

ROLE OF PERSONAL AND ORGANIZATIONAL FACTORS IN THE USAGE OF TECHNOLOGY ENABLED SERVICES IN BANKS- A STUDY AMONG THE SELECTED CUSTOMERS IN CHENNAI

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ABSTRACT

Today computers are used extensively for data storage, computation and communication. Information technology is concerned with computation and communications. Internet offers new opportunities to both consumers and producers of information in business transactions. In the five decades since independence, banking in India has evolved through Traditional phase, (1786-1969), Nationalization phase (1969-1980), Post Nationalization phase (1980-1991), Reform phase (from 1991). During Fourth phase, also called as Reform Phase, Recommendations of the Narasimhan Committee (1991) paved the way for the reform phase in the banking. Important initiatives with regard to the reform of the banking system were taken in this phase. Entry of new banks resulted in a paradigm shift in the ways of banking in India. The present study has adopted both descriptive and analytical methodologies. The descriptive methodology has been focused on review in the literary evidences that are available through external and internal sources. The primary aim of the study is to find out the reasons and problems in availing the technology enabled services among the customers in Chennai city.

Based on the Results discussion, it is found that, the need of the hour is to create the wide publicity on technology enabled services usage and advantages, making sufficient and customer friendly technology enabled services at different points to avail with ease and access the same. This further gives ignition to financial services industry growth. The burning issue here is finance is closely associated with trust factor. No manhandling in financial matters sometimes leads to misuse of services and using the technology for anti-social activities too is a concern. By fixing a specific target strategy and reviewing on the issues from time to time can bring a lot of change in the usage patterns of the technology enabled services in banks in the years to come..

Keywords: Security issues- Trust factor- Availability-User friendly products- Service quality.

Introduction:

Information technology refers to all forms of technology applied to processing, storing and transmitting information in electronic form. The physical equipments used for information processing include computers, communication equipments and networks, fax machines. Information is a processed data used for decision making during uncertainty. Information systems execute organized procedures that process and communicate information. Information technology extends far beyond the computational capabilities of computers. Today computers are used extensively for data storage, computation and communication. Information technology is concerned with computation and communications. Internet offers new opportunities to both consumers and producers of information in business transactions.

Review of Literature:

S.No	Dimension	Name of the author	Variables identified and used
1	Technology services -Level of awareness	Trembly(1991)	Theoretical knowledge and usage pattern
		Dr.Carlo Gabriel(2002)	Tele banking
		Norizon.m.Kassim(2007)	Webservices in banking
		Chee Lee Goi(2007)	Online transfers and accessibility
		Bronnenberg(2008)	E-Payments-awareness
2	Problems in availing technology services	Deekshit (1991)	Privacy and personal confidence
		Rajan(2006)	Technology failures
		PV.Vohra(2010)	Change of technology and up gradation, availability issues
		Harrington Warf(2004)	Hidden costs and cost per transaction
		Javalakshi(1995)	Network safety Establishment and maintenance.
3.	Reasons for not using the technology services	Xoan.AG (2006)	Lack of availability
		Yang(1997)	Myths associated with system usage
		Berger (2003)	Lack of uniformity in services and costs
		L.Mohan(2010)	Technology frauds
		Pretan.k.Shresta(2011)	No linkage with all banks connectivity
4	Factors influencing/ considering in the adoption and availing technology services	V.Chandra sekar(2003)	Availability and accessibility User friendliness Proper connectivity
		KMC.Nair(2008)	Procedural lapses
		O.Connel(2008)	Electronic security issues
		Mike Herald &Sunil raj(2009)	Customer service information
		Sankaran(2010)	CRM and trust building activities

Information Technology in Commercial Banking Sector:

In the five decades since independence, banking in India has evolved through Traditionalphase,(1786-1969),Nationalaizationphase(1969-1980),PostNationalaizationphase (1980-1991),Reform phase(from 1991).During Fourth phase, also called as Reform Phase, Recommendations of the Narasimhan Committee (1991) paved the way for the reform phase in the banking. Important initiatives with regard to the reform of the banking system were taken in this phase. Entry of new banks resulted in a paradigm shift in the ways of banking in India.

