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**OBJECTIVES** 

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## ANOVA BETWEEN THE STATEMENT REGARDING THE MOBILE BANKING FACILITY AND TYPE OF MOBILE PHONE OWNED: A STUDY WITH REFERENCE TO TENKASI AT VIRUDHUNAGAR DSITRICT

## DR. S. VALLI DEVASENA ASST. PROFESSOR **MOTHER TERESA UNIVERSITY KODAIKANAL**

#### **ABSTRACT**

The digital media comprising of internet and mobile phone are the fastest growth avenues for marketing of both consumption and financial products. In India marketing through digital media was much less affected by the economic slowdown than through other media. Further, digital marketing looks set to continue its rapid growth as new developments and their advantages become even more apparent, when marketing budgets are faced with increasing constraints. Mobile Marketing is one of the fastest growing personal digital media tools; Now, with the third and fourth generations of mobile telephony (3G and 4G) coming into picture, the dimensions of mobile marketing have undergone a paradigm shift and one has moved far ahead from the early days and SMS was very successful as a marketing tool because of its user friendliness and ever present nature. In other words, mobile phone users regard their phones as part of their own body and this shows that marketers have a power full tool for communication and their disposal. This has promoted marketers to recognize the utility and role that mobile phones play in the lives of consumers. The services which are necessary to facilitate marketing functions, provided through mobile phones differ according to the type of mobile they owned and facilities (technology) it contains. Depends on the technology adopted in mobile phone, the banker is rendering the banking services. Hence it is imperative to study to what extent customers felt the relevancy of services they availed and whether their opinion differs according to the type of mobile they owned and services availed through mobile phones through an analysis of variance test.

#### **KEYWORDS**

mobile banking, Tenkasi.

#### **INTRODUCTION**

anking system is the backbone of the economy and Information Technology (IT) in turn has become the backbone of banking activities. Technology, which was playing a supportive role in banking, has come to the forefront with the ever-increasing challenges and requirements. Technology to start with was a business enabler and now has become a business driver. The Banks cannot think of introducing a financial product without IT support. Be it customer service, transactions, remittances, audit, marketing, pricing or any other activity in the Banks, IT plays an important role not to complete the activity with high efficiency but also has the potential to innovate and meet the future requirements.

The Banking Sector was early adopter of technology and in that way set an example to the other Industries the need to opt for automation for taking full advantage in operational efficiency.<sup>2</sup>

#### STATEMENT OF THE PROBLEM

In order to cater to the changing preferences, bankers are bound to provide the services suitable to their customers needs to survive in the competition;. Besides, the business relationship between a bank and its customer is not a non-time transitory relationship, but a relatively permanent and enduring one, which requires to be nurtured with good quality of service. In such a situation, any bank not having a mind towards bettering the quality of customer service is almost certain to lose its business.<sup>3</sup> Needless to say, in the post-reform era which is becoming day by day frighteningly competitive, only those banks which have been exactingly customer-focused will have better chances of survival and growth.

Despite so many measures initiated at various levels to improve the standard of customer service, the level of satisfaction perceived by various segments of customers has been low. Demand for improvement in customer service continues to be louder-and so is the level of customer complaints regarding poor

Despite so many measures initiated at various levels to improve the standard of customer service, the level of satisfaction perceived by various segments of customers has been low. Demand for improvement in customer service continues to be louder-and so is the level of customer complaints regarding poor service.4

#### **OBJECTIVES OF THE STUDY**

- To know the opinion about the relevancy of the statements on mobile banking facility used
- To verify whether Type of mobile phone owned and the opinion about the relevancy of the statements on mobile banking facility differ significantly or not.
- And to offer suggestions based on the findings of the study

## **REVIEW OF LITERATURE**

Jim Dale Reed conducted a study on "Commercial Bank selection: A Factor Analysis of the Determinants of Consumer Choice" with the purpose to identify the variables that influence the consumer behavior in selecting a commercial bank and concluded that no single variable was responsible for a particular decision. It was the combination of several factors that led to final selection.<sup>5</sup>

Eugene W. Anderson, Daes and Furness and Donald R. Lehmann discussed the links between quality, expectations, customer satisfaction and profitability. The findings state that when quality and expectations increase, there is a positive impact on customer satisfaction and in turn, profitability

Stephen S. Tax, Stephen W. Brown and Murali Chandrasekaran developed and tested a hypothesis regarding the inter play between satisfaction with complaint handling and prior experience in shaping customer trust and commitment. The result indicates that a firm's favourable actions during conflict demonstrate its reliability and trustworthiness and implies that investments in complaint handling can improve service quality, strengthen customer relationships and build customer commitment.7

#### FRAMEWORK OF ANALYSIS

Arithmetic mean and percentages are used to describe the data.

