



The Role of Information Technology & Insurance Penetration: A Study

Dr. C K Hebbar
Mangalore University

Sandeep S Shenoy, Guru Prasad Rao and Abhishek Rao
Manipal University

1.0: ABSTRACT

The developments in IT are the working wonders in all the fields of activity. It has become possible to send and receive information almost instantaneously. If circulars do not reach the agents on time or doubts are not cleared quickly, or the agent does not have details of the new plans announced in the press, the agent may face awkward situation with the prospects.

Insurance companies face problems which can be totally ducked with the use of technology. The insurers who are conventionally have been quick to adapt latest developments in the field of IT. The scope of information technology will vary between insures. The IT has constantly played a very imperative role in the operations of every insurance company. The fact is that of all the business establishments in the facility sector, of the life insurance companies were the first to adopt *Computerization* as an incontrovertible part of their operation all over the world.

The swift innovation in the area of information and communication technology has stood with serious challenges for the insurance industry in India. The practice with the application of information technology in comprehensive variety of guarantor's operations has now become strategic in the sense that it has direct impact on the efficiency of resources, and a steepening impact on reducing the case of various activities.

With the entrance of private insurance players, the competition has become more powerful and an important role is being played by the insurance sector. The use of information technology is not new to the insurance sector, yet we may find constricted computerization regarding the use of information technology in various departments of the insurance companies including the major players from past several years. The most evident departments are accounting, Legal issue and servicing, claim processing, sales management etc.

2.0: OBJECTIVES OF THE STUDY

- The major purpose of the research is to study the impact of demographic characteristics on insurance adoption.
- To examine the perceived benefits of information technology integration in insurance business



3.0: SCOPE OF THE STUDY

This study has been organized into five sections including the present one. The next section is dedicated to data base and research methodology followed in conducting this study. A detail of data collection, sample size and will be presented in the next section. The fourth section presents finding of the study with discussion details and Section five deals with conclusion, and implication of the study. The last section was set for recommendations and limitation of the study.

4.0: Literature Review

Larger insurers see revenue enhancement as a key reason for having a web presence (2003) one of the most frequently cited virtues of newer technologies is the reduction in Paper. It's the cost of dealing with the documents that companies often fail to take into account.

The technology landscape in developing countries is changing rapidly – sometimes outpacing developed countries. Nairobi city-dwellers send money by mobile phone to rural relatives, Indian farmers get market quotations from wireless solar-powered ATMs, while doctors in city hospitals diagnose patients via video-streams and remote sensing. For growth and retention, the key drivers for adoption and innovation include: identification of new market opportunities and rapid execution of the right propositions to exploit them; identification of ways to increase the value of their current customers and improve loyalty over the long-term; and identification of new ways to make it easier for customers to do business with the insurer, wherever they are located.

5.0: RESEARCH MEHODOLOGY

This study is a descriptive and a non-parametric convenience sampling technique which has been adopted. The study would be conducted in and around Udupi. Totally 120 respondents will be selected and with well structured, pre-tested questionnaire will be used to collect information from the respondents. Information will be collected from respondents on characteristics such as age, education, occupation, monthly income, personal accessibility to computer and internet facilities, etc.

Data analysis will be done by the use of important statistical tools which included cross tabulation, percentages, and mean, among others. The statistical software SPSS version 16.0 was used to come up with complete and perfect result and to minimize errors.

Development of Null Hypothesis

H1: There is no significant relation between age and customers preference of insurance

H2: There is no significant relation between gender and customers preference of insurance company



Demographic Profile of the Respondents

Table 1 shows that in the gender response rate of survey, male respondents (59%) are more than the female respondents (41%). A scrutiny of the age group shows that a majority of the respondents are young, i.e., less than 30 years. The table illustrates that 40% of the respondents are less than 35 years of age, followed by age groups of 36-45 years (37.5%) and above 45 years (14.1%).

