Managing Transformation through Information Technology: An Empirical Study in Rural Punjab

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ABSTRACT- The tremendous advances in technology and the aggressive infusion of Information Technology had brought in a paradigm shift in banking operations. Inducing technological input has been the second most important milestone in the banking history after nationalization of banks in 1969.This empirical study assesses the current status of developments in e-banking in rural areas of Punjab & explores how it differs from conventional banking and how more awareness can be created for e-banking to make the work easy & time savvy. IT is an important emerging sector of the Indian economy. The size of this sector has increased at a tremendous rate of 35% per year during the last 10 years. Its contribution to the national gross domestic product is expected to be around 8.5% by the year 2010-11. The maximum technology is taking place in new generation private sector banks as well as foreign banks. At the same time the immense opportunities are also available for the public sector banks if they explore them and change their mind set and adopt new techniques to combat at the diff. recent challenges.
The study focuses on perception & motivational parameters. On the basis of an empirical study which was conducted in Rural Punjab in August 2013, the study concludes that all the factors play a vital role for developing more e-banking services in all segments of Punjab. Perception factors include Courteous behavior of the bank staff, Easy procedure and less formalities, More and appropriate e-channels & better customer relation management. Motivational factors include cost effective services, time savvy & provide accurate information.

Ultimately the paper suggests that overall satisfaction of the rural customer towards the e-banking service provided by the banks is good. All the banks should concentrate more on responsiveness. The study also frames the strategies to create the awareness regarding e-banking services.
It can be concluded that mere introduction of IT will not be sufficient to bring necessary performance improvement and to get the competitive edge. Intelligent people are required to use such intelligent tools. That's why banks are taking steps to spread awareness and knowledge among the rural masses.

Key Words: Information Technology, Perception , Motivational factors.

I.   INTRODUCTION

Currently, the most important factor shaping the world is globalization, benefits of which are being increasingly recognized. Integration of domestic markets with international financial markets has been facilitated by tremendous advancements in information technology and the structure, work culture, systems and procedures, products/services changed considerably. These changes are clear evidence of significant transformation of banking industry in India. While transformation has entailed greater competition but it has also opened up number of opportunities for the banks to gain the benefits of international business. More particularly, new technology has revolutionized the banking business where the first and foremost set of application of IT that could benefit from technology advances, relates to payment system. Traditionally, payments were made in cash but now various electronic based payments through ATMs, Cards, EFTs, ECS etc. have been making their appearance. Currently, ebanking is the recent technology that is being increasingly recognized as the only system to survive in globalized economy. The customers feel comfortable with ebanking while banks also gain momentum in improved efficiency and customer's base in local market and gain more competencies in global markets. IT as an enabler has broken all bounds of cost, distance and time and hence, efficiency of the banks has been improved especially with quality improvement, timely delivery of services at affordable cost.
ICICI and SBI Banks have taken a lead in introduction of e-banking in India. ICICI Bank is the first one to introduce internet-banking for limited number of services. The new private sector banks and foreign banks gain lead by merely invested in best of breed e-banking solutions from the beginning and gaining the momentum in all banking spheres. Almost all these banks have invested in establishing IT systems especially e-services and banking is one of the core strategies for their development. The major banks, who have successfully implemented IT, are on the top of the emerging competitive markets because IT further intensify competition, better efficiency of operations, risk management, better customer relations etc. The banks' efficiency is not because of banks only but customer is a king to make the banks successful in market. Today customer has become more aware hence, expect more and customer is the focal point of

success of every business. More or less the efficiency of the banks depends upon their ways of entertaining the customers and the satisfaction of their employees. Hence, this domain of banking transformation in India prompts to study the efficiency of the banks because the banks are operating in state of global environment and their efficiency is a key concern to be evaluated.

II.   REVIEW OF LITERATURE:

Avasthi & Sharma (2000-01) have analyzed in their study that advances in technology are set to change the face of banking business. Technology has transformed the delivery channels by banks in retail banking. It has also impacted the markets of banks. The study also explored the challenges that banking industry and its regulator face.

B. Janki (2002) analyzed that how technology is affecting the employees' productivity. There is no doubt, in India particularly public sector banks will need to use technology to improve operating efficiency and customer services. The focus on technology will increase like never before to add value to customer services, develop new products, strengthen risk management etc. the study concludes that technology is the only tool to achieve their goals.