Analysis of variance (ANOVA) test to verify whether the opinion about the relevancy of the statements on mobile banking facility used, and Type of mobile phone owned differ significantly or not.

#### ANALYSIS OF VARIANCE - ONE WAY CLASSIFICATION MODEL

ANALISIS OF VARIANCE ONE WAT CLASSIFICATION MODEL					
Source of Variation	Sum of Squares	Degrees of freedom	Mean Squares	Variable ratio of F	
Between Samples		V1=C-1	Sum of squares C-1	Mean squares between columns	
With in Samples		V2=n-c	Sum of squares C-1	Mean square within sample	
Total			n-1		

#### SCOPE OF THE STUDY

This study covers the mobile banking services rendered by ICICI bank in Tenkasi taluk. As the study is an empirical study to identify the satisfaction level of the customers towards mobile banking services rendered by the banker, the study has been focused towards customers who are the recipient of services. The ICICI bank in Tenkasi taluk consists of 5 branches. The study was undertaken on the customers of 5 branches only.

#### SAMPLING DESIGN

The customers of ICICI bank in tenkasi taluk branches are large in number and hence a comprehensive list of customers could not be prepared. Moreover, the list of customers of each branch could not be obtained only from the bank managers. They should not reveal the names of customers due to their obligations to maintain the confidentiality of customers' accounts as per sec.13 of Banking Company (Acquisition and Transfer of undertakings) Act, 1970. Therefore, a sample of 100 customers inclusive of all branches was selected by applying a non-probability random sampling method.

#### **GEOGRAPHICAL AREA OF THE STUDY**

The study covers the whole area of Tenkasi, Virudhunagar District in Tamil Nadu, only where the branches of the ICICI Bank are situated. They are Illathur Branch, Sundharapadiapuram Branch, Malapa Branch, Ravannasamuthiram Branch, pathamadai Branch, in 5 branch.

#### **ANALYSIS OF THE STUDY**

Irrespective of sector whether public or private, Banks are offering variety of services through mobile banking. In this study, the various banking facility provided through mobile are listed and an analysis is made to know the whether the services are availed by the customers and to verify whether the opinion about the relevancy of the statements on mobile banking facility used, and Type of mobile phone owned differ significantly or not.

#### I SAMPLE ADEQUACY TEST

For that first KMO and Bartlett's Test is applied to assess the sample adequacy. Table 1 shows the results.

#### **TABLE 1: KMO AND BARTLETT'S TEST**

Kaiser-Meyer- Olkin Measure	.599	
Bartlett's Test of Sphericity	852.489	
	171	
	Sig.	.000

The value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy is .599is just adequate

## **CUSTOMERS DETAILS WITH REGARD TO MOBILE**

#### A) MOBILE OWNED

The table 2 shows the classification of the respondents of the study on the basis of mobile owned.

#### **TABLE 2: TYPE OF MOBILE OWNED**

mobile is owned	NUMBER OF RESPONDENTS	PERCENTAGE		
CDMA	29	29		
GSM	71	71		
Total	100	100		

(Source: Primary)

Among the 100 respondents 71 respondents owned GSM type mobile, 29 respondents owned CDMA type mobile.

#### B) FACILITIES IN THE MOBILE PHONE

The table 3 shows the classification of the respondents of the study on the basis of Facilities in the mobile phone.

#### **TABLE 3: FACILITIES IN THE MOBILE PHONE**

Facilities	NUMBER OF RESPONDENTS	PERCENTAGE		
GPRS	23	23		
SMS	72	72		
Internet	5	5		
Total	100	100		

(Source: Primary)

Out of respondents most of the respondents 72 percent use SMS,23 per cent use GPRS, and 5 per cent use internet facility to mobile banking service.

#### C) OPINION ABOUT RELEVANCY OF THE STATEMENT REGARDING THE MOBILE BANKING FACILITY

The table below shows the opinion of the respondent regarding the relevancy of a mobile banking facility. If a respondent says yes it means the facility is relevant and vice versa.

