Study on Adoption of Internet Banking services in Udaipur District- An empirical study

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Abstract: In the modern era, where business has crossed the international boundaries and banking has international standards, Technical competency has a very crucial role to play. With its inbuilt facilities and flexibility sky is the limit for internet banking. The focus of this research paper is to explore the level of adoption of internet banking among the citizens of Udaipur and in addition, find the association between various demographics like age, gender, level of education, level of income and profession of citizens and the adoption of various internet services provided by the banks like pay bill, transfer of funds, download statements, check balance etc. . For this a structured questionnaire was sent to 500 people of Udaipur district of Rajasthan, out of which 447 responded and a related analysis was done. Chi square test was used to find the association of various demographic profiles with various internet banking services. In the analysis it was found that rampant use of the service was not availed. The frequency of use was only around once in twice a month. Also it was found that most of them were using the services only to pay bills and transfer of funds. Among all those who applied for loan, it was observed that these were the people of the young age group 25-35. It can be conclude that this is the age group which is more techno savvy and in the stage of career building   and settling down in life and so more in need of money.   It was also found that this age group is the most active group to check their account balance using the internet banking. Another review of the statistics made us conclude that there is a direct relation between the level of income and transfer of funds using internet banking. More the income of the respondents more was the use of this facility.

Key words: Internet Banking, Banking services

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INTRODUCTION

Technology is the key to changes regarding the conduct of economic transactions. Rampant use of internet via computers and mobile has contributed significantly to this change. Banks are core to these transactions and so the banks are strategically aligning themselves to the changing scenario and providing host of tailor made services to customers. It has brought unprecedented changes in banking industry. Today technology has emerged as a strategic resource for achieving higher efficiency, control of operations, productivity and profitability for Banks. Services like Internet Banking, Mobile Banking, and Telephone Banking have gained popularity among users in a relatively short span of time. These services allow the bank's customers to access and inquire about their accounts and perform simple transactions like transaction between accounts, personal financial consulting, online stock trading, shopping, and utilities fee payments via the Internet from their computer at home or at work at their convenience. Customers are slowly getting accustomed to safe and secure electronic information and money transfer systems. This has reduced the need of the customers to visit the banks premises and has reduced waiting time to be served by the banks employees, reduce errors and cost, and ultimately improve customers' satisfaction.

On one side where the internet banking has provided a host of facilities to the customers, on the other hand it facilitates the banking functions also. Internet banking lower operational costs, improves consumer banking services, retain customers, and expand their market share.(Bahman Saeidipour, 2013).Use of technology has rationalized the "anywhere anytime" banking concept.

The ease of banking with increasing use of internet has opened many paradigms of banking and more and more people are being attracted to it. People of all age groups are seen paying bills through internet banking. People of various professions are seen making their transactions online. Students and parents are seen paying school and college fees using internet banking. Both males and females are seen seeking information about banks and its products through their online banking sites. People o f various income groups are seen using internet to transfer funds, open new accounts or avail any such kind of online service provided by the banks.

It is also observed that in spite of the many facilities and services provided by the banks through internet banking factors like security & privacy, trust, innovativeness, familiarity, awareness level beholds the acceptance of technology based banking services among many

Indian customers. Many reasons like lack of technical knowledge, lack of trust on the safety and security measures and lack of infrastructural facilities can be attributed to this cause. Keeping in view the two dimensions of Internet Banking a research was concluded to analyze the level of adoption of internet banking among the citizens of Udaipur district of Rajasthan. The respondents were chosen on the basis of demographic profile- Age, gender, income, education and profession. Indian banks provide various Internet services. These can be classified in three heads. One, Information services which include information about banks products and information about banks services. Two, Communication services which include Loan application, check balances, download statements and update addresses. Three, transactional services which include pay bills, transfer of funds, open new account and apply for demand draft. The following research work shows an association between these various internet services provided by the bank and the various demographic profiles stated above.

