset for Mobile Banking Payment performance of Commercial Banks in India: A Trend Analysis from 2013 to 2018

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1. Introduction

M-Commerce is referred as the sale of goods and services as well as other contents through wireless devices without any hindrances from the perspectives of time and place .(Au & Kauffman, 2008; Mallat, 2007). As m-commerce is rapidly gaining popularity, m-banking transactions are expected to provide safe and secure e-payment transactions among individuals as well as organizations (Ondrus & Pigneur, 2006). Mobile payments may be explained as any payment system where mobile devices are used to set off, approve, and confirm a transaction (Au & Kauffman, 2008). M-payment is considered to be a natural advancement of E-payments and transactions which facilitate viable and expedient M-commerce transactions (Mallat, 2007). M-payments are usually transacted distantly through premium rate SMSs, WAP billing, Mobile Web, Direct-to-subscribers' bill and direct to credit cards. According to Juniper Research (2008), the gross value of payments made through mobile devices for digital products (eg, music, games and tickets etc) and physical products (eg, gifts, books and electrical appliances) would cross \$300 billion globally by the end of 2013. The reports have predicted the global annual gross payments to be grown more than 5 times and ticketing sector would constitute more than 40% share in the global payments value by the end of 2013. E-commerce corporations can gain competitive advantages over their counterparts by making provisions for m-payments and M-transactions to their customers apart from this; the issues related with appropriate m-payment usage are of very much significance (Au & Kauffman, 2008; Mallat, 2007; Ondrus & Pigneur, 2006).

Worldwide, the number of mobile users is increasing tremendously. For instance, and according to Statista (2018c), the number of mobile phone subscribers reached 4.6 billion in 2016 and this number is expected to reach 5.07 billion by 2019. Accordingly, mobile and telecommunication organizations

have been looking forward to expand their products and services provided by mobile phones (i.e. mobile internet, mobile payment, mobile social media, mobile government, mobile commerce, mobile shopping, and mobile learning) (Alalwan et al., 2016; Gerpott and Meinert, 2016; Laukkanen, 2016; Rana et al., 2016; Shareef et al., 2018; Xu et al., 2017). The evolution in mobile technology also represents more opportunities to be utilized by business and governmental organizations to introduce their products and services in a more effective and efficient manner (Mascheroni and Ólafsson, 2016; Tran and Corner, 2016). It is important to mention that this interest in accelerating mobile services has been with the intention of making people's life easier and enhancing the quality of services provided to them from both private and public organizations (Shareef et al., 2016). Accordingly, mobile technology applications have increasingly been playing an integral part in customers' daily lives; most people cannot leave their homes without carrying their phones (Dwivedi et al., 2016; Dwivedi et al., 2017a; Gallup, 2012; Shareef et al., 2012).

According to RBI's annual report for 2017-18, mobile banking services witnessed a growth of 92 per cent and 13 per cent in volume and value terms, respectively. Gone are days where mobile phones were used just to make calls, send messages, and take photographs. An increasing number of us are using our phones for financial transactions. According to the Reserve Bank of India's (RBI) annual report for 2017-18, mobile banking services witnessed a growth of 92 per cent and 13 per cent in volume and value terms, respectively. The number of registered customers rose by 54 per cent to 251 million at end-March 2018 from 163 million at end-March 2017. In general, the share of electronic payments in the total volume of retail payments has gone up. The share of electronic transactions in the total volume of retail payments increased to 92.6 per cent in 2017-18, up from 88.9 per cent in the previous year with a corresponding reduction in the share of paper-based clearing instruments from 11.1 per cent in 2016-17 to 7.4 per cent in 2017-18. Volume and value of the payment and settlement systems grew 44.6 per cent and 11.9 per cent, respectively.