#### TABLE 4: OPINION ABOUT RELEVANCY OF THE STATEMENT REGARDING THE MOBILE BANKING FACILITY

Mobile banking facility	Number of re spondents who	Number of respondents who	Total
	statedYes	stated No	
Mini- Statements and (checking of account history)	96	4	100
Alerts on account activity or passing of set thresholds	98	2	100
Monitoring of term deposits	90	10	100
Access to loan statements	73	27	100
Access to card statements	68	32	100
Mutual funds/ equity statements	53	47	100
Insurance Policy management	32	68	100
Pension plan management	18	82	100
Status on cheques stop payment on cheque	43	57	100
Ordering check books	66	34	100
Balance checking in the account	69	31	100
Recent transactions	96	4	100
Due dates of payment (functionality) for stop change and deleting of	69	31	100
payments)			
Pin provision, change of pin and reminder over the internet	67	33	100
Blocking of (lost \ stolen) cards	64	33	100

Source: computed from Primary Data

98 respondents stated that' Alerts on account activity or passing of set thresholds' on account activity facility was relevant for their mobile banking account. This facility is ranked number -I with regard to relevancy to respondents.

96 respondents stated that' Mini- Statements and (checking of account history)'and information about Recent transactions was relevant for their mobile banking account. There facility is ranked number - II with regard to relevancy to respondents.

90 respondents stated the 'Monitoring of term deposits' is relevant therefore it is ranked III.

82 respondents stated that' Pension plan management's was not relevant. So with regard irrelevant are facilities pension plan management facility ranks

68 respondents stated that' Insurance Policy management's not relevant. So with regard irrelevant are facilities pension plan management facility ranks number-

57 respondents stated that' Status on cheques, stop payment on cheque's not relevant. So with regard irrelevant is facilities pension plan management facility

#### D) RESULTS OF ANOVA TEST

ANOVA test is applied to know whether there is any variance between relevancy of statement on mobile banking facility used and type of mobile phone owned. The results of the analysis of given in Table 5



Square   Square   Square   Repetition   Rept   Re	TABLE 5: ANOVA BETWEEN OPINIONS ABOUT RELEVANCY OF THE ST.	ı	1				1	1
Groups   G	Statement	Variation	Sum of Squares	DF	Mean Square	F	Sig.	Acceptance / Rejection of H <sub>0</sub>
Within Groups   3322   97   040	Mini- Statements and (checking of account history)	Between	.008	2	.004	.107	.898	Accept
Total   3.840   99		Groups						
Between   0.16   2   0.08   3.88   6.79   Accept		Within Groups	3.832	97	.040			
Groups   Within Groups   1941   37   0.20   1   1   1   1   1   1   1   1   1		Total	3.840	99				
Within Groups   1944   97   020	Alerts on account activity or passing of set thresholds	Between	.016	2	.008	.388	.679	Accept
Total   1.960   99		Groups						
Between   Groups   Serveen   G		Within Groups	1.944	97	.020			
Between   Groups   Within Groups   Between   Groups   Groups   Within Groups   Groups		Total	1.960	99				
Groups   B-946   97   .092	Monitoring of term deposits	Between		2	.027	.295	.745	Accept
Within Groups	<b>6</b>							,
Total   9.000   99			8.946	97	.092			
Between   Setween   Setw				00				
Groups   Within Groups   19.556   97   2.03				+				
Within Groups   19.656   97   203	Access to loan statements		.054	2	.027	.134	.875	Accept
Total   19.710   99								
Between   206   2   .103   .463   .631   Accept		Within Groups	19.656	97	.203			
Groups		Total	19.710	99				
Groups	A second to soul statements	Detures	200	-	102	462	C21	1
Within Groups	Access to card statements		.206	2	.103	.403	.031	Ассері
Total   21.760   99			24.554	07	222			
Between   A58   2   .229   .908   .407   Accept				+	.222			
Groups   Within Groups   24.452   97   .252								
Within Groups	Mutual funds/ equity statements		.458	2	.229	.908	.407	Accept
Total   24.910   99		· ·						
Between Groups   Status on cheques stop payment on cheque   Status on cheques stop payment on cheque   Status on cheques stop payment on cheque   Between Groups   Within Groups   14.713   97   152					.252			
Groups   Within Groups   21.553   97   2.22								
Within Groups   21.553   97   .222	Insurance Policy management		.207	2	.103	.465	.629	Accept
Pension plan management   Between   0.47   2   0.23   1.155   0.857   Accept								
Pension plan management   Between Groups   14.713   97   1.152		Within Groups		_	.222			
Groups   Within Groups   14.713   97   .152		Total	21.760	99				
Within Groups   14.713   97   1.52	Pension plan management	Between	.047	2	.023	.155	.857	Accept
Total   14.760   99		Groups						
Between Groups   Status on cheque   Between Groups   Status on cheque   Status on chequ		Within Groups	14.713	97	.152			
Groups   Within Groups   24.456   97   .252		Total	14.760	99				
Within Groups	Status on cheques stop payment on cheque	Between	.054	2	.027	.107	.899	Accept
Total   24.510   99		Groups						
Between Groups   Content   Content		Within Groups	24.456	97	.252			
Groups   Within Groups   22.417   97   .231		Total	24.510	99				
Within Groups   22.417   97   .231	Ordering check books	Between	.023	2	.011	.049	.952	Accept
Within Groups   22.417   97   .231		Groups						
Total   22.440   99			22.417	97	.231			
Between Groups   Company   Company			22.440	99				
Groups   Within Groups   21.123   97   .218	Balance checking in the account				.134	.614	.543	Accept
Within Groups   21.123   97   .218								
Total   21.390   99			21.123	97	.218			
Between Groups   Served   Se				1	.210			
Groups   Within Groups   3.832   97   .040	Recent transactions				004	107	898	Accent
Within Groups   3.832   97   .040	Necent transactions		.008		.004	.107	.656	Αιτερί
Total   3.840   99			3 832	97	040			
Between   Setween   Setw					.0-0			
Groups   Within Groups   20.870   97   .215	Due dates of payment (functionality) for stan change and deleting			_	260	1 200	202	Accent
Within Groups   20.870   97   .215			.320	-	.200	1.209	.303	Αιτερι
Total   21.390   99			20.870	07	215			
Between   Groups   Between   Company   Compa					.213			
Groups   Within Groups   21.989   97   .227	Disconsision shape of the desired to				000	267	766	Assist
Within Groups   21.989   97   .227	rin provision, change of pin and reminder over the internet		.121	2	.060	.267	./66	Accept
Total   22.110   99	The second second	· ·	24.655		227			
Between   .471   2 .235   .475 .623   Accept   Groups   Within Groups   48.039   97 .495	A STATE OF THE PARTY OF THE PAR			+	.227			
Groups         48.039         97         .495	ATT AND		<b>†</b>					
Within Groups 48.039 97 .495	Blocking of (lost \ stolen) cards		.471	2	.235	.475	.623	Accept
		· ·						
Total   48.510   99		Within Groups		97	.495			
		Total	48.510	99			1	