Research Methodology:

The present study has adopted both descriptive and analytical methodologies. The descriptive methodology has been focused on review in the literary evidences that are available through external and internal sources. As the study is based on the services and their satisfaction thereon. Measurement of satisfactory level is with respect to various service ingredients. Hence the analytical process has become inevitable, resulting in the adoption of analytical methodology. A questionnaire has been designed in four segments consisting of personal data, determinant of customer satisfaction, services provided by the bank.

This research has primarily been based on the primary data collected from the select respondent customers of the selected commercial banks in Chennai. The oral interview has also been conducted wherever necessary to add clarity to certain key issues.

Objectives of the Study:

1. To find out the level of awareness of the customers on technology services in the sample area.
2. To find out the problems faced by the customers in availing the technology services in banks.
3. To find out the reasons for not using the technology services offered by the banks.
4. To analyze the factors influencing the selection of technology services offered by banks.

Need for Study:

For a long time, Indian banks faced very little competition and operated in a protected economy. Now, well-computerized foreign banks are beginning to compete seriously with the nationalized banks. Banks which use IT mainly focus on three areas viz. Meeting a customer's service expectations, cutting down the costs, managing dynamic competitive environment. For this, the banks are venturing into new financial products and service options that would help them grow without losing existing customers. And any new financial product or service that a bank offers will be intrinsically related to technology. Automation is the basic thing that banks need to have in place. It involves a combination of centralized networks, operations, and a core banking application. Automation enables banks to offer 24x7x365 service using lesser manpower. But to be really competitive, banks need to think beyond just basic automation. In this context this study has become very vital to find out the service- satisfaction level of the customer. Therefore the researcher decided to study the impact of Information Technology on the functioning and productivity of Commercial Banks in Chennai City of Tamil Nadu.

Sample Size:

The sample size is determined by using the scientific method, by using the pilot study standard deviation of the sample of 50 respondents, by allowing the standard error at 5% level. The sample size was determined by using the following formula. Sample Size (N) = $(ZS/E)^2$ The sample size should be = $(N) = (ZS/E)^2 = (1.96 * 0.548 / 0.05)^2 = 461.46$ or 462. The overall reliability of the questionnaire is represented by the Corn Bach's alphas is 0.8653 and found reliable to proceed with the data collection.

Data Analysis and Interpretation:

In this section the analysis of the data is done by using the appropriate statistics through SPSS version 15. The first part of the study deals with descriptive statistics and the second part deals with inferential statistics. The major findings and the results of the analysis is discussed in the light of existing literature and presented in a brief manner.

Data Analysis and Discussion:

Table 1: Distribution of sample on the basis of Experience

Age Group in years	Frequency	Percentage
Below 20	59	12.8
21-30	198	42.9
31-40	150	32.5
Above 40	55	11.9
Total	462	100.0

It is observed from the table 1 that the majority of the customers in the sample survey using technological services offered by the banks are belongs to 21-30 years age, and it is followed by 31-40 years age group. It indicates the role of age in adopting and availing technological services offered by the banks. One predominant reason for such relation may be lack of time and relocation of employees from one place to other and long working hours not permitting them to go to bank physically. In addition, the work place

may be equipped with the online facilities and could have founds easy to complete the financial payments and other transactions through online via technological services offered by banks. The easy and free from logistics and waiting time may motivate the customers to use such options.

Table 2: Distribution of Sample on the basis of Educational Stream

Education Qualification	Frequency	Percentage
Upto SSLC	91	19.7
HSC	71	15.4
UG	126	27.3
PG	111	24.0
Professional	63	13.6
Total	462	100.0

Source: Primary data/Questionnaire.