1.1 Growth in electronic payments

According to the apex bank's annual report, here is the growth witnessed in various electronic modes of payments

- The Real Time Gross Settlement (RTGS) system handled 124 million transactions valued at Rs 1,167 trillion in 2017-18, up from 108 million transactions valued at Rs 982 trillion in the previous year. At the end of March 2018, the RTGS facility was available through 1,37,924 branches of 194 banks.
- The NEFT system handled 1.9 billion transactions valued at around Rs 172 trillion in 2017-18, up from 1.6 billion transactions valued at Rs 120 trillion in the previous year, registering a growth of 20 per cent in terms of volume and 43.5 per cent in terms of value. At the end of March 2018, the NEFT facility was available through 1,40,339 branches of 192 banks, in addition to a large number of business correspondent (BC) outlets
- During 2017-18, the number of transactions carried out through credit cards and debit cards was 1.4 billion and 3.3 billion, respectively.

Prepaid payment instruments (PPIs) recorded a volume of about 3.5 billion transactions, valued at Rs 1,416 billion

1.2 Payments' infrastructure

The number of Point of Sale (POS) terminals deployed increasing by 24 per cent from 2.53 million in 2016-17 to 3.14 million in 2017-18. However, during the same period, the ATMs deployed witnessed.

Number of mobile phone internet users in India from 2015 to 2018 (in millions)

Table 1

Year	Users
2015	242.92
2016	281.81
2017	320.57
2018	358.46

The purpose of this paper is to show the data set of Mobile banking transactions from period of 2013-2018 and to determine whether the volume of Mobile banking transactions is increasing or it is declining.

2. Review of literature

Web analysts use their knowledge base and experiences for facilitating their information processing and to differentiate the relevant information from irrelevant ones (Rieh, 2004). The number of mobile phone users has already surpassed the number of people who use fixed lines connected to the Internet (Dholakia & Rask, 2002).

M-technology is an umbrella term which encompasses devices, protocols, and infrastructural facilities which grant permission to communicate, transmit and exchange data with other people and/or systems anywhere as well as anytime (Lim, 2007). In terms of Mobile technologies, the most unique feature is mobility and reachability, which keep mobile transactions in an advantageous position over online transactions (Ding, Ijima, & Ho, 2004). Mobility means that the users could carry mobile phones and other mobile devices with the purpose of making transactions anytime and anywhere within the limits of mobile networks.(Au & Kauffman, 2008; Ding et al., 2004). Reachability in terms of mobile phones and devices facilitate peoples to connect or get connected anytime as well as anywhere besides it also provides mobile users to limit their connectivity and reachability to specific peoples and at specific times (Perry, O'hara, Sellen, Brown, & Harper, 2001). The most important aspect of mobile technology is mobility per se: which is defined as the ability to access mobile services universally through wireless networking and mobile devices, including Personal Digital assistants and mobile devices (Au & Kauffman, 2008; Clarke, 2001; Coursaris & Hassanein, 2002; Mallat, 2007; Nohria & Leestma, 2001). In contrast to the traditional e-commerce, where transactions are typically conducted via wired-Internet, the mobile payment system facilitates users greater sense of freedom and value and allow the users to have access over the time-critical information and other services that too without considering time as well as place (Anckar & D'Incau, 2002). Au and Kauffman (2008) explained the advantages provided by mobile technology as follows "anytime and anywhere computing" and explained the two most basic aspects of mobility as , most common dimensions of mobility – freedom in terms of time and place.

In the words of Proch now (2006), credit allotment is a technique of granting loans and credit to a beneficiary for economic organization. M-banking grants loan and credits to borrowers after verifying and analyzing borrower's credit credentials and eligibility as per the concerned bank's rules, regulations, policies, loan terms, loans Conditions, credit standards, credit collection terms and credit reference reportage (Greuning& Bratanovic, 2009).