Review of Literatures

(Sharma, 2016) says that Internet banking seems poised to become an important part of the Indian banking sector in the years to come. The banking today is re-defined and re-engineered with the use of Information Technology and it is sure that the future of banking will offer more sophisticated services to the customers with the continuous product and process innovations. Thus, there is a paradigm shift from the seller's market to buyer's market in the industry and it has affected at the bankers level to change their approach from "conventional banking to convenience banking" and "mass banking to class banking". The shift has also increased the degree of accessibility of a common man to bank for his variety of needs and requirements. Analysts claim that Internet banking holds lots of potential with the emergence of growing Internet awareness among customers, integration of banking services with e-commerce service, the increasing reach of the Internet and the entry of global players in the banking sector.**(Nidhi, 27 august 2016)** says that the competition among the banks has led to the increasing total banking automation in the Indian banking industry. E-Banking is a generic term encompassing internet banking, telephone banking, mobile banking etc. Through E-Banking the bank wants to introduce the core concept of IT based Enabled Services (ITES). The E-Banking services are executed only upon the customer, and these e-banking services would fully integrate with the core banking solution that is already in usage. **(Vikas Chauhan, 2015)** discusses the challenges and opportunities associated with the internet banking in Indian context. The discussion concludes that concept of internet banking is slowly gaining acceptance in Indian scenario and efforts are being made by

government agencies to make it more popular among consumers. A research says that even in developed countries like America the usage of IB is limited.(Top 3 Surprising Reasons People Don't Use Online Banking, 2016)Statesthat only 21.4% of Americans use online banking. With that, we can infer that roughly 78% of people don't.**That means nearly 3/4 of people make trips to the bank when they can complete (most) banking transactions with online banking. The reasons for this , the report states that ,are** The belief that information and money aren't safe, They are **Not sure how to use it and they don't see the benefits.**in accordance with**(Jindal, 2015**)**,** The rapid development of E-banking services carries risks as well as benefits. This research paper will introduce you to e-banking giving the meaning, functions, types, advantages and challenges in adoption of e-banking. It also aims at suggesting some ways for making e-banking successful in the developing country like India.**(BK*, 2015)**The findings of the study revealed that demographic factors such as gender do not have significant effect on customers in adopting and using internet banking services. The study further concluded that there is a strong correlation between employment status, educational level and customer adoption and usage of internet banking services in Ghana.**(Mohammed Naved Khan, 2015)**The analysis indicates that if the factors of concerns inhibiting the adoption of IB increase, then the awareness of IB will decrease to a slight extent. The banks should, therefore, work on reducing the concerns about IB. The issues which make a significant impact are awareness of technology, comfort, satisfaction, physical presence and safety and security. Out of these, awareness and safety and security will bring about positive changes in usage of IB.**(Bhatnagar, 2015)**Concludes in her research that mostly only the business men in rural areas of Udaipur are interested in internet banking.**(P, 2013)** stresses on Cost effective mechanism.The internet banking provides an opportunity of self service channel to the consumers. This help the banks to cut their workforce up to a particular extent that results in reducing the administrative costs bear by the banks. Compared to traditional banking system, internet banking is cost-effective as it reduces the administrative costs and paperwork needed for the bank transactions.**(Thanika Devi Juwaheer, 2012)**Data analysis shows that perceived ease of use and perceived usefulness have a direct influence on the adoption of internet banking in Mauritius. Results have also indicated that both trust and security aspects are deemed crucial factors to explaining internet banking adoption in Mauritius. Further examination of the inferential analysis highlighted that level of education and income level of respondents may be a major determinant in influencing the adoption of internet banking.**(Rahmath**

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Safeena, 2011) Determines the factors influencing the consumer's adoption of internet banking in India and hence investigates the influence of perceived usefulness, perceived ease of use and perceived risk on use of IB. When online banking is perceived as useful, customer's intention to adopt it would be greater. Likewise bank customers are likely to adopt IB when it is easy to use. This shows that bank customers anchor their online banking adoption intention to the beneficial outcomes and ease of use process of the system. Although IB provides flexibility in performing financial transaction, fast and easy, however individuals are still reluctant to adopt the system because of the risk associated with it. Security and privacy are two elements in the perceived risk. Customers are not ready to take any risk on using the new system

Research Gap

After an intense study in the related field of services provided by internet banking in India, it was found that no concrete research work related to usage of internet banking services was done in context to the Udaipur district of Rajasthan. This research gap motivated us to work on our set of objectives.