#### Source: computed from Primary Data

#### **HYPOTHESIS 1**

H<sub>0</sub>: The opinion about relevancy of the statement regarding the mobile banking facility and mobile phone owned do not differ significantly at 5%. It is clear from the above table that on applying analysis of variance, on the basis of the computed value of F for the statements Mini- Statements and (checking of account history), Alerts on account activity or passing of set thresholds, Monitoring of term deposits, Access to loan statements, Access to card statements, Mutual funds/ equity statements, Insurance Policy management, Pension plan management, Ordering check books , Balance checking in the account, Recent transactions, Due dates of payment (functionality) for stop change and deleting of payments, Pin provision, and change of pin and reminder over the internet, Blocking of (lost \ stolen) cards and the significance level of F which is more than 0.05 (5%), the null hypothesis is accepted and it is concluded that the opinion about relevancy of the statements Mini- Statements and (checking of account history), Alerts on account activity or passing of set thresholds, Monitoring of term deposits, Access to loan statements, Access to card statements, Mutual funds/ equity statements, Insurance Policy management, Pension plan management, Ordering check books , Balance checking in the account, Recent transactions, Due dates of payment (functionality) for stop change and deleting of payments, Pin provision, and change of pin and reminder over the internet, Blocking of (lost \ stolen) cards regarding the mobile banking facility and Type of mobile phone owned do not differ significantly at 5%.

#### **SUGGESTIONS**

Consumers are becoming more tech-literate, buying mobile phones, toying with online trading and just as much in need of banking services as consumers anywhere. So banks are trying to harness banking and mobile telephony into a set of applications and services, called m-banking, and are expecting that the money will roll in.

That is what cell-phone operators and financial institutions have expected. However the substance of their offering was quite different from what they promised. Though there were many plans to enhance mobile-banking offerings and services, in reality the initiatives were very restricted

#### CONCLUSION

The digital media comprising of internet and mobile phone are among the fastest growth avenues for banking. In India, banking through digital media was much less affected by the economic slowdown than through other media.

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