M-Banking is also viewed as a redeemer for commercial banking institutions as it provides numerous opportunities for banks to retain their existing customers as well as tech-savvy customer base by offering them improved, value-added and innovative banking services. Besides it also assist banks in attracting new customers (Mageto, 2017). Kathuo, Rotich and Anyango (2015) validated that m-banking technologies have transformed the most basic banking services to be more accessible and approachable by reducing the constraints created by time and geographical distances. Through M-banking technology the banking services are possibly available at the nearest retail branches of banking institutions ultimately M-banking has also helped banks in mitigating their overheads and other transaction costs. A study by Ethang'atha et al. (2015) advocated that there is a necessity to lower service fees usually charged upon the Mobile Payments and transactions in Kenya, in an effort to mitigate higher charges on Mobile Payments.

3. Research Methodology

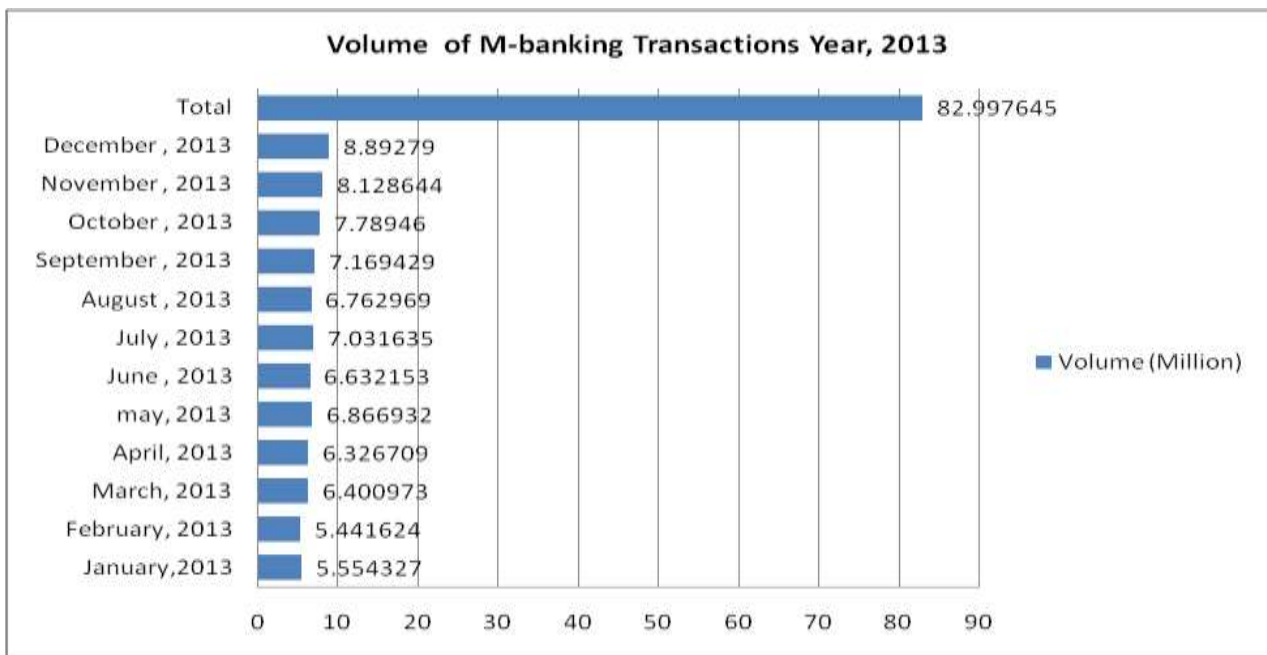
This study took on a descriptive survey research design. A descriptive survey attempts to describe or define a subject often by creating a profile of a group of problems, people or events through the collection of data and tabulation of the frequencies on research variables or their interaction as indicated by Cooper and schindler (2006). The population of the study in this research included all the commercial banking institutions operating in India.

The study made use of secondary data on the deposits and other transactions of the banking industry for the last five years from 2013 to 2018. The dataset is a raw data for a six year period starting from 2013 to 2018 pooled from the online repositories of the apex regulatory body, the Central Bank of India(RBI) .The dataset was analyzed using Microsoft excel applying sum total and simple average formula.