Table 1: Demographic Profile of the Respondents Using Online Insurance

Demographic Variables		Private Sector	Public Sector	Total	Percentage
Gender	Male	23	48	71	59
	Female	18	31	49	41
	Total	41	79	120	100
Age	Less than 25 years	3	5	8	6.7
	26 -35 years	21	29	50	41.7
	36 - 45 years	15	30	45	37.5
	Above 45 years	2	15	17	14.1
	Total	56	64	120	100
Income Level	Upto 3 lakh	12	12	24	20
	3-5 lakh	22	26	48	40
	5-7 lakh	–	8	8	6.7
	7-9 lakh	14	14	28	23.3
	Above 9 lakh	8	4	12	10
	Total	56	64	120	100

Source : Primary Data

Similarly, an analysis done on the basis of income groups reveals that the dominating group using Online insurance belongs to the income group of 3-5 lakh depicts that 40% of the total respondents, followed by 23.3 % respondents belong to 7 – 9 lakhs group, 20% respondents of up to 3 lakh income group, 10% respondents are above 9 lakh income group and 6.7 % respondents of 5 – 7 lakh income group.

Results

The Results of the hypotheses (mentioned earlier) are discussed below:



Insurance Company	Frequency	Percentage
MAX NEW YORK LIFE INSURANCE	3	2.5
HDFC LIFE INSURANCE	24	20
ICICI LIFE INSURANCE	15	13
LIC	78	65
TOTAL	120	100

Age and Customers' Preference of Insurance Companies

The table value of F is 1.14 at 5% level of significance. Calculated value is greater than table value at 5% level of significance (Table 4). Hence, the null hypothesis (H₁) is rejected at 5% level of

Insurance Companies	Age Group in years					Total
	18 - 25	26 - 35	36 - 45	46 - 60	< 61	
MAX NEWYORK LIFE INSURANCE	0	2	1	0	0	3
HDFC LIFE INSURANCE	0	15	7	2	0	24
ICICI LIFE INSURANCE	3	4	7	0	0	14
LIC	5	29	30	13	2	79
Total	8	50	45	15	2	120

significance. It shows that the factor age has significant effect on choice of a particular company.

	Sum of Squares	df	Mean Square	F	Sig
Between Groups	3.315	4	0.83	1.144	0.0001
Within Groups	83.277	115	0.72		
Total	86.592	119			



Gender and Customers Preferences of Insurance Company

Table 5: Cross-Tabulation Between Gender and Customers Preferences of Insurance Company

Insurance Companies	Gender		Total
	MALE	FEMALE	
MAX NEWYORK LIFE INSURANCE	2	1	3
HDFC LIFE INSURANCE	14	10	24
ICICI LIFE INSURANCE	7	7	14
LIC	48	31	79
	71	49	120

The table value of F is 0.536 at 5% level of significance. The calculated value of F is more than the table value (Table 8). Hence, the null hypothesis (H3), there is a significant influence of gender on the preference of insurance company, is rejected.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.530	4	.133	.536	.710
Within Groups	28.462	115	.247		
Total	28.992	119			

Table 6: ANOVA and F – Test for Gender and Customers’ Preference of Insurance Company

Analysis of perceived benefits of information technology integration in Insurance Business

Table 7: Tabular Presentation of Perceived benefits of the IT integration with respective of insurance Companies

Benefits of Online Insurance	Institution					Total
	MAX NEWYORK LIFE INSURANCE	HDFC LIFE INSURANCE	ICICI LIFE INSURANCE	LIC	OTHER	
CONVINIENCE	1	9	5	21	0	36
LOWER FEES	1	9	6	18	0	34
TIME SAVING	1	6	3	39	1	50
Total	3	24	14	78	1	120



The above table reveals that online insurance have been found to be the most beneficial in both the sectors. Data collected from primary sources reveals that 39% respondents in the case of public sector and remaining respondents from private sector banks consider time saving as the most influential source of benefit of online insurance, whereas as remaining respondents of the public sector banks and private sector have adopted for convenience and lower fees transaction.

