

Research Paper

COMMERCE

Customer Satisfaction Towards E- Banking Services Select Commercial Banks In Coimbatore City

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ABSTRACT E-Ban towar	king services have gained greater importance in modern days. This purpose of study is Customer's satisfaction ds Customer Services with Value- Added Services in Private Sector Banks in Coimbatore City. The objective of the is To identify the customers satisfaction towards e- banking services of select commercial banks in Coimbatore

city. For the purpose five hundred respondents were selected. A structured questionnaire was administered to the respondents and the primary data is collected. The secondary data is collected through various sources like magazines, journals, company records etc. these data are collected and based on the analysis made, and the suggestions are given.

KEYWORDS:

1.1 INTRODUCTION

The Banking Industry is considered a service oriented Industry. It renders manifold services to the customers. Effective customer service is the center to all business operations and also plays an integral part in the growth strategy of the Banking Industry(G.P.Kapoor 2004). A sound, progressive and dynamic banking system is the fundamental requirement for economic development. Hence, Commercial Banks act as the backbone of economic development. They inculcate the habit of saving and investment. They mobilize funds from numerous small household activities and help business firms spread over a wide geographical area.

Present scenario focuses, the environment of cut-throat competition, where private and foreign banks are leaving no stones unturned to attract new customers and existing customers of the banking sector to their turf, customer retention has become the key to the survival of national and international banks. In the competitive world, awareness level of customers is increasing day by day, their expectations are increasing as they have wider choice of products and services, and the concept of generation to generation banking has also undergone changes. Customers' loyalty is now conditioned by the quality of products and its delivery mechanism i.e. Service. All these have necessitated the banks to provide better and excellent customer service. New products are added to the basket and above all, computerization and networking is adopted for faster place and widely deployed to no longer provide substantive differentiation on a relative basis. They have unique characteristics and they relate to other services in a completely different way to the customers via; ATMs, Telebanking, Internet Banking, Credit Cards and Debit Cards and so on. Banks have been offering Value-added services in many product areas, either by way of additional attractive features or delivery mechanisms. Many banks have introduced Credit Cards, Insurance Linked Deposit Products, 24 Hour Banking, Any Day Banking, Mobile Banking, Cash Back Offers, Core Banking, Anywhere Banking and So on (M.V. Nair, 2007).,

1.2. STATEMENT OF PROBLEM

In the post liberalization era, every customer is concerned about the safety of their funds and also expects good and effective return from their funds.

They are always busy and expect to complete all their engagements from a single place. They are not ready to run around paying their electricity bill at one place, telephone bill at another place. In fact the perception and the satisfaction of the customers have undergone a vast change with the availability of banking services at their door steps through the help of technology. Sometimes customers faced many problems in e-banking services through unauthorized access within the network, inaccurate processing and transactions, data privacy and confidentiality, more hidden cost and so on. Hence the present study has been carried out to examine the above enquiries and offer solutions.

1.3. SCOPE OF THE STUDY

In this global scenario, commercial Banks have introduced many customer oriented services apart from the regular Banking activities. The study has been undertaken to highlight the Customer satisfaction towards E-banking services in Commercial Banks. The study also explores the satisfaction of the various e-banking services provided by the Banks, their reasons for selection of Banks, the e-banking services commonly used by them. The study is confined to Coimbatore city. The sample respondents are the customers of various selected Commercial Banks. As such, there is a scope to examine whether the e-banking services provided by the Banks cater to the needs of various sectors of customers.

1.4. OBJECTIVES OF THE STUDY

The general purpose of the study is to investigate the influence of e-banking on service delivery in commercial bank. However, the study specifically seeks to:

1. To analysis the customer satisfaction towards e- banking services of select commercial banks in Coimbatore city

1.5. METHODOLOGY AND RESEARCH DESIGN

The Methodology and design adopted for the study was as follows:

1.5.1. SAMPLE DESIGN

The primary objective of the study is to examine the **customer satisfaction towards e- banking services of select commercial banks in Coimbatore city.** A sample of five hundred customers from public private banks were selected for the study. Ten banks were selected by following stratified random sampling procedure by giving due representation in Coimbatore City.