Hua G. (2009) investigates the online banking acceptance in China by conducting an experiment to investigate how users' perception about online banking is affected by the perceived ease of use of website and the privacy policy provided by the online banking website. The 110 undergraduate students in Chinese University are involved in the investigation. The study finds that both perceived ease of use and privacy policy have a significant impact on user's adoption of online banking. The study also investigates relative importance of perceived ease of use, privacy, and security. Perceived ease of use is of less importance than privacy and security. Security is the most important factor influencing user's adoption. The study also discusses the implications of these results and limitations.

Jalan, B. (2003), IT revolution has brought about a fundamental transformation in banking industry. Perhaps no other sector has been affected by advances in technology as much as banking & finance. It has the most important factor for dealing with the intensifying competition & the rapid proliferation of financial innovations.

Mittal, R.K. & Dhingra, S. (2007) studied the role of technology in banking sector. They analyzed investment scenario in technology in Indian banks but this study was related to the time period before the Information Technology Act and at that time technology in Indian banks was very low. But both the researchers nicely presented their views.

Padhy, K.C. (2007) studied the impact of technology development in the banking system and he also highlights the future of banking sector. The core competencies will provide comparative advantages.

Rao (2002) analyzed the impact of new technology on banking sector. The technology is changing the way the business is done and opened new vistas for doing the same work differently in most cost effective manner. Tele-banking and internet banking are making forays such that branch banking may give to home banking. He provided some policies to protect their profitability.

Shastri, R.V. (2000), studied the emergence of IT in banking sector. He highlighted some challenges faced by banks regarding IT implementation. This paper also highlighted future outlook of IT oriented banks.

Shetty, V.P. (2000), technology is dramatically altering the ways in which financial services are delivered to consumers and continue to do so in future too. Electronic banking or the use of computers and electronic technology as a substitute for traditional paper based transactions, is here to stay.

Uppal, R.K. & Kaur, R. (2007) studied the impact of Information Technology on various parameters of bank performance and concluded that Indian banking industry is fastly moving towards IT. The future of e-channels is very bright.

Research Problem

The significant transformation of the banking industry in India is clearly evident from changes that have occurred in the financial markets, institutions and products. Even though deregulation, liberalization, privatization and globalization have accelerated the growth but also entailed greater competition for the financial sector. All this necessitates a transformation; a transformation in the mindset, a transformation in the business processes and finally, a transformation in knowledge management. As a result, all known parameters of the earlier regime are continuously changing during transformation. Managing transformation is, thus, a challenging task. The current transformation process in the Indian banking has many facets like capital restructuring, financial re-engineering, technology absorption and of course human resource development where information technology is the most crucial facet to change and manage the banking business. In these days online banking revolutionized the banking system. There is no need to visit the banks which attracts the customers to utilize banking services through electronic system. New private sector banks have leveraged the internet effectively in taking away the customers from public

sector banks and significantly increased their revenue potential. Strong IT infrastructure especially internet banking is just one-manifestation technology capabilities of these banks. New private sector and foreign banks are becoming threat and also motivation for Indian public sector banks. Their customer base, productivity, profitability, branch network (in domestic and foreign countries) is continuously increasing. Hence, it is essential to study all these changes in Indian banking to obtain better insight about the management of transformation.

Research Gap

From the earlier studies, it is recognized that information technology is playing a vital role in transforming the banking system. No doubt, studies have been conducted in various aspects of transformation and its impact on banks performance in foreign countries but in Indian context, no comprehensive study is conducted on this aspect. Despite, research papers and articles have been written on some aspects of information technology and transformation. This research gap inspires to explore the related aspects of transformation, its impact on Indian banks and further opportunities and challenges to better manage transformation with IT. The present study is devoted to how transformation is taking place in Indian banks, role of e-channels in banks' efficiency and what the customers and banks employees observe about e-services of the banks. The study also analyses the service quality in partially and fully IT-oriented banks. On the basis of empirical analysis, study travels around the problems of banks in managing transformation through IT and suggests some possible measures to manage the problems in a better way.

Objectives

The study aims to examine that how e-services are transforming Indian banking. The study also explores future prospects and emerging challenges in the way of transforming Indian banking through the e-banking services. In general, this research is concerned with the following objectives:

- To assess the current status of e-banking services in rural Punjab.

- To explore the potential strategies to create awareness among the rural masses.

