Research Paper　　　　　　　　　　　　　　　　**Commerce**

Factor Analysis of Customer Preference Towards E – Banking Services With Special Reference To Coimbatore City

Mrs. L. A. Razia Fathima	Assistant Professor, PG and Research Department of Commerce, Hindusthan College of Arts and Science, Coimbatore, TamilNadu, India.
Dr. R. Kavitha	Assistant Professor, Department of Commerce, Nirmala College For Women, Coimbatore, TamilNadu, India.

ABSTRACT

The Indian banking industry is changing rapidly, particularly as a result of a variety of services offered to customers, notably with the ease of accessing them at the click of a mouse. Electronic banking (e-banking), also known as Internet banking, is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels. The purpose of this paper is to gain an understating regarding the factors encouraging the customers to prefer e – banking services.

KEYWORDS　　　　e – banking, customer preference, encouraging factors etc.,

INTRODUCTION

The Indian banking industry is changing rapidly, particularly as a result of a variety of services offered to customers, notably with the ease of accessing them at the click of a mouse. Electronic banking (e-banking), also known as Internet banking, is defined as the automated delivery of new and traditional banking products and services directly to customers through electronic, interactive communication channels. The convenience of accessing bank accounts at one's place encourages usage of Internet banking.

Electronic banking makes use of electronic currency. Check cards or debit cards, smart cards or stoned – value cards, digital cash and digital checks are the different types of electronic currency. If you use a check card to make purchases, the funds are transferred immediately from your account to the store's account. Smart cards have a specific amount of credit embedded in it. The chip in the card contains both personal and financial information. Digital checks are used with electronic bill paying services. Consumers could use personal finance software packages or use software provided by a bank. Online banking or PC banking offers a wider outreach for smaller institutions. Electronic banking offers consumers the convenience of accessing and transferring funds between their accounts, paying their bills and other purchases, twenty four hours a day, seven days a week.

REVIEW OF LITERATURE

Doreswamy (1996) discussed in his article Technology trends and implications about changes which are happening in banking industry with the introduction of information technology. He also discussed threats as well as opportunities to the banks in future. He concluded that in the emerging competitive environment, customer expectations and the imperative need for toning up operational efficiency to lead better bottom line, banks have hardly an alternative. **Cunningham and Gerrard (2003)** studied the diffusion of internet banking among Singapore consumers. The results showed that adopters of internet banking perceive the service to be more convenient, less complex, more compatible to them and more suited to those who are PC Proficient. **Amin (2007)** conducted a study on internet banking adoption among young intellectuals in Malaysia. The aim of the study was to study technology acceptance of internet banking among undergraduate students in Malaysia, using the modified Technology Acceptance Model (TAM) as the theoretical framework. The results suggest that perceived usefulness, perceived ease of use, perceived credibility had significant relationship with behavioral intention.

OBJECTIVES OF THE STUDY

- To test whether the relationship among the variables has been significant or not.
- To analysis the factors encouraging to prefer e – banking services by customers.

LIMITATIONS OF THE STUDY:

The entire study is dependent on the response given by sample respondents, so the attitude and the mental status of the respondents will be reflected in the research findings. Since the time was limited Convenient sampling method is used to select respondents.

RESEARCH METHODOLOGY:

Convenience sampling technique is used for the study. A well structured questionnaire covering the objectives were framed for the data collection. The sample size is 600 bank customers. Factor analysis is used to elucidate the important factors encouraging the use of e – banking services by the customers.

Data

For the purpose of the study both primary data and secondary data has been used. Primary data is collected through well structured questionnaire from customers of Public sector, Private sector and Foreign banks.

Statistical tools used

Factor Analysis is used for the study and it is a set of technique which by analyzing correlations between variables reduces their numbers into fewer factors which explain much of the original data, more economically.

ANALYSIS AND DISCUSSION

Table - 1

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.757
Bartlett's Test of Sphericity	Approx. Chi-Square	14311.014
	Df	190
	Sig.	.000

**p<0.01   S-Significant

From the above table, two tests, namely Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) and Bartlett's Test of Sphericity have been applied to test whether the relationship among the variables has been significant or not. The Kaiser-Meyer-Olkin Measure of sampling adequacy shows that the value of test statistics is 0.757, which means the factor analysis for the selected variable is found to be appropriate or good to the data. Bartlett's test of sphericity is used to test whether the data is statistically significant or not with the value of test statistics and the associated significance level. It shows that there exists a high relationship among variables.