Research Methodology

Objective of the study:-

1. To explore the level of adoption of internet banking services among the citizens of Udaipur District.
2. To find the relation between demographic profile of respondents and adoption of various internet banking services.

Type of Research – (Exploratory & Empirical Research) The research is exploratory because the level of adoption of various internet banking services were explored and empirical because a relation between demographic profile of respondents and adoption of various internet banking services was found.

Data Collection Method- Data was collected through structured mailed Questionnaire

Method of sampling- Convenient Sampling

Sample Size –Questionnaire was sent to 500 citizens of Udaipur district out of which 447 responded.

Sampling Frame- Citizens of Udaipur district of Rajasthan.

Test- Chi Square test was used to find the association between demographic profile of respondents and adoption of various internet banking services

Hypothesis framed for the study:-

Ho1: There is no association between demographics* and adoption of internet banking service- Enquiry about bank's product and services.

Ho2: There is no association between demographics* and adoption of internet banking service- Pay Bills.

Ho3: There is no association between demographics* and adoption of internet banking service- Check Balances.

Ho4: There is no association between demographics* and adoption of internet banking service- Transfer of Funds.

Ho4: There is no association between demographics* and adoption of internet banking service- Download statements.

Ho4: There is no association between demographics* and adoption of internet banking service-Application for Loan.

Ho5: There is no association between demographics* and adoption of internet banking service-Open a new account.

Ho6: There is no association between demographics* and adoption of internet banking service-Apply for Demand Draft.

Ho7: There is no association between demographics* and adoption of internet banking service-Update your address.

*Demographics- Age, Gender, Level of Education, Level of Income, Profession.

Limitation of the study:

The Questionnaire was sent to 500 citizens of Udaipur district. Questionnaire was prepared online by using Google Form. Only 447 out of 500citizens responded. Research was restricted to Udaipur district only.

Data analysis and Interpretation

Table 1- Demographic profile of Respondents

Demographic profile of Respondents		
Age	Frequency	Percent
18-24	198	44.295302
25-34	144	32.214765

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35-44	60	13.422819
45-54	36	8.0536913
54-64	9	2.0134228
Total	**447**	**100**

Gender	Frequency	Percent
Female	264	59.060403
Male	183	40.939597
Total	**447**	**100**

Level of Education	Frequency	Percent
Below secondary	6	1.3422819
Secondary	12	2.6845638
Higher Secondary	84	18.791946
Graduate	117	26.174497
Post Graduate	198	44.295302
Others	30	6.7114094
Total	**447**	**100**

Profession	Frequency	Percent
Student	162	36.241611
Private Employee	120	26.845638
Government Employee	21	4.6979866
Housewife	57	12.751678
Business	66	14.765101
Retired	3	0.6711409
Others	18	4.0268456
Total	**447**	**100**

Income	Frequency	Percent
No Income	150	33.557047
Up to 10,000	51	11.409396
10,000-20,000	57	12.751678
20,000- 30,000	75	16.778523
30,000-40,000	24	5.3691275
40,000-50,000	18	4.0268456
Above 50,000	72	16.107383
Total	**447**	**100**

Source: Own computation

Interpretation: Around 42% of the respondents were of the age group 18-24 years and 32% of the respondents were of the age group 25-32. 60- 40 was the ratio found between Female

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and males. Most of the respondents were post graduates(45 %) and graduates(26%). 36 % of the respondents were students and around 27% of the respondents were private employees. As majority of the respondent were students, so it can beinferred that most of the respondents had no income.

Table 2 – Adoption of Internet banking services

Adoption of Internet Banking services	Frequency	Percent
Yes	324	72.48%
No	123	27.52%
Total	**447**	**100.00%**

Source: Own computation

Interpretation: Out of the 447 respondents 324 respondents were using internet banking services. More than 70 % of the respondents were using one or the other internet banking services.

Table 3- Frequency of Usage of Internet banking services

| Frequency of usage of Internet Banking services	Frequency	Percent
Daily	69	21.2962963
Once or twice a week	69	21.2962963
Once or twice a month	138	42.59259
Once in 6 months	42	12.96296
Once in a Year	6	1.851852
Total	**324**	**100**

Source: Own computation

Interpretation: It was found that most of the respondents i.e. around 42 % of the respondents use internet banking services twice a month.