1.5.2. SOURCES OF DATA

The primary objective of the study is to ascertain the customer perception, preference and satisfaction towards e- banking services of select commercial banks in Coimbatore city. The study is first of its kind and mainly based on primary data. The primary data was collected through the questionnaires administered to different types of selected sample respondents. The secondary data were collected from different sources. Hence, the researcher has collected information from ten banks, with five hundred from commercial banks of Coimbatore city.

1.5.3. STATISTICAL TOOLS USED FOR ANALYSIS

The primary data have been collected from the potential respondents from different areas and has been properly sorted, classified, edited, tabulated in a proper format and analyzed by deploying appropriate statistical tools. The statistical tests are conducted at 5 per cent level of significance. The following statistical tools are used like Discriminant function analysis.

1.6.ANALYSIS AND INTERPRETATION DISCRIMINANT FUNCTION ANALYSIS

Discriminant analysis (DA) was the traditional statistical technique used for differentiating groups (categorical dependent variable) when the independent variables were quantitative. Respondent's opinion towards factors level of satisfaction about e-banking services in commercial banks. In the study area out of five hundred respondents were divided into two groups .ie., low level of factors level of satisfaction about e-banking services and the high level of level of satisfaction about e-banking services. The difference of opinion of the respondents in one group from the other is studied with the help of discriminant function analysis. For the purpose of the study, the following variables were selected.

- 1. Gender
- 2. Age
- 3. Educational Qualification
- 4. Occupational Status
- 5. Annual Income
- 6. Marital Status
- 7. Residential area
- 8. Family members have Bank Account

The discriminant function analysis attempts to construct a function with these and other variables so that the respondents belonging to these two groups are differentiated at the maximum. The linear combination of variables is known as discriminant function and its parameters are called discriminant function coefficients. In constructing this discriminant function all the variables which contribute to differentiate these three groups are examined.

Mahalanobis minimum D^2 method is based on the generalized squared Euclidean distance that adjusts for unequal variances in the variables. The major advantage of this procedure is that it is computed in the original space of the predictor (independent) variables rather than as a collapsed version which is used in the other method.

Generally, all the variables selected will not contribute to explain the maximum discriminatory power of the function. So a selection rule is applied based on certain criteria to include those variables which best discriminate. Stepwise selection method was applied in constructing discriminant function which selects one variable at a time to include in the function. Before entering into the function the variables are examined for inclusion in the function.

The variables which could have maximum D² value, if entered into the function is selected for inclusion in the function. Once entered any variable already in the equation is again considered for removal based on certain removal criteria. Likewise, at each step the next best discriminating variable is selected and included in the function and any variable already included in the function is considered for removal based on the selection and removal criteria respectively.

DISCRIMINANT ANALYSIS FOR THIS STUDY

Discriminant function analysis involved classification problem also to ascertain the efficiency of the discriminant function analysis all the variables which satisfy the entry and removal criteria were entered into the function. Normally the criteria used to select the variables for inclusion in the function is minimum F to enter into the equation (i.e) F statistic calculated for the qualified variable to enter into the function is fixed as ≥ 1 . Similarly any variable entered in the equation will be removed from the function if F statistic for the variable calculated is < 1. The two groups are defined as

Group 1	-	Low level
Group 2	-	High leve

The mean and standard deviation for these groups and for the entire samples are given for each variable considered in the analysis.

TABLE - 1 GROUP MEANS (BETWEEN LOW AND HIGH GROUPS)

S.	Factor	Low		High		Total	
No.	Factor	Mean	SD	Mean	SD	Mean	SD
1	Gender	1.256	0.437	1.583	0.494	1.374	0.484

	r		r				r
2	Age	3.238	1.044	3.206	1.023	3.226	1.036
3	Educational Qualification	2.244	1.055	2.189	0.962	2.224	1.022
4	Occupational Status	2.428	1.201	2.289	1.038	2.378	1.146
5	Annual Income	3.081	0.950	3.133	0.912	3.100	0.936
6	Marital Status	1.356	0.480	1.550	0.499	1.426	0.495
7	Residential area	1.472	0.530	1.450	0.521	1.464	0.527
8	family mem- bers have Bank Account	1.397	0.490	1.444	0.498	1.414	0.493

The overall stepwise D.F.A results after all significant discriminators have been included in the estimation of discriminated function is given in the following table

TABLE -2 SUMMARY TABLE BETWEEN LOW LEVEL AND HIGH LEVEL GROUPS

Step	Variables entered	Wilk's Lamda	P-value	S/NS
1	Gender	.895	.007**	S
2	Marital Status	.965	.000**	S