4. Data Analysis Result and Discussion

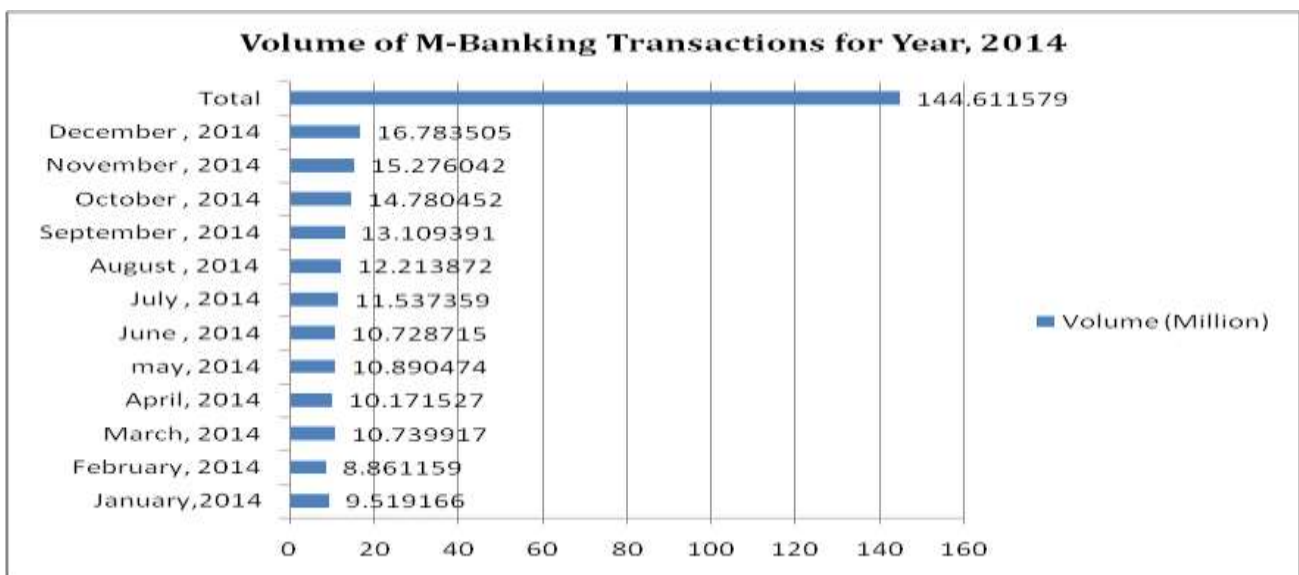
This section presents the data analysis and interpretation of the results. The study sought to establish the transactions reached through technology customers among commercial banks in India from the year 2013 to 2018. This was done by calculating the ratio of number

4.1 Mobile Banking transactions for the year, 2013



From the findings presented above, the study established that in the year 2013, the volume of mobile banking transactions were 5.55 million in January which grew again throughout the year to reach 8.89 by December 2013. The annual volume of mobile banking transactions was recorded 88.92 by 2013 year.