Table 4-Frequency of banking services availed by the respondents

Frequency of banking services availed by the respondents	Percent
Pay Bills	63.40%
Check Balance	55.30%
Transfer of funds	54.50%
Download statements	28.45%
Other Services	16.30%
Enquiry about bank products and services	14.60%

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Loan application	4.90%
Open a new account	4.90%
Apply foe Demand draft	4.90%
Update your address	4.10%

Source: Own computation

Frequency of banking services availed by the respondents
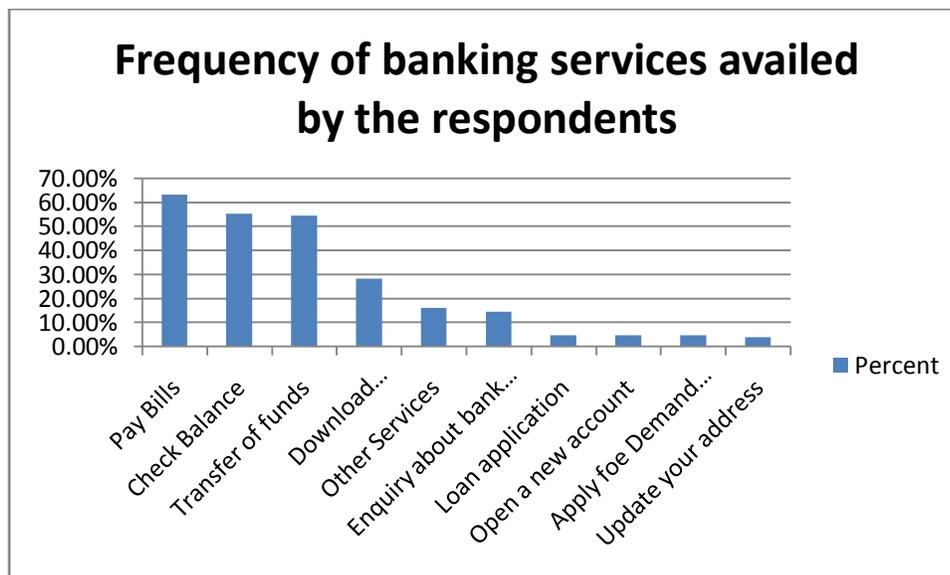
Interpretation: It was found that 63 % of the respondents were paying Bills through Internet banking. Around 55 % of the respondents were using Internet banking to Check Balances and Transfer of funds. 29 % are using services of Download statements. Only 5 % of the respondents are using Loan application services, applying for Demand drafts and opening a new account. Only 4 % are using to update their address.

Hypothesis Testing

Null Hypothesis(Ho1): There is no association between demographics and adoption of internet banking service- Enquiry about bank's product and services.

Table 5:-Enquiry about bank product and services

	p value	table value	Decision
Gender	0.0002528	3.841	Accept
Age	2.73994	7.815	Accept
Level of education	10.5678	9.488	Reject
Profession	0.008201432	11.07	Accept
Level of Income	7.78581	12.59	Accept

Source: Own computation

Decision & Conclusion: Since chi square calculated is greater than table value in case of level of education , so we reject the null hypothesis at 5 % Level of significance and hence conclude that there is association between Level of education of respondents and service – enquiry about bank products and services.

Since the calculated value is less than table value for all demographics other than level of education (Gender, Age, Profession, Level of Income)it was found that there is no association between them and the adoption of service- Enquiry about bank product and services.

Null Hypothesis(Ho2): There is no association between demographics and adoption of internet banking service- Loan application

Table 6:-Loan application

	p value	table value	Decision
Gender	0.156971387	3.841	Accept
Age	8.0123	7.815	Reject
Level of education	0.04873066	9.488	Accept
Profession	0.003782	11.07	Accept
Level of Income	0.03817882	12.59	Accept

Source: Own computation

Decision & Conclusion: Since chi square calculated is greater than table value in case of Age, so we reject the null hypothesis at 5 % Level of significance and hence conclude that there is association between Age of respondents and adoption of service –Loan application.