- To study the problems and prospects for ebanking in India and predict the future of ebanking in India.

- To suggest possible measures in the light of problems, if any, how to mould these challenges into opportunities.

Hypothesis

H_0:   Employee Productivity/Branch Productivity is not significantly correlated with e-channels in pre and post e-banking period.

H_0:   The perceptions of bank customers regarding e-banking services are not significantly different with respect to bank groups, age, income and occupation.

III.   RESEARCH METHODOLOGY

The study has used secondary and primary data. The secondary data was collected from Performance Highlights of IBA, Report on Trend and Progress of Banking in India, Annual Reports of the banks and other journals, newspapers etc. For analyzing the perceptions of bank customers (300) , primary data was collected through well structured and pre-tested questionnaires.

The study is related to Indian banking industry. The collected data was analyzed using statistical tools based on objective of the study. Simple average, weighted average score, standard deviation, co-efficient of variations, correlation analysis, regression analysis, t-test, f-test, chi-square were used to draw the inferences.

Data collection:

Data has been collected from the rural sector of Punjab in august 2013.

Findings of the survey:

Table no. 1 : Profile of respondent

 The present study shows that gender wise maximum respondents are males similarly 34 pc respondents are in the age group of below 35. The young blood has quick decision making and easy to move alternative.

51 pc of the respondent's family earn between one lakh to two lakh and 30 pc respondents family earn above two lakh. Those who are earning more, their expectation and perception level will vary with those who are earning less. Income affects the thinking of the customers in the present study because we have taken the samples from the 3 segments of the economy.

The total sample size is 300. 33.33 pc bank respondents have been analyzed from the rural sector of Punjab and remaining 200 respondents (33.33 pc each) from the semi urban segment & urban respectively . Occupation wise 30 pc respondents are from business class and 29.67 respondents belong to the service class.

Need, wants, desire vary based on income level, educational qualifications, age group, designation and their family setup like qualification, respondent's designation also disturbs the service preferences. The individual behavior has lots of difference based on their education profile. This study found that 56.67 pc of the respondents are graduates and 36.67 pc respondents are post graduates.

TABLE NO.1

Group /Sub Group	Number	%
Area 1.Rural 2.Semi-Urban 3.Urban	100 100 100	33.33 33.33 33.33
Age Group (Yr.) 1.Below 25 2.25-35 3.36-45 4.Above 45	100 102 70 28	33.33 34.00 23.33 9.33
Annual Income 1.Below 1 Lac 2. 1 – 2 Lac. 3. Above 2 Lac.	56 154 90	18.67 51.33 30.00
Gender 1.Male 2.Female	186 114	62.00 38.0
Educational Level 1.High School 2.Graduate 3. Post -Graduate	38 170 92	12.67 56.67 30.67
All Data	**300**	**100.0**

Table no. 1: Convenient location of a bank

There was a time when people was not aware about modern e-services such as ATM's ,Smart cards, debit cards and credit cards . but now a days almost everybody is aware about modern e-services and people do not take the risk of carrying cash along with them so they use more and more ATM , debit card , credit card smart cards , tele banking and mobile banking services. If the location of a bank is convenient to customers they use more and more e-banking services . Usage of more and more services dependent upon the convenient location of a bank.

Table no. 2

Perception: Convenient location of a bank?   (Per cent)

Group /Sub Group	Most Unimportant	Unimportant	Undecided	Important	Most important	Chi^2	WAS
Area 1.Rural 2.Semi-Urban 3.Urban		17.00 10.00	4.00	77.00 72.00 44.00	6.00 14.00 56.00	91.00**	
Age Group (Yr.) 1.Below 25 2.25-35 3.36-45 4.Above 45		8.00 10.78 8.57 7.14	1.96 2.86	71.00 62.75 60.00 57.14	21.00 24.51 28.57 35.71	7.23	
Annual Income 1.Below 1 Lac 2. 1 – 2 Lac. 3.Above 2 Lac.		14.29 5.84 11.11	3.57 1.30	55.36 68.18 63.33	26.79 24.68 25.56	8.34	
Gender 1.Male 2.Female		10.22 7.02	1.08 1.75	63.98 64.91	24.73 26.32	1.13 12.64*	
Educational Level 1.High School 2.Graduate 3. Post - Graduate		15.79 10.00 4.35	5.26 1.18	55.26 66.47 64.13	23.68 22.35 31.52	40.39**	
All Data		9.00	1.33	64.33	25.33		1.06