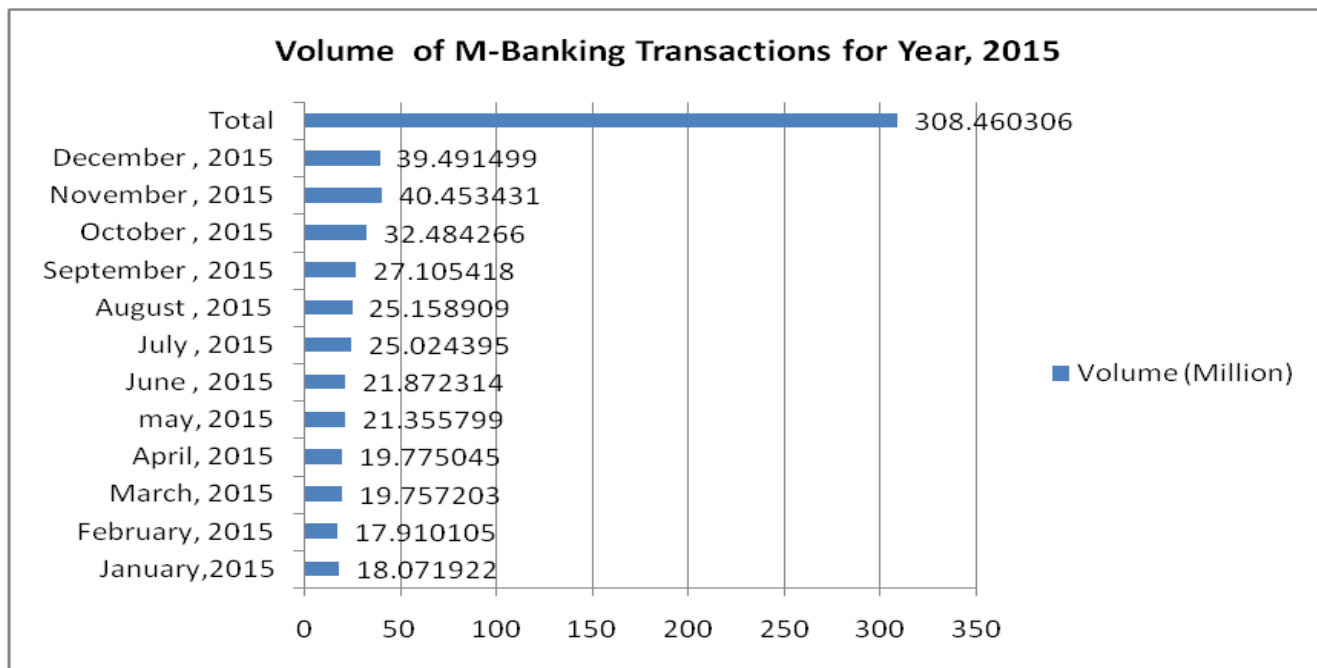
4.2 Mobile Banking transactions for the year, 2014



From the findings presented above, the study established that in the year 2014, the volume of mobile banking transactions were 9.51 million in January which grew again throughout the year to reach

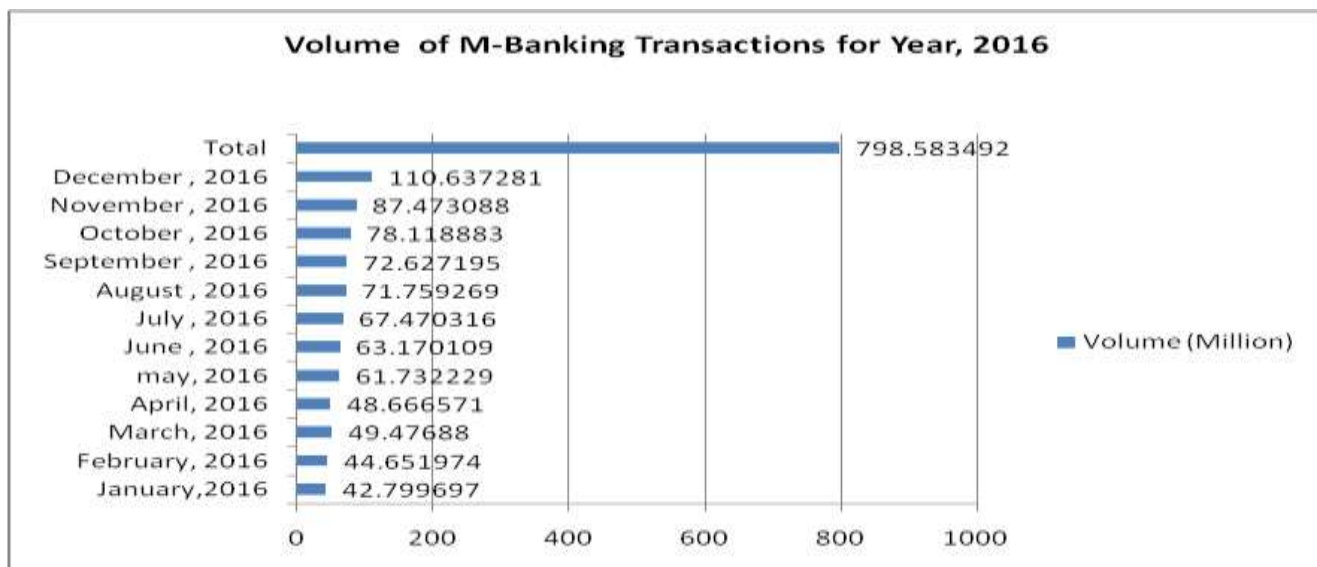
16.78 by December 2014. The annual volume of mobile banking transactions was recorded 144.62 by 2014 year.