It is noted from the table 2, that the majority of the respondents in the sample using technical services offered by banks are under graduates and it is followed by post graduates. The simple reason could be the majority of them are technical back ground and working in IT firms having technical savvy. The way deal with things in both personal and professional life is through technology and online. Such out comes are common and expected. It is the responsibility of the banks to propagate the need for going to electronic and technical services through explaining the advantages of it. In addition, technical services service quality needs to be improved to build the confidence and trust among the customers.

Table 3: Distribution of sample on the basis of occupation

Occupation	Frequency	Percentage
Private Employee	247	53.5
Government Employee	87	18.8
Business	59	12.8
Professional	69	14.9
Total	462	100.0

Source: Primary data/Questionnaire.

It is found from the table 3, that the majority of the customers using technical services offered by banks are employees working in private organizations. It indicates that the private organizations are equipped with technical savvy, which can be allowed to use the technology services offered by banks. In addition, private employees won't get time to visit banks frequently during working time. It is also difficult for them to reach the banks located in distance places due to logistic issues and traffic. In such conditions private employees are used to go for technological services offered by banks.

Table 4: Distribution of sample on the basis of Annual income

Annual Income in Lakhs	Frequency	Percentage
Below 1	170	36.8
1-3	177	38.3
3-5	71	15.4
Above 5	44	9.5
Total	462	100.0

It is noted from the table 4, that the 38.3 percent of the sample respondents are belongs to the less than Rs.3 lakhs per year. It indicates the usage of banking services in increasing in the recent past by the middle income group. It indicates a positive sign in the organized sector growth and development in the country. The reported incomes are more means the transparency of the financial deals. In addition, this group is the potential income group for technological services adoption in the years to come. The hidden

threat is the cost of services to avail technology services needs to be kept under control to attract the lower income groups in to the orbit of technology services.

Table 5: Showing the level of awareness of technology services among the different qualification groups

Educational qualification	Educational Qualification				
	Upto SSLC	HSc	UG	PG	Professional
Technology services	Mean	Mean	Mean	Mean	Mean
Internet Banking	4.24	4.11	4.12	4.45	4.24
Electronic bill payment	3.85	4.01	3.86	4.28	4.14
Online brokerage	3.86	3.82	3.40	3.46	3.49
Online delivery of financial products	3.80	3.66	3.44	3.56	3.54
Downloading transaction inform	3.86	3.83	3.73	4.01	3.94
Loan Applications	3.85	3.79	3.60	3.65	3.54
Mobile banking	3.86	3.82	3.81	4.23	4.11
Tele Banking	3.82	3.68	3.64	3.89	3.94
Electronic Fund Transfer (ETF)	3.88	3.83	3.59	4.28	4.08
The Electronic Clearing System (Credit)	3.89	3.72	3.52	3.71	3.98
The Electronic Clearing System (Debit)	3.90	3.66	3.39	3.75	3.92
National Electronic Fund Transfer (NEFT)	3.74	3.49	3.35	3.53	3.68
Real Time Gross Settlement (RTGS)	3.60	3.35	3.13	3.40	3.21

It is noted from the table 5.5, that the level of awareness on the technology enabled services are identified among the customers lower educational profile and higher educational profile are moderate. Majority of the services are aware of the SSLC qualified customers and into service sector, post graduate holders and professionals. It may be due to regular usage of these services for business purposes.

Table 6: Level of awareness on technology services among the different bank customers

Level of awareness on technology services	Type of bank account maintained			
	Public Sector Bank	Private Sector Bank	Foreign Bank	Co-operative Bank
Level of awareness on technology services	Mean	Mean	Mean	Mean
Internet Banking	4.27	4.29	3.84	3.90
Electronic bill payment	4.05	4.04	3.64	3.95
Online brokerage	3.59	3.53	3.68	3.75
Online delivery of financial products	3.67	3.44	3.60	3.75
Downloading transaction information	3.91	3.85	3.48	3.95
Loan Applications	3.73	3.57	3.72	3.90
Mobile banking	4.00	4.00	3.44	3.80
Tele Banking	3.79	3.82	3.44	3.80
Electronic Fund Transfer (ETF)	3.87	4.03	3.52	4.00
The Electronic Clearing System (Credit)	3.76	3.71	3.64	3.70
The Electronic Clearing System (Debit)	3.69	3.74	3.60	3.45
National Electronic Fund Transfer (NEFT)	3.55	3.55	3.44	3.35
Real Time Gross Settlement (RTGS)	3.35	3.32	3.40	3.10

Based on the mean value, the overall usage of different services is recorded with different banks. It indicates that the level; of awareness is there among the respondents. The trust factor is not allowing them to use certain services with a particular bank.