Significance of Difference of Proportions

1.   **Rural Area**   **2. Semi – Urban Area**   **3. Urban Area**

Comparison	p_1	p_2	t-Value	LOS
1 Vs.2	0.83	0.86	0.59	
1 Vs.3	0.83	1.00	4.31	**
2 Vs.3	0.86	1.00	3.88	**

In order to get to know the perceptions of people about the convenient location of a bank the enquiry was made 77 pc rural consumers said that convenient location of bank is very important , followed by semi-urban sector that is 72 pc . The preference to convenient location of a bank is lead in urban sector that is 44 pc . Gender wise study revealed that female prefers more convenient location of a bank that is 64.91 pc as compared to males that is 63.98 pc .

The people of different age group , different annual income level ,different education level and different occupation level wise considered that convenient location of a bank is important to receive bank services . The chi-square test reveals that the difference in the opinion of the customer is insignificant age group

wise , Annual income wise and gender wise . It is significant at 1 pc LOS areas wise and occupation wise . it significant at 5 pc LOS education level wise .

Over all 64.33 pc customer wants convenient location of a bank and considered it is important while 25.33 pc customers considered it is most important .

Conclusion: The location of a bank is important for consumers if it is convenient to them they use more and more e-banking services . Usage of more and more services dependent upon the convenient location of a bank.

Table 3 – Courteous behavior of the bank staff

As a human being, everybody expects kind and courteous behavior from the other people. Talking about the service sector , quality of services only depends upon the polite and courteous behavior of the staff . If the staff is courteous people or customers would like to go again and again to the same org and avail services only from that org productivity is totally linked with the loyalty of the customer . It is evident from the study that 53 pc rural area consumers said that courteous behavior of the bank staff is important , followed by semi urban area that is 38 pc . The 75 pc consumers from the urban sector considered that the courteous behavior of the bank staff is most important . Occupation wise , the study revealed that according to the professionals the courteous behavior of the bank staff is most important , followed by the industry customers that is 54.55 pc.

Education level wise post graduation customers considered that courteous behavior of the bank staff is most important is 52.17 pc.The customers of different age group , different gender and different annual income wise considered the courteous behavior of the staff is

Table no. 3

Perception: Courteous behvaiour of the bank staff?

Group /Sub Group	Most Unimportant	Unimportant	Undecided	Important	Most Important	Chi^2	WAS
Area 1.Rural 2.Semi-Urban 3.Urban	2.00	37.00 33.0 3.00	12.00	53.00 38.00 22.00	10.00 15.00 75.00	147.64**	0.36 0.31 1.69
Age Group (Yr.) 1.Below 25 2.25-35 3.36-45 4.Above 45	2.00	22.00 35.29 18.57 7.14	6.00 3.92 2.86	40.00 31.37 37.14 53.57	30.00 29.41 41.43 39.29	21.55*	0.74 0.55 1.01 1.25
Annual Income 1.Below 1 Lac 2. 1 – 2 Lac. 3.Above 2 Lac.	2.22	32.14 24.03 20.00	10.71 1.30 4.44	35.71 36.36 41.11	21.43 38.31 32.22	19.90*	0.46 0.89 0.81
Gender 1.Male 2.Female	1.75	26.88 20.18	1.08 8.77	38.71 35.96	33.33 33.33	15.18**	0.78 0.79
Educational Level 1.High	5.26	31.58		42.11	21.05	47.66**	0.42

School 2.Graduate 3. Post - Graduate		28.82 13.04	2.35 8.70	42.49 26.09	25.88 52.17		0.66 1.77
All Data	**0.67**	**24.33**	**4.00**	**37.67**	**33.33**		**0.79**

Significance of Difference of Proportions

Rural Area   2. Semi – Urban Area   3. Urban Area

Comparison	p_1	p_2	t-Value	LOS
1 Vs.2	0.63	0.53	1.43	
1 Vs.3	0.63	0.97	6.01	**
2 Vs.3	0.53	0.97	7.19	**

important .The chi-square test reveals that the difference in the opinion of the customer is significant at 5 pc LOS age group wise and annual income wise . It is significant at 1 pc LOS area wise , gender wise , education level and occupation wise .Overall 37.67 pc customers considered that courteous behavior of the bank staff is important while 33.33 pc customers considered that it is most important .

