

## Analysis of Mobile Banking Transactions by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank)

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### Abstract:

**Background:** Now a day customers are aware about their rights of availing the facilities providing by the service industries. As the service provider's number is enormous in market thus, customers have several choices to shift or change its service provider easily. Hence the competition among the service providing companies become more severe so they provide the as much as facilities to their customers for retaining in them into their company. Banking sector is not an exception of this competition. Thus, banks try to provide banking services 24 by 7 to their customers. And in the time of digital era mobile banking become kingpin in this competition. The present article is an approach of analyze the mobile banking transaction utilization by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank).

**Materials and Methods:** The data of monthly actual transactions made by customers and amount of the transaction in Rs '000 was collected from various online sources. And their analysis was done with the help of several statistical tools for interpretation of the objectives of the study and validation was also done by the hypothesis testing with the help of ANOVA statistical tool.

**Results:** State Bank of India is leading Bank in Mobile banking among the three banks analyzed followed by the Bank of Baroda and HDFC Bank in terms of Actual transaction and value of transaction in Rs '000.

**Key Word:** Mobile Banking; Actual Transactions; Value of Transactions; State Bank of India; Bank of Baroda, HDFC Bank.

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### I. Introduction

Banking sector is one of the important financial sectors of several countries economic growth. Indian banking sector can be classified under Public Sector Banks, Private Banks, Foreign Banks, Regional Rural Banks and Cooperative Banks. During last several years, Indian banking sector faced a variety of even and odd situations; besides that Indian banking sector evolved in a dramatically way. The technological advancements with internet and telecommunication stated a new era of banking sector. Now a customer may utilize the banking facilities at any time from any place. The advancement in mobile phone technology (android phones, operating system based phones and satellite phones) revolutionized the customer experience towards the banking services<sup>1,2</sup>. Mobile banking is the part of the E-Banking facilities provided by the several banks situated in India. Mobile banking popularizes day by day due to its easy handling, short time period of process and instant information sharing and ultimately more user friendly approach made it a feather in a crown situation for the customer utilization trend<sup>3</sup>.

### II. Material And Methods

**Study Duration:** January 2019 to December 2019.

**Sample size:** Three Banks (Bank of Baroda, State Bank of India and HDFC Bank).

**Objective:** To analyze the trend of Mobile Banking Transactions by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank) during the year 2019.

#### Hypothesis of the Study:

**Null Hypothesis H<sub>0</sub>** = There is no significant difference in the Number of Actual Mobile Banking Transactions and Total Values of Mobile Banking Transactions (In Rs'000) by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank) during the selected time period.

**Alternative Hypothesis H<sub>1</sub>** = There is significant difference in the Number of Actual Mobile Banking Transactions and Total Values of Mobile Banking Transactions (In Rs'000) by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank) during the selected time period.

**Scope of the Study:** The study helps to evaluate the recent customer trends about the mobile banking in banking sector. The study would help to improve the banking facilities and making them more user friendly on customer's mobiles.

**Limitation of the Study:** The presented study having limitations as it is based on the published data by selected banks in the form of annual reports and their financial statements). Thus, it is subjected to all limitations that are inherent with the utilization of published financial statements.

**Procedure Methodology:**

The data regarding to the Number of Actual Mobile Banking Transactions and Total Values of Mobile Banking Transactions (In Rs'000) by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank) was collected from secondary data set available with Annual reports of the selected banks, Reserve Bank of India and several online portals dealing with the Banking sector or Reserve Bank of India (<https://www.rbi.org.in>)<sup>4,5</sup>.

The banks taken under the study were classified as State Bank of India and Bank of Baroda from public sector banks and HDFC Bank from private sector banks.

**Statistical Analysis:**

Various statistical methods were employed to analyze the datasets. In the present study Average, Standard Deviation and ANOVA was mainly utilized to explain the interpretation and findings. Hypothesis was tested and supported with ANOVA statistical tool.

**III. Result**

During the January 2019 to December 2019 (one year) a total of 101702270 Mobile Banking Transactions was made by customers of the Bank of Baroda with an average of 8475189.167 transactions per month. While SBI customers made a total of 2558877681 Mobile Banking Transactions with an average of 213239806.8 transactions per month. On the other hand HDFC bank customers made a total of 938674010 Mobile Banking Transactions with an average of 78222834.17 transactions per month (Table 1 and Figure 1).

In terms of amount circulated through mobile banking during the January 2019 to December 2019 (one year) was a total transaction amount of 821657501.1 thousands rupees was made by customers of the Bank of Baroda with an average of 68471458.43 thousands rupees per month. While SBI customers made a total transaction amount of 13930471120 thousands rupees with an average of 1160872593 thousands rupees per month. On the other hand HDFC bank customers made a total transaction amount of 6652985432 thousands rupees with an average of 554415452.7thousands rupees per month (Table 1 and Figure 2).