Table 7: Problems in availing technology services among the different bank customers

Type of bank	Public Sector Bank	Private Sector Bank	Foreign Bank	Co-operative Bank
Problems in using the technology services	Mean	Mean	Mean	Mean
Technology do not ensure privacy	3.98	3.77	4.24	3.65
Safety to the funds is at stake due to trapping	3.74	3.73	3.84	3.85
Technology failures	4.06	3.90	3.72	3.05
Poor level of awareness on modus operandi	3.77	3.67	3.52	3.60
Frequent change of technology	3.70	3.56	3.80	3.05
No uniformity in operations and services	3.76	3.66	3.76	3.00
E-banks charge more hidden cost	3.74	3.74	3.84	3.15
More formalities in updating the changes	3.73	3.66	3.44	3.45
Network related issues	3.95	3.84	3.64	3.20
Lack of availability in many places	3.80	3.70	3.40	3.10

The major problems recorded in availing the technological services among the banks are safety and security, availability and accessibility, lack of customer friendliness, hidden charges and network related issues.

Table 8: Reasons for not using technology services among the different bank customers

Type of bank	Public Sector Bank	Private Sector Bank	Foreign Bank	Co-operative Bank
Reasons for not using technology services	Mean	Mean	Mean	Mean
Poor availability and accessibility	4.00	3.68	4.00	3.70
Myths on privacy of information and safety issues	3.72	3.61	3.52	3.25
Lack of awareness on operating mechanism	3.68	3.52	3.56	3.05
Fear of mistakes in operation and charges	3.65	3.42	3.60	3.40
No uniformity among the services offered	3.75	3.42	3.32	3.35
Complex Process and infrastructure availability	3.73	3.21	3.04	3.50
No linkage with all banks and differential charges	3.50	3.45	3.52	3.45
Frequent change in modus operandi	3.57	3.43	3.32	3.40
Technology frauds and cyber crimes	3.88	3.58	3.40	3.25
Delivery failures and implications	3.69	3.34	3.20	3.10

Factor Analysis:

Table 9: Rotated Component Matrix showing factors emerged along with score loadings

Items loaded as technical services	1	2	3	Factors
Internet Banking	.744	.096	.104	Utility services
Electronic bill payment	.722	.188	.230	
Mobile banking	.705	.148	.194	
Downloading transaction information	.622	.216	.365	
Tele Banking	.561	.205	.358	
Electronic Fund Transfer (ETF)	.559	.556	.017	
The Electronic Clearing System (Debit)	.241	.781	.178	Fund transfer services
National Electronic Fund Transfer (NEFT)	.182	.771	.109	
Real Time Gross Settlement (RTGS)	-.034	.758	.321	

The Electronic Clearing System (Credit)	.337	.714	.191	
Online delivery of financial products	.261	.150	.818	Agency services
Online brokerage/trading	.161	.223	.791	
Loan Applications	.382	.224	.606	

Technology enabled services of banks are broadly grouped into three types, The first kind of services are mentioned as utility services, the second set of services are called as fund transfer services, and the final category of services are titled as agency services.