Table no. 4 : Easy procedure and less formalities.

Thanks to today's technological advances, banking and financial transactions can be easily conducted electronically. With many of us facing hectic schedules, we depend on these channels to help facilitate our banking needs. Whether its banking using the ATM, the Internet, these channels prove to be a convenient and efficient form of banking. Banking online allows you to manage your finances from home, work and just about anywhere else in the world.

Table no. 4

Perception: Easy procedure and less formalities?

Group /Sub Group	Most Unimportant	Unimportant	Undecided	Important	Most Important	Chi^2	WAS
Area 1.Rural 2.Semi-Urban 3.Urban	8.00	39.00 45.00	6.00 9.00 3.00	55.00 32.00 60.00	6.00 37.00	125.77**	
Age Group (Yr.) 1.Below 25 2.25-35 3.36-45 4.Above 45	2.00 1.96 5.71	28.00 39.22 17.14 14.29	10.00 6.86 1.43	44.00 43.14 64.29 50.00	16.00 8.82 11.43 35.71	36.13**	

Annual Income 1.Below 1 Lac 2. 1 – 2 Lac. 3. Above 2 Lac.	3.57 2.60 2.22	42.86 27.92 18.89	3.57 7.79 4.44	39.29 46.10 60.00	10.71 15.58 14.44	13.31	
Gender 1.Male 2.Female	2.15 3.51	26.88 29.82	5.38 7.02	48.92 49.12	16.67 10.53	2.88	
Educational Level 1.High School 2.Graduate 3. Post - Graduate	5.26 2.35 2.17	28.95 32.35 19.57	10.53 2.94 9.78	44.74 48.24 52.17	10.53 14.12 16.30	11.74	
All Data	**2.67**	**28.00**	**16.00**	**49.00**	**14.33**		**0.44**

Significance of Difference of Proportions

1.   **Rural Area   2. Semi – Urban Area   3. Urban Area**

Comparison	p$_1$	p$_2$	t-Value	LOS
1 Vs.2	0.55	0.38	2.41	*
1 Vs.3	0.55	0.97	6.95	**
2 Vs.3	0.38	0.97	8.91	**

The enquiry was made to get to know about the perceptions of the customers about the procedure and formalities segment wise it is a rural segment, semi urban and urban sector all the customers from different segments want that there should be Easy procedure and less formalities & it is an imp factor for bank customers. Age wise preference to Easy procedure and less formalities lies more in the age group of 35 to 45 followed by the age group above 45 that is 5o pc.The people of different income level, different sex, different education level and different occupation level wise considered that there should be Easy procedure and less formalities & it is an imp factor for bank customers.The chi – square test exhibits that the difference in opinion of customers is insignificant sex wise, annual income wise, education wise. It is significant at 1 pc los segment wise & age group wise & occupation level wise.
 Over all 49 pc customers considered that there should be Easy procedure and less formalities & it is an imp factor for bank customers while 39.67 pc customers considered it most imp.
Conclusion: E-channels prove to be a convenient and efficient form of banking. Banking online allows you to manage your finances from home, work and just about anywhere else in the world.

Table no. 5 : More and appropriate e-channels.

Over the last few years, Indian banks have spent crores of rupees to provide electronic channel banking. They invested heavily in expanding and improving the IT systems and, in the process, have come up with a number of new e-banking services. This was mainly to restructure their operations and successfully meet the ever-changing needs of the customers. From the available host of e-products in the banking industry, it can be said that the innovation has gone to the peak and is reaching the saturation point. Various studies on banks profitability also reported that the `Indian Banking Profitability' is mainly from `Retail Banking

Sector'. E-Channels are part of retail banking and, in fact, play a major role in reducing the cost of operations in the retail banking segment. This case study explores the usage of various e-channels by the retail users based on the demographic differences .The objective of the study is to understand the impact of various `demographical' features on the e-channels usage.

Table no. 5

Perception: More and appropriate e-channels?