Table – 2

Communalities			
		Initial	Extraction
Convenient Accessibility		1.000	.646
Cost – Effective		1.000	.903
Personalized Identity		1.000	.650
24 x 7 x 365 days service		1.000	.965
Time – Saving		1.000	.827
Personalized Service		1.000	.813
Ease of tracking information		1.000	.624
Techno Savvy facilities		1.000	.821
Grievance Handling		1.000	.910
Easy to communicate in regional language		1.000	.961
User – Friendly system		1.000	.805
Acknowledgment receipt		1.000	.688
Data management and Integrity		1.000	.898
Proximity to ATM		1.000	.920
Reputation		1.000	.945
Multitude facility		1.000	.921
Assurance of security		1.000	.802
Trust in e – service		1.000	.938
Prompt service		1.000	.777
Easy login		1.000	.805
Extraction Method: Principal Component Analysis.			

Source: Primary Data

The above table (Communalities) represents the application of the Factor Extraction Process, it was performed by Principal Component Analysis to identify the number of factors to be extracted from the data and by specifying the most commonly used Varimax rotation method. In the principal component analysis, total variance in the data is considered. The proportion of the variance is explained by the fourteen factors in each variable. The proportion of variance is explained by the common factors called communalities of the variance. Principal Component Analysis works on initial assumption that all the variance is common. Therefore, before extraction the communalities are all 1.000. Then the most common approach for determining the number of factors to retain i.e. examining Eigen values was done.

TABLE- 3

Rotated Component Matrix[a]		Component					
		1	2	3	4	5	6
DATA MGT	X13	.889					
TRUST	X18	.887					
USER-FRIENDLY	X11	.886					
GRIEVENCE	X9	.850					
EASY LOGIN	X20	.831					
REPUTATION	X15	.822					
PROMPT SERVICE	X19	.812					
24X7X365	X4		.933				
REGIONAL LANG	X10		.932				
ACK RECEIPT	X12		.718				
ATM	X14		.571				
FACILITY	X16			.907			
SECURITY	X17			.815			
ACCESS	X1			-.503			
COST	X2				.862		
TECHNO	X8				.641		
TIME	X5					.909	
PRSOSERVICE	X6					.897	
PERSIDENTITY	X3						.794
EASE OF INFO	X7						.773
Extraction Method: Principal Component Analysis. Rotation Method: Quartimax with Kaiser Normalization.							
a. Rotation converged in 9 iterations.							

The above table represents the Rotated Component Matrix, which is an important output of principal component analysis. The coefficients are the factor loadings which represent the correlation between the factors and the twenty variables $(X_1$ to $X_{20})$. From the above factor matrix it is found that coefficients for factor-I have high absolute correlations with variable X13 (Data Management and integrity), X18 (Trust in e-service), X11 (User friendly) and X9 (Grievance Handling), X20(Easy login),X15(Reputation) and X19 (Prompt service) that is, **.889,.887,.886,.850,.831,.822 and .812** respectively. Similarly factor-II has high absolute correlation with variable X_4(24x7x365), X_{10} (Regional language), X_{12} (Acknowledgement Receipt), and X14 (Proximity to ATM) that is, **.933, .643, .932,.718, and .571** respectively. Next, factor III has high absolute correlation with variable X_{16} (Multitude facility) X_{17}(Assuran ce of security) and X_1 (Convenient Accessibility) that is, **.907,.815 and .503** respectively. Factor-IV has high absolute correlation with variable X_2 (Cost-effective) and X_8 (Techno savy facility) that is, **.862 and .641** respectively. Factor V has high absolute correlation with variable X_9 (Convenience handling) and X_6(Personalised services) that is, **.909 and .897** respectively. Factor VI has high absolute correlation with variable X_3 (Personalised identity) and X_7(Ease track information) that is, **.794 and .773** respectively.

CONCLUSION

Thus it can be concluded that among the twenty factors encouraging the customers to prefer e – banking services Data Management and Integrity, Trust in e – services, User friendly, Grievance Handling, Easy login, Reputation and Prompt Service has been given top priority by the customers. As a result, twenty factors has been reduced to six important fewer factors.

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