4.3 Mobile Banking transactions for the year, 2015



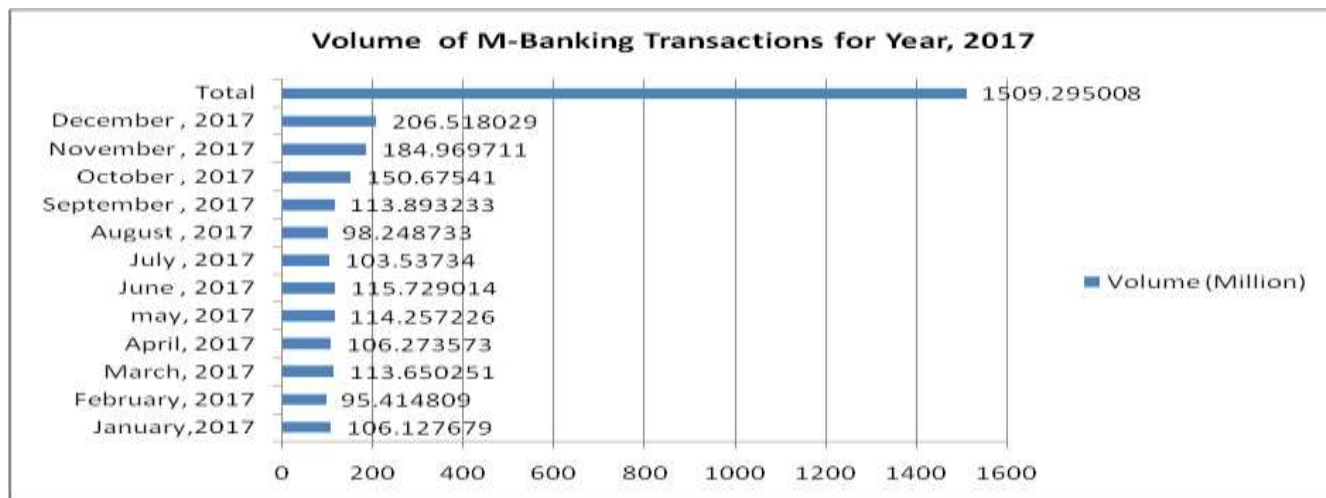
From the findings presented above, the study established that in the year 2015, the volume of mobile banking transactions were 18.07million in January which grew again throughout the year to reach 39.49 by December 2015. The annual volume of mobile banking transactions was recorded 308.47 by 2015 year.