Group /Sub Group	Most Unimportant	Unimportant	Undecided	Important	Most Important	Chi^2	WAS
Area 1.Rural 2.Semi-Urban 3.Urban	4.00	55.00 24.00 3.00	2.00 3.00	43.00 43.00 24.00	2.00 27.00 70.00	139.13**	- 0.08 0.65 1.61
Age Group (Yr.) 1.Below 25 2.25-35 3.36-45 4.Above 45	1.00 2.94	24.00 27.45 34.29 21.43	1.96 1.43 7.14	33.00 41.18 34.29 39.29	42.00 26.47 30.00 32.14	17.21	0.91 0.61 0.60 0.82
Annual Income 1.Below 1 Lac 2. 1 – 2 Lac. 3.Above 2 Lac.	1.79 1.95	28.57 25.32 30.00	3.25	35.71 33.12 43.33	33.93 36.36 26.67	10.23	0.71 0.77 0.67
Gender 1.Male 2.Female	1.61 0.88	26.88 28.07	1.61 1.75	37.63 35.09	32.26 34.21	0.54	0.72 0.74
Educational Level 1.High School 2.Graduate 3. Post - Graduate	2.63 1.76	26.32 30.59 21.74	5.26 1.18 1.09	50.00 32.94 38.04	15.79 33.53 39.13	14.06	0.50 0.66 0.95
All Data	**1.33**	**27.33**	**1.67**	**36.67**	**33.00**		**0.73**

Significance of Difference of Proportions

1.   **Rural Area   2. Semi – Urban Area   3. Urban Area**

Comparison	p1	p2	t-Value	LOS
1 Vs.2	0.45	0.70	3.58	**
1 Vs.3	0.45	0.94	7.53	**
2 Vs.3	0.70	0.94	4.42	**

The survey exhibits that annual income wise, those who are earning above 2 lakhs that considered that more and appropriate e-channels are important that is 43.33 pc. Followed by the income level of below 1

lakh that is 35. 71 pc. Income level between 1-2 lakh consumers considered it most important that is 36.36 pc. Occupation wise, the professionals considered it most important that is 77.78 pc. According to different area wise, different age group wise, different gender wise and different education level wise more and appropriate e-channels are important. The chi-square test exhibits that the difference in the opinion of customers is insignificant age group wise, gender wise, education level wise and different annual income level wise. it is significant at 1 pc LOS area wise and occupation wise . Over all 36.67 pc consumers considered that more and appropriate e-channels are important while 33 pc consumers considered it most important.

Table no. 6 : Better customer relationship management [CRM]

TECHNOLOGY, people and customer are the three elements on which hinges the success of banking in the fast changing economic environment. The ultimate performance of a bank
depends upon the satisfaction of its customers. In the emerging competitive and technological driven banking era, banks have to strive hard for retaining and enlarging their customer base. E-CRM, which is the latest buzzword in the corporate sector, is perceived as one of the effective tool in this direction by the banks. Its emphasis is on defining the customers as valuable in the long-term and on viewing customer relationships as a learning relationships. The concept of CRM, when seen in the context of e-business, it translates into e-CRM, which essentially deals with managing customer interactions over the web. The present paper attempts to analyze the concept of e-CRM in Indian banks from its various dimensions covering specifically its need, process, present status and future prospects.
The survey exhibits that either it is a rural segment, semi urban or urban sector all the customers from different segments want that there should be a good relationship between customers and bank employees & it is an imp factor for bank customers.

Age wise preference to CRM lies more in the age group of 35 to 45 which is 68.57 pc followed by the age group of 25 to 35 that is 54 pc then in the age group of above 45 that is 53.57 pc. The preference to CRM is least in the age group of below 25 that is 51 pc.

The people of different income level, different sex, different education level and different occupation level wise considered that CRM is imp because without CRM customers will not get any affiliation with the org.

The chi – square test exhibits that the difference in opinion of customers is insignificant age group wise, annual income wise, education wise. It is significant at 1 pc los segment wise & gender wise & occupation level wise.

Over all 56.67 pc customers considered that CRM is an imp factor for bank customers while 39.67 pc customers considered it most imp.