**Table 1:** Comparative account of Number of Actual Mobile Banking Transactions and Total Values of Mobile Banking Transactions (In Rs'000) by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank)

2019 Month	BANK OF BARODA		STATE BANK OF INDIA		HDFC BANK LTD.	
	Volume (Actual)	Value (In Rs'000)	Volume (Actual)	Value (In Rs'000)	Volume (Actual)	Value (In Rs'000)
Jan-19	6299786	49092022.31	133742923	481516847.4	48299181	439466404.1
Feb-19	6183341	47525226.34	130150828	529712802.2	49188204	428037848.5
Mar-19	9400600	78551095.27	145159525	1275330289	60057314	525843745.8
Apr-19	11009341	72773976.32	189128183	990775025.43	60180210	491041652.73
May-19	8094417	67807343.87	182640831	1676156517.17	64556692	554401571.84
Jun-19	7832602	64141316.02	187981664	1894525609	67439088	519418708.2
Jul-19	8403726	67793157.5	209805229	2109278432	77024318	547334987.3
Aug-19	8600873	66933139.14	229890759	2025876.179	84139976	567303664.6
Sep-19	8401313	67633046.87	241583684	1536953480	89920932	560297201.2
Oct-19	8990210	79490950.63	290589444	1593453480	107330626	663272211.3
Nov-19	8960800	77513849.92	300516767	910042961	108376705	660154034.1
Dec-19	9525261	82402376.95	317687844	930699800.35	122160764	696413402.30
<b>Total</b>	<b>101702270</b>	<b>821657501.1</b>	<b>2558877681</b>	<b>13930471120</b>	<b>938674010</b>	<b>6652985432</b>

Average	8475189.167	68471458.43	213239806.8	1160872593	78222834.17	554415452.7
Std.Dev.	1329772.355	11096285.61	64396606.17	631919324	24415653.42	84577360.52

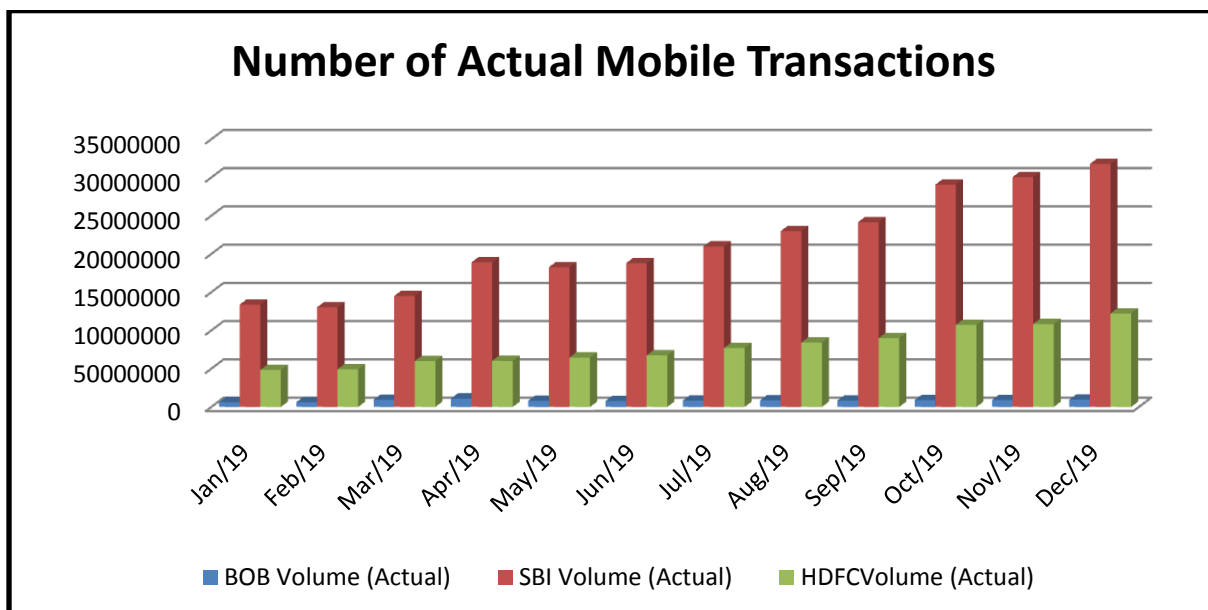


Figure 1: Comparative account of Number of Actual Mobile Banking Transactions by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank)