4.4 Mobile Banking transactions for the year, 2016



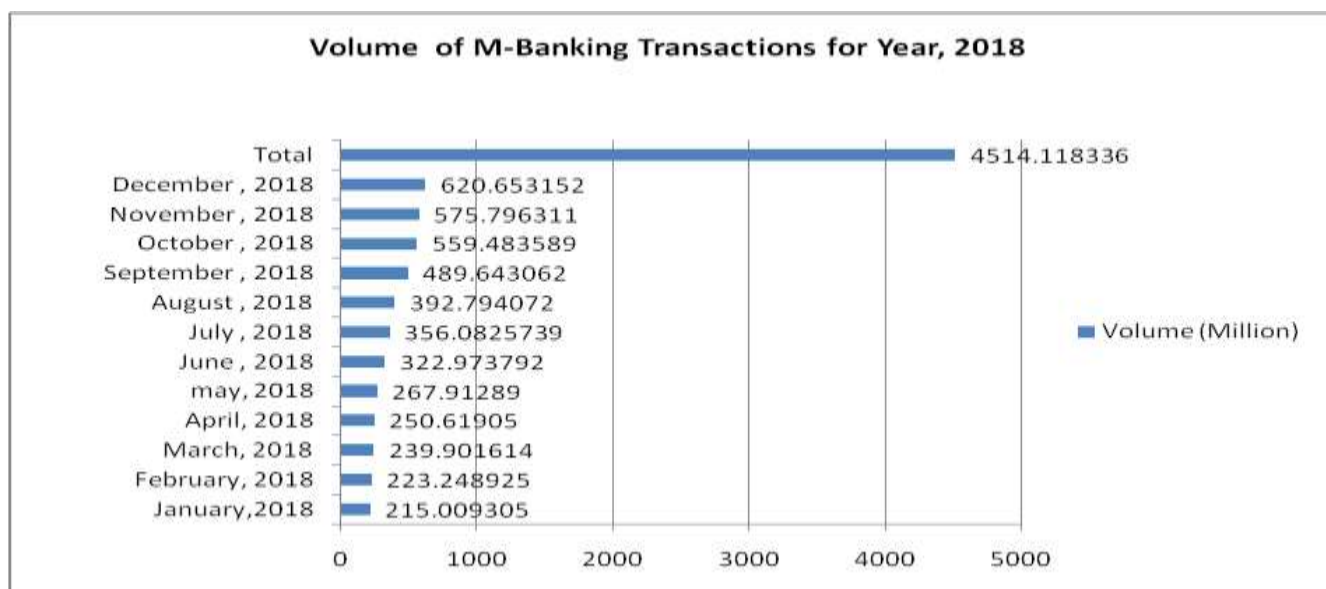
From the findings presented above, the study established that in the year 2016, the volume of mobile banking transactions were 42.80 million in January which grew again throughout the year to reach 110.64 by December 2016. The annual volume of mobile banking transactions was recorded 798.59 by 2016 year

4.5 Mobile Banking transactions for the year, 2017



From the findings presented above, the study established that in the year 2017, the volume of mobile banking transactions were 106.13million in January which grew again throughout the year to reach 206.52by December 2017. The annual volume of mobile banking transactions was recorded 1509.30 by 2017 year