Table no. 6

Perception: Better customer relationship management?   (Per cent)

Group /Sub Group	Most Unimportant	Unimportant	Undecided	Important	Most Important	Chi^2	WAS
Area 1.Rural 2.Semi-Urban 3.Urban		5.00	6.00	82.00 57.00 31.00	18.00 32.00 69.00	79.96**	1.18 1.16 1.69
Age Group (Yr.) 1.Below 25 2.25-35 3.36-45 4.Above 45		2.00 2.94	4.00 1.96	51.00 54.90 68.57 53.57	43.00 40.20 31.43 46.43	10.88	1.35 1.32 1.31 1.46
Annual Income		3.57	3.57	51.79	41.07	6.36	1.30

1.Below 1 Lac		0.65	1.30	54.55	43.51		1.41
2. 1 – 2 Lac.		2.22	2.22	63.33	32.22		1.26
3. Above 2 Lac.							
Gender							
1.Male		1.08		60.22	38.71	12.02**	1.37
2.Female		2.63	5.26	50.88	41.23		1.31
Educational Level							
1.High School			1.18	63.16	36.84		1.37
2.Graduate		2.94	4.35	58.82	37.05	1.04	1.30
3. Post - Graduate				50.00	45.65		1.41
All Data		**1.67**	**2.00**	**56.67**	**39.67**		**1.34**

Significance of Difference of Proportions

1.   **Rural Area**   **2. Semi – Urban Area**   **3. Urban Area**

Comparison	p_1	p_2	t-Value	LOS
1 Vs.2	1.00	0.89	3.41	**
1 Vs.3	1.00	1.00		
2 Vs.3	0.89	1.00	3.41	**

Table No: 7 E-channels don't ensure privacy

Technological innovations witnessed by the corporate sector during the Nineties has charged the way business needs to be conducted. I.T has introduced new business paradigms and in increasingly playing a significant role in improving the services in the banking industry. E-Banking is becoming more and more popular today, as is banking via digital television. E-Banking has become a necessary survival weapon and is fundamentally changing the banking industry worldwide. Today, The click of the mouse offers customers banking services at much lower cost and also empower them with unprecedented freedom in choosing vendors for their financial service needs. But only single drawback is E-channels don't ensure privacy and privacy is super most imp. While conducting a business.

   The study concludes that 68 Pc of the Urban segment and 15 Pc of the Semi-Urban segment strongly agree with that e-channels do not ensure privacy. Occupation wise 66 Pc of the professionals are Strongly Agree with that e-channels do not ensure privacy as comparative to Business Sector, Industry Sector and Agriculture Sector that is 40 Pc, 18 Pc and 12 Pc respectively.

      All people from diff. age group , diff. Annual Income, diff. Gender, diff. Education level are agree with that e-channels do not ensure privacy.

   The chi-square test concludes that diff. in opinion of customers is insignificant Age wise, Annual Income wise, Gender wise. It is significant at 1 Pc LOS Area wise, Education wise, Occupation wise.

   Overall 31.67 Pc respondents are Strongly agree with that e-channels do not ensure privacy.

Table no. 7

Perception: e-channels do not ensure privacy?

Group /Sub Group	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Chi^2	WAS
Area 1.Rural 2.Semi-Urban 3.Urban	 8.00 	 55.00 24.00 7.00		 33.00 53.00 25.00	 12.00 15.00 68.00	 131.24** 	 0.02 0.43 1.54
Age Group (Yr.) 1.Below 25 2.25-35 3.36-45 4.Above 45	 3.00 4.90 	 24.00 32.35 28.57 32.14		 45.00 36.27 30.00 28.57	 28.00 26.47 21.43 39.29	 13.05 	 0.71 0.47 0.84 0.75
Annual Income 1.Below 1 Lac 2. 1 – 2 Lac. 3. Above 2 Lac.	 5.36 3.25 	 21.43 28.57 33.33		 44.64 32.47 40.00	 28.57 35.71 26.67	 9.46 	 0.70 0.69 0.60
Gender 1.Male 2.Female	 2.69 2.63	 26.88 31.58		 34.95 40.35	 35.48 25.44	 3.36 	 0.74 0.54
Educational Level 1.High School 2.Graduate 3. Post -Graduate	 7.89 2.94 	 47.37 27.65 22.83		 26.32 43.53 29.35	 18.42 25.88 47.83	 28.26** 	 0.00 0.62 1.02
All Data	2.67	28.67		37.00	31.67		0.66

Significance of Difference of Proportions

1.   **Rural Area   2. Semi – Urban Area   3. Urban Area**

Comparison	p_1	p_2	t-Value	LOS
1 Vs.2	0.45	0.68	3.28	**
1 Vs.3	0.45	0.93	7.34	**
2 Vs.3	0.68	0.93	4.46	**

Table No. 8 : E-Channels level bright future in Global-age.