Since the calculated value is less than table value for all demographics other than Age(Gender, Level of Education, Profession, Level of Income)it was found that there is no association between them and the adoption of service- Loan Application.

Null Hypothesis (Ho3): There is no association between demographics and adoption of internet banking service- Check Balances.

Table 7:Check balances

	p value	table value	Decision
Gender	0.958348581	3.841	Accept
Age	7.9034	7.815	Reject
Level of education	3.87541E-06	9.488	Accept
Profession	3.26423	11.07	Accept
Level of Income	2.28886	12.59	Accept

Source: Own computation

Decision & Conclusion: Since chi square calculated is greater than table value in case of Age, so we reject the null hypothesis at 5 % Level of significance and hence conclude that there is association between Age of respondents and adoption of service –Check Balance.

Since the calculated value is less than table value for all demographics other than Age (Gender, Level of Education, Profession, Level of Income)it was found that there is no association between them and the adoption of service- Check Balance.

Null Hypothesis (Ho4): There is no association between demographics and adoption of internet banking service-Download Statements

Table 8:Download statements

	p value	table value	Decision
Gender	0.002366692	3.841	Accept
Age	9.90123	7.815	Reject
Level of education	0.125576609	9.488	Accept
Profession	0.003083529	11.07	Accept
Level of Income	0.109068426	12.59	Accept

Source: Own computation

Decision & Conclusion: Since chi square calculated is greater than table value in case of Age, so we reject the null hypothesis at 5 % Level of significance and hence conclude that there is association between Age of respondents and adoption of service –Download statements.

Since the calculated value is less than table value for all demographics other than Age (Gender, Level of Education, Profession, Level of Income) it was found that there is no association between them and the adoption of service- Download Statements.

Null Hypothesis (Ho5): There is no association between demographics and adoption of internet banking service-Update your address.

Table -9 Update your Address

	p value	table value	Decision
Gender	0.001256896	3.841	Accept
Age	4.8834733	7.815	Accept
Level of education	0.013809693	9.488	Accept
Profession	4.57677	11.07	Accept
Level of Income	7.77432	12.59	Accept

Source: Own computation

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Decision & Conclusion: Since the calculated value of chi- square is less than table value so null hypothesis is accepted in case of all the demographics. By this it was concluded that there is no association between demographics and adoption of service- Update your address.

Null Hypothesis (Ho6): There is no association between demographics and adoption of internet banking service-Pay Bills.

Table 10 :Pay bills

	p value	table value	Decision
Gender	0.44646663	3.841	Accept
Age	0.000193038	7.815	Accept
Level of education	0.000632	9.488	Accept
Profession	0.477224804	11.07	Accept
Level of Income	0.038684687	12.59	Accept

Source: Own computation

Decision & Conclusion: Since the calculated value of chi- square is less than table value so null hypothesis is accepted in case of all the demographics. Thus it can be concluded that there is no association between demographics and adoption of service-Pay bills.

Null Hypothesis (Ho7): There is no association between demographics and adoption of internet banking service-Transfer of funds

Table 11: Transfer of Funds

	p value	table value	Decision
Gender	0.15857188	3.841	Accept
Age	0.062272065	7.815	Accept
Level of education	0.000380442	9.488	Accept
Profession	1.25161	11.07	Accept
Level of Income	13.075	12.59	Reject

Source: Own computation

Decision & Conclusion: Since chi square calculated is greater than table value in case of Level of Income, so we reject the null hypothesis at 5 % Level of significance and hence conclude that there is association between Level of Income of respondents and adoption of service –Transfer of Funds.

Since the calculated value is less than table value for all demographics other than Level of Income(Gender, Age, Level of Education, Profession, it was found that there is no association between them and the adoption of service- Transfer of Funds.

Null Hypothesis (Ho7): There is no association between demographics and adoption of internet banking service-Open a new account.

	p value	table value	Decision
Gender	0.013336203	3.841	Accept
Age	0.33062743	7.815	Accept
Level of education	0.542162906	9.488	Accept
Profession	0.000719079	11.07	Accept
Level of Income	0.307974014	12.59	Accept

Source: Own computation

Decision & Conclusion: Since the calculated value of chi- square is less than table value so null hypothesis is accepted in case of all the demographics. Thus it was found that there is no association between demographics and adoption of service-Open a new account.