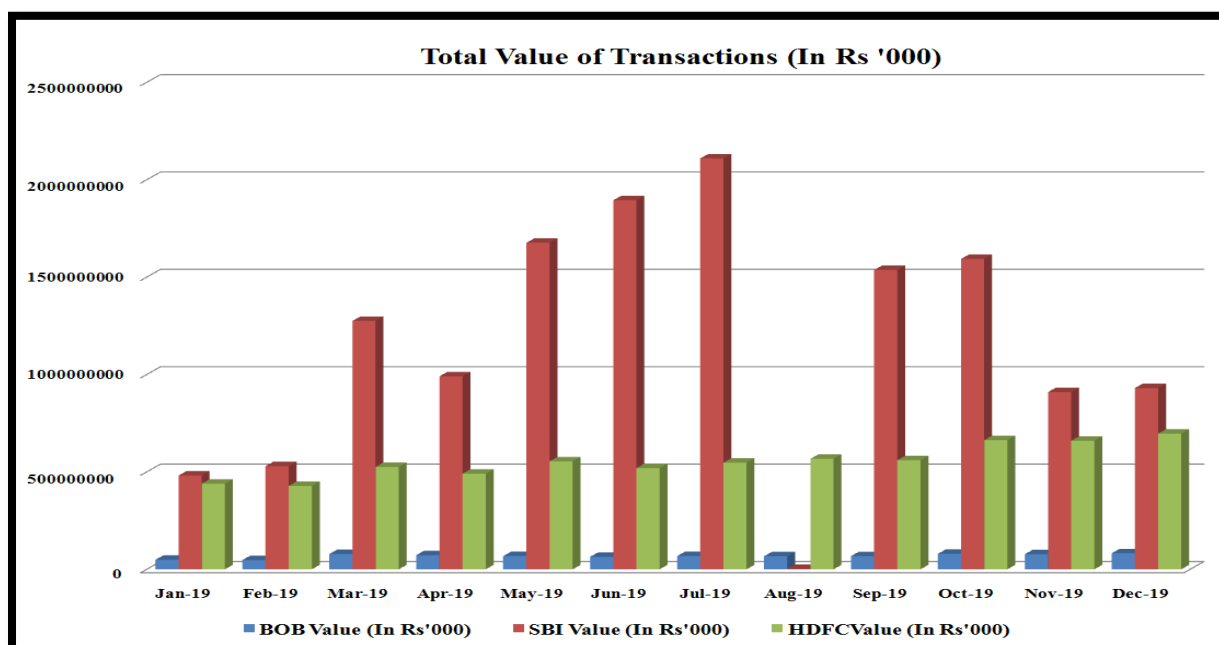


Figure 2: Comparative account of Total Values of Mobile Banking Transactions (In Rs'000) by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank)

Table 2: ANOVA (Single Factor) for Number of Actual Mobile Banking Transactions by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank)

SUMMARY					
Groups	Count	Sum	Average	Variance	
BOB Volume (Actual)	12	101702270	8475189.167	1.76829E+12	
SBI Volume (Actual)	12	2558877681	213239806.8	4.14692E+15	
HDFC Volume (Actual)	12	938674010	78222834.17	5.96124E+14	

ANOVA						
Source of Variation	Sum of Squares	df	Mean Square	F	P-value	F crit
Between Groups	2.60091E+17	2	1.30046E+17	82.22389434	1.51537E-13	3.284917651
Within Groups	5.2193E+16	33	1.58161E+15			
Total	3.12284E+17	35				

**Table 3:** ANOVA (Single Factor) for Total Values of Mobile Banking Transactions (In Rs'000) by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank)

SUMMARY						
Groups	Count	Sum	Average	Variance		
BOB Value (In Rs'000)	12	821657501.1	68471458.43	1.23128E+14		
SBI Value (In Rs'000)	12	13930471120	1160872593	3.99322E+17		
HDFC Value (In Rs'000)	12	6652985432	554415452.7	7.15333E+15		

ANOVA						
Source of Variation	Sum of Squares	df	Mean Square	F	P-value	F crit
Between Groups	7.18909E+18	2	3.59454E+18	26.52157519	1.36E-07	3.284918
Within Groups	4.47258E+18	33	1.35533E+17			
Total	1.16617E+19	35				

#### IV. Discussion

- F value (82.223) is higher than F critical value (3.284) indicates that there is significant difference in total Number of Actual Mobile Banking Transactions by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank) (Table 2)
- F value (26.521) is higher than F critical value (3.284) indicates that there is significant difference in Total Values of Mobile Banking Transactions (In Rs'000) by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank) (Table 3)

#### V. Conclusion

- As F value (82.223) is higher than F critical value (3.284) for the total Number of Actual Mobile Banking Transactions and F value (26.521) is higher than F critical value (3.284) for Total Values of Mobile Banking Transactions (In Rs'000) by the customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank) we reject the Null hypothesis and accept the alternative hypothesis as results indicates that there is significant difference among the trend of datasets in customers of selected Indian Banks (State Bank of India, Bank of Baroda and HDFC Bank).

#### References

- [1]. Menberu, A. (2017). The effect of electronic marketing on customer satisfaction: the case of four-star hotels in Addis Ababa. A Master Thesis Submitted to the School of Graduate Studies of Addis Ababa University
- [2]. Alharbi, A.H. &Alhider, I.H. (2018). The impact of customer satisfaction and loyalty on e-marketing: moderating effect of perceived value. *Journal of Marketing and Consumer Research* Vol.46, 2018 pg. 70-77
- [3]. Bhasin, NK. and Anupama, R. (2015): Increasing Trends in Usage of E-Banking Payment Systems by Bank Customers. *Thirteenth AIMS International Conference on Management. Held at Indus Business Academy (Bangalore campus) December 19-22. ISBN: 978-1-943295-02-9. Pp 150-155*
- [4]. Reserve Bank of India: (<https://www.rbi.org.in/>)
- [5]. Ibef, (2020): [www.ibef.org/industry/banking-india.aspx](http://www.ibef.org/industry/banking-india.aspx)

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