Banks have came to realize that survival in the new e-economy depends on delivering some or all of their banking services on the Internet while continuing to support their traditional infrastructure. Without any doubt, the international scope of E-banking provides new growth perspectives and Internet business is a catalyst for new technology and new business process.

The study concludes that Occupation wise Industry sector agree with the E-Channels have bright future in global age that is 72.73 Pc as comparative to agriculture sector and other sector that is 58.33 Pc and 39.62 Pc respectively. Similarly Area wise 71 Pc of Urban respondents and 18 Pc of Semi Urban respondents are St. agree with the same.

Acc to Annual Income wise, Age group wise, Education wise, Gender wise respondents agree with that E-Channels have bright future in global- age.

The chi-square concludes that diff. in the opinion of the respondents is insignificant Gender wise. It is significant at 1 Pc LOS Area wise, Age group wise, Education wise and Occupation wise. While it is significant at 5 Pc LOS Annual Income wise.

Over all study reveals that 36.67 Pc respondents are agreeing that e-channels have bright future in global age while 32.33 Pc are St. agree with the same.

Table No:8 : E-channels have future in global age

Table 8

Perception: e-channels have bright future in global age?

Group /Sub Group	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Chi^2	WAS
Area 1.Rural 2.Semi-Urban 3.Urban	6.00 3.00	41.00 33.00 4.00	6.00	51.00 37.00 22.00	8.00 18.00 71.00	129.53**	0.26 0.28 1.54
Age Group (Yr.) 1.Below 25 2.25-35 3.36-45 4.Above 45	6.00 1.96 1.43	18.00 38.24 27.14 7.14	3.00 2.94	43.00 27.45 34.29 53.57	30.00 29.41 37.14 39.29	27.00**	0.73 0.44 0.79 1.25
Annual Income 1.Below 1 Lac 2. 1 – 2 Lac. 3. Above 2 Lac.	3.57 1.95 4.44	28.57 28.57 20.00	5.36 1.95	37.50 29.22 48.89	25.00 38.31 26.67	17.53*	0.52 0.73 0.73
Gender 1.Male 2.Female	2.69 3.51	22.04 32.46	1.61 2.63	38.71 33.33	34.95 28.07	5.06	0.81 0.50
Educational Level 1.High School 2.Graduate 3. Post - Graduate	5.26 2.94 2.17	42.11 27.06 17.39	2.63 2.94	31.58 41.18 30.43	18.42 25.88 50.00	25.54**	0.16 0.60 1.09
All Data	**3.00**	**26.00**	**2.00**	**36.67**	**32.33**		**0.69**

Significance of Difference of Proportions

1.   **Rural Area   2. Semi – Urban Area   3. Urban Area**

Comparison	p$_1$	p$_2$	t-Value	LOS
1 Vs.2	0.59	0.55	0.57	
1 Vs.3	0.59	0.93	5.63	**
2 Vs.3	0.55	0.93	6.13	**

IV.   SUGGESTIONS:

- E-banking services should be more customer centric than the service centric as dreamt earlier.

- The rise of E-banking is redefining business relationship and the most successful banks will be those that can truly strength their relationship with the customers.

- Banks should also offer sufficient price incentives for customers to use bank online, in their efforts to build a sound E-banking business.

- Just enrolling customers for online banking may not be sufficient until & unless they use the site actively, banks must make the efforts to increase their site usage by customers and effectively co-ordinate the online channel with branches and call centers. Then only they will be able to derive maximum value that includes cost reduction, cross – selling opportunities and higher customer retention.

- It is found that awareness of rural customers about the E – services of banks is not adequate hence. There is a need to educate them about the E – channels provided by banks as well as about the benefits of E – banking. Now need is to aware the consumers about the E – age products and how to use them.

V.   CONCLUSION:

In the era of E – banking and severe competition, the expectations of the bank customers have increased. Due to this bank should offer a broad range of deposits, investments and credit products through diverse distribution channels including upgraded branches, ATM's telephone and internet. For this banks should become more customer centric, offering a wide range of products through multiple delivery channels, becomes proficient in managing assets & liabilities acc. to risk & return and pay greater attention to profitability including cost reduction and increased fee- based income.

It can be concluded that mere introduction of IT alone will not be sufficient to bring necessary performance improvement and to get the competitive edge. Intelligent people are required to use such intelligent tools. Awareness programmes should be conducted to spread awareness to usage of more E – channels.

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