Conclusion: Technology is changing the form of the world at a very great pace. Along with technology is changing the life and life style of the common mass. The most quick to adopt and adapt to new faces of technology is the young generation, mostly students. Keeping this in view a research was conducted. Objective of the study was to explore the level of adoption of internet banking services among the citizens of Udaipur District and to find the relation between demographic profile of respondents and adoption of various internet banking services.As,expected among all the respondents majority of them i.e.70% were using one or the other internet banking services mostly once in fortnight. As a further probe was conducted to find out the various types of services availed, it was found that among all those who availed the services 63% of the respondents were paying bills through internet, 55% were using the system to check balances of their accounts and transfer funds from their accounts, 29% used the system to download statements, 5% used it apply for loans and only 4% used it update their address. These statistics clearly show that though the banks are providing a host of internet banking services, only few services like paying bills, checking balance of their accounts and transfer of funds from their accounts are beingcommonly availed by the citizens of Udaipur. The remaining other internet banking services available to them are rarely used.In order to fulfill the next objective, a statistical analysis using chi

square was done to find the association between various demographic factors like age, income, profession, gender and level of education and the various internet banking services provided by the banks. Few interesting facts were found. It was found that (1) level of education affects enquiry about bank products and services.(2)Age of respondents affects the adoption of the loan application service and check balance service and download statement service.(3) Level of income affects the service i.e. transfer of funds. All other services had no association with the various chosen demographic factors. A further analysis of the statistics was done to explore the reasons for the associations. It was found that as the level of education increases, enquiry about the various services provided by the bank also increases .It was also found that the percentage of people applying for loan is already very less. Among all those who applied for loan, it was observed that these were the people of the young age group 25-35. We can conclude that this is the age group which is more techno savvy and in the stage of career building and settling down in life and so more in need of money. It was also found that this age group is the most active group to check their account balance using the internet banking. Another review of the statistics made us conclude that there is a direct relation between the level of income and transfer of funds using internet banking. More the income of the respondents more was the use of this facility.

Refrences

Bahman Saeidipour, H. R. (2013). Adoption of internet banking. *IOSR Journal of Business and Management(IOSR_JBM), 11* (2(may,Jun.2013)), 46-51.

Bhatnagar, D. H. (2015). Awareness and Adoption of Technology in Banking Especially by Rural. *Pacific Business Review International, 7* (11), 24-37.

BK*, A. (2015, August 09). The Impact of Customer Demographic Variables on the Adoption and Use of Internet Banking in Developing Economies. *Journal of Internet Banking and Commerce* .

Jindal, S. (2015). Study of E-Banking Scenario in India. *International Journal of Science and Research (IJSR)* , 680-683.

Mohammed Naved Khan, N. A. (2015). Adoption of Internet Banking in India: Issuesand Concerns. *SIU Journal of Management, 5*, 64-72.

Nidhi, K. (27 august 2016). E-BANKING IN INDIA: CHALLENGES AND. *international conference on recent innovations on Science,Management ,Education and technology*, (pp. 931-937). JCD Vidyapeeth,Sirsa,Haryana.

P, S. (2013). An exploratory study on internet banking uses in semi urban areas in India. *International Journal of Scientific and Research publications* , 1-5.

Rahmath Safeena, H. D. (2011). Internet Banking Adoption in an Emerging Economy: Indian Consumer's Perspective. *International Arab Journal of e-Technology,, 2*, 56-64.

Sharma, D. G. (2016). Study of Internet Banking Scenario in India. *International Journal of Emerging Research in Management &Technology* , 43-48.

Thanika Devi Juwaheer, S. P. (2012). Factors influencing the adoption of internet banking: a case study of commercial banks in Mauritius. *World Journal of Science, Technology and Sustainable Development, 9* (3), 204-234,.

(2016). *Top 3 Surprising Reasons People Don't Use Online Banking.* ABC Bank.

Vikas Chauhan, D. V. (2015, june). Internet Banking: Challenges and Opportunities in. *Apeejay - Journal of Management Sciences and Technology* , 29-40.