4.6 Mobile Banking transactions for the year, 2018



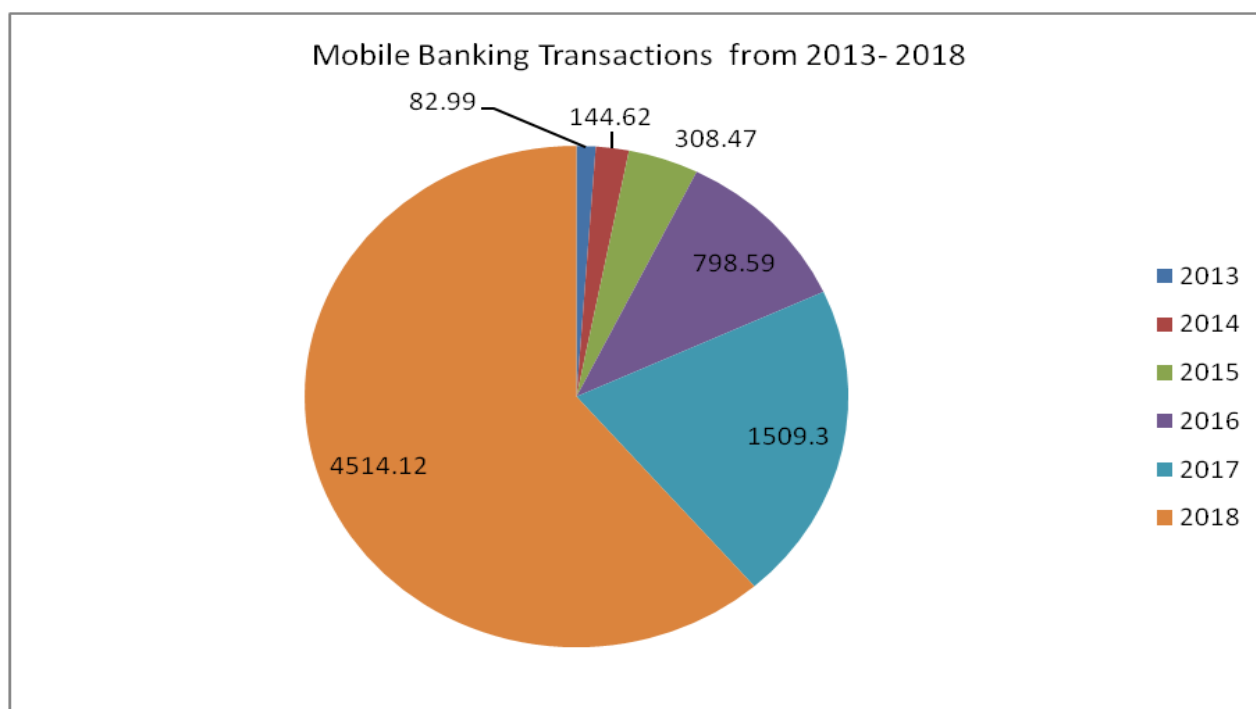
From the findings presented above, the study established that in the year 2018, the volume of mobile banking transactions were 215.01 million in January which grew again throughout the year to reach

620.65 by December 2018. The annual volume of mobile banking transactions was recorded 4514.12 by 2018 year

4.7 Mobile Banking Transactions from 2013- 2018

Table 1
Mobile Banking Transactions from 2013- 2018

Year	Volume (million)
2013	82.99
2014	144.62
2015	308.47
2016	798.59
2017	1509.3
2018	4514.12



From the findings presented above, the study established that in the year 2013, there were 82.99 million users in year 2013 which grows continuously to reach by 4514.12 by year 2018. The annual growth rate volume of Mobile Banking transactions is recorded almost more than 50 percent which shows there is positive trend in the volume of Mobile Banking transactions as it doesn't decline annually.

5. Conclusion and future research

From the research findings presented in the above section and summary of findings, the study concludes that there is a positive trend of Mobile Banking transactions from 2013-2018 because the volume of Mobile Banking transactions in India is increasing at increasing rate as it doesn't decline annually. The annual growth rate volume of Mobile Banking transactions is recorded almost above 50 percent. In some previous literature the Mobile Banking customer are increasing rapidly which may also increase the Mobile Banking transactions. The dataset sheds light on the post-adoption and performance of Mobile Banking in India

The dataset is useful for research work on determining the responsiveness of bank customers to e-banking products, e-payment fraud and cashless policy agenda of regulatory authorities. The data set is valuable for further guidance to researchers who act as consultants on policy for, financial advisory services and performance measurement. The dataset can be used by research and development units of Mobile telecommunications operators, Internet Service Providers (ISPs) and Financial Technology (FinTech) companies for market analysis, forecasting and opportunities that lie ahead

6. References

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