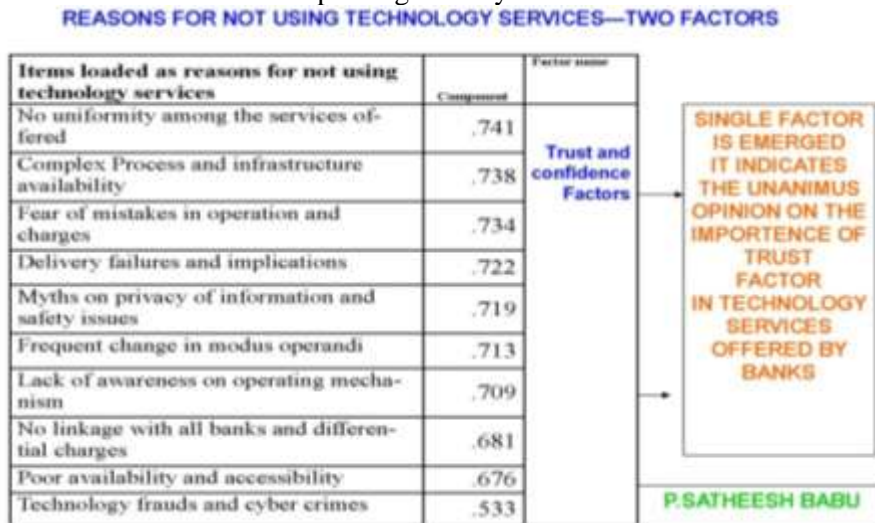
Factor Analysis-II:

Table 10: Problems in availing technology services by the customers along with factor loadings and emerged factors.

Items shown as problems	Component		Factors
	1	2	
Lack of availability in many places	.728	.120	Operating problems
Network related issues	.712	.062	
No uniformity in operations and services	.687	.320	
More formalities in updating the changes	.637	.244	
E-banks charge more hidden cost	.616	.307	
Technology do not ensure privacy	.042	.831	Safety and Security problems
Safety to the funds is at stake due to trapping	.129	.739	
Frequent change of technology	.382	.618	
Poor level of awareness on modus operandi	.338	.596	
Technology failures	.442	.544	

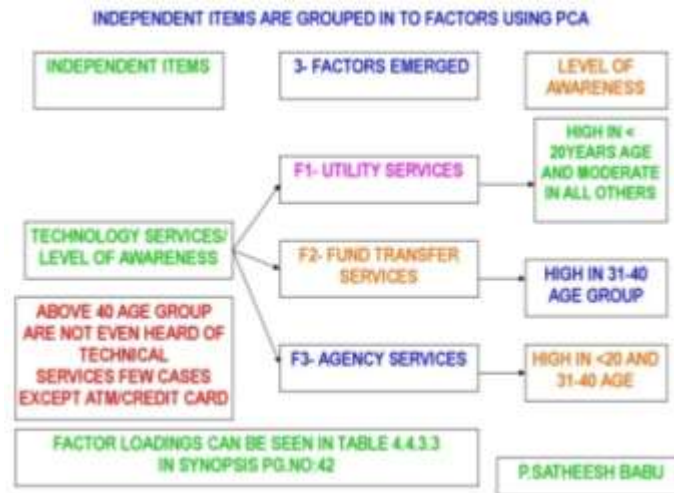
There are two factors emerged, grouping the level of awareness of technological services offered by the banks. They are titled as operating problems and safety and security problems.

The following factor analysis figure shows the reasons for not using technology enabled services in banks, emerged as single factor. It indicates that the level of trust customers held among the technology services. It indicates there is a need for improving security and trust factors in banks.



The following figure shows the level of awareness among the technology enabled services among the different age groups in the sample survey. It indicates there is a relationship between the age and the level of awareness on technology enabled services among the customers. In addition, it is also observed that

there is a relationship between the usage pattern and the demographical variables among the sample respondents.



Summary and Conclusion:

Based on the above discussion, the need of the hour is to create the wide publicity on technology enabled services usage and advantages, making sufficient and customer friendly technology enabled services at different points to avail with ease and access the same. This further gives ignition to financial services industry growth. The burning issue here is finance is closely associated with trust factor. No manhandling in financial matters sometimes leads to misuse of services and using the technology for anti social activities too is a concern. By fixing a specific target strategy and reviewing on the issues from time to time can bring a lot of change in the usage patterns of the technology enabled services in banks in the years to come.

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