*Significant at 1% level

The summary table indicates that variable gender and Marital Status entered in step one and two. The variables such as gender and Marital Status are significant at one per cent significance level. All the variables are significant discriminators based on their Wilk's lambda and p-value value. The multivariate aspect of this model is given in the following table

TABLE -3 CANONICAL DISCRIMINANT FUNCTION (BETWEEN LOW AND HIGH GROUPS)

Canonical correlation	Wilks Lamda	Chi -square	D.F	p-value
0.324	.895	55.345	1	.000**

The canonical correlation in the discriminant group can be accounted for by this model, Wilks lamda and chi square value suggest that D.F is significant at one per cent level.

The variables given above are identified finally by the D.F.A as the eligible discriminating variables. Based on the selected variables the corresponding D.F coefficients are calculated. They are given in the following table.

TABLE -4 DISCRIMINANT FUNCTION COEFFICIENT (BETWEEN LOW LEVEL AND HIGH LEVEL)

Gender	2.181
Marital Status	1.226
Constant	-2.996

Z = -2.996

+2.181 (Gender)

+1.226 (Marital Status)

Using this D.F coefficients and variables discriminating scores for two groups groups are found out and are called group centroids or group means

For low level user $(Z_1) = -.257$ For High level user $(Z_2) = .456$ Discriminating factor is the weighted average of Z₁, Z₂

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Thus to classify any respondent as to low or high user the Z score for the respondent is found out by using the equation. If the score found out for any respondent is Z_0 and if the value is > Z (i.e. $Z_0 > Z$) then it is classified into high user and if $Z_0 < Z$ then (i.e. $Z_0 < Z$) it is classified into low user. Now the guestions remain to be answered are, first How efficient are the discriminating variables in the D.F.A? and second How efficient the D.F itself is? .The first equation cannot be answered directly however the discriminating power or the contribution of each variable to the function can sufficiently answer the question. For this consider the following table

TABLE - 5 **RELATIVE DISCRIMINATING INDEX** (BETWEEN LOW LEVEL GROUP AND HIGH LEVEL GROUP)

	Group I Mean X ₁	Group II Mean X ₂	Un- standarised coefficient	I = ABS (K) Mean (X' _{j0-} X _{ji})	R_ I/sum I,j*100
Gender	1.256	1.583	2.181	0.713	74.99
Marital Status	1.356	1.550	1.226	0.238	25.01
TOTAL			·	0.951	100

RELATIVE DICRIMINATING INDEX

Low level

For each variable the respective D.F coefficient its mean for each group and R are given. R called relative discriminating index is calculated from the discriminant function coefficient and group means. R, tells how much each variable is contributing (%) to the function. By looking at this column one education is the discriminating variable and the family income the least discriminating variable.

The second question is answered by reclassifying the already grouped individuals into low or high level using the D.F (Z) defined in the equation.

This classification is called predictor group membership .In short the efficiency of the D.F is called predictor group membership. In short the efficiency of the D.F. is how correctly it predicts the respondents into distinct groups.

PERCENTAGE OF CORRECT CLASSIFICATION

This measure applies the proposed discriminant model on our data and classifies the cases into two categories of low and high level of satisfaction about e-banking services provided by commercial banks. Table 6 yields the following results:

TABLE -6

CLASSIFICATION RESULTS (BETWEEN LOW LEVEL **GROUP AND HIGH LEVEL GROUP**)

Actual	No. of cases	Predicted group membership		
group		Group I	Group II	
Group I	130	238 74.4 %	82 25.6%	
Group II	132	75 41.7%	105 58.3%	

Per cent of grouped case correctly classified: 66.8 per cent

The above table gives the results of the re classification. The function using the variables selected in the analysis classified 66.8 per cent of the cases correctly in the respective groups.

1.7 CONCLUSION

High level

In a service industry like banking, where product differentiation is hard to maintain and the quality of service depends on the service provider, it is imperative for the Bank to have staff who realize that they are a part of the business concern. They have to render services to the satisfaction of the customers. The Banks need to equip themselves with internal capabilities and build efficient and viable Business models to create advantage of new opportunities available into a long term sustainable competitive advantage. It is found that the Discriminant function analysis was applied to the respondents on low user and high user. The following factors significantly discriminate the two users. They are gender and Marital Status (1 per cent level).

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