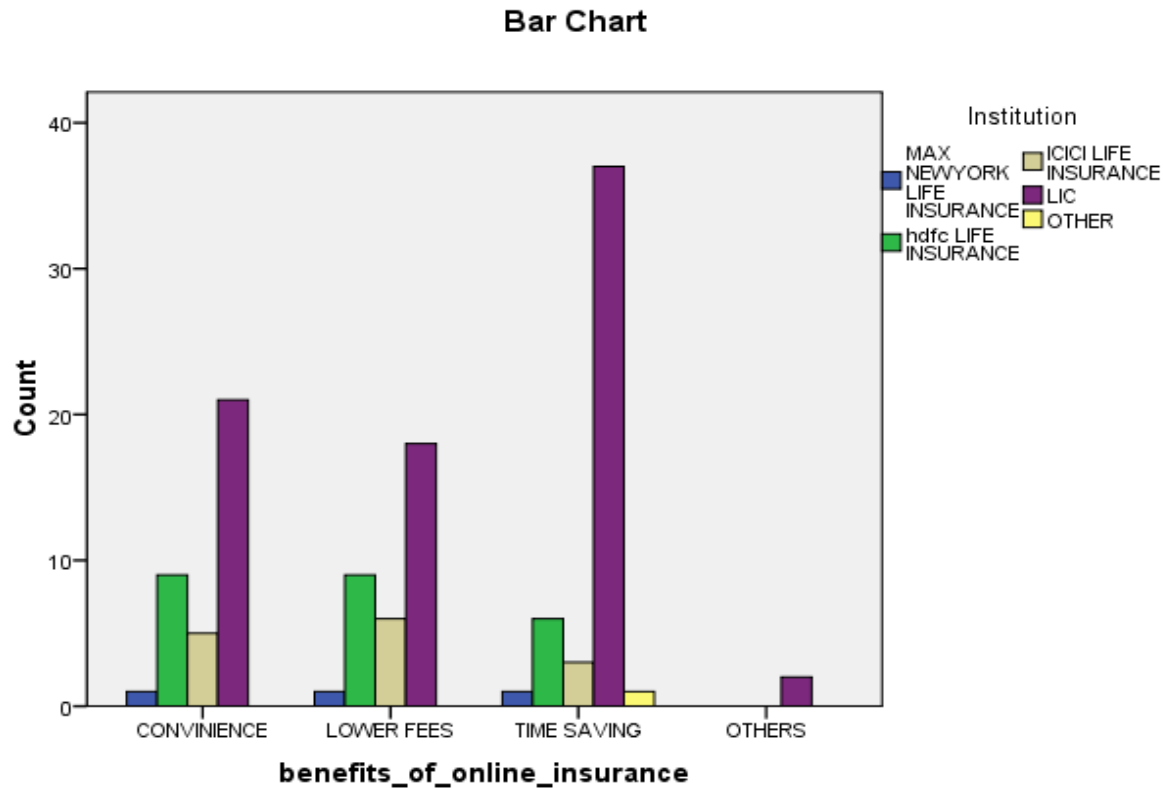


Fig 1: Pictorial representation for the above table



Analysis of respondents on the perceived benefits of online insurance services

Table 8 : Tabular Presentation of Online services with respective of insurance Companies

Online Services	Gender		Total
	MALE	FEMALE	
SEEKING PRODUCT AND RATE INFORMATION	20	17	37
CALCULATE PREMIUM PAYMENT INFORMATION	31	21	52
DOWNLOAD APPLICATION	4	1	5
CHECK FUND VALUE ONLINE	12	7	19
APPLY FOR INSURANCE LOAD ONLINE	0	1	1
INTER ACCOUNT TRANSFER	1	1	2
ONLINE PREMIUM PAYMENT	2	1	3
OTHERS	1	0	1
Total	71	49	120

Table: 8 Shows that in the case of Male as well as Female, 52% respondents are calculate premium payment information, secondly 37% of respondents seeking product and rate information from the online facility provided by the insurance companies with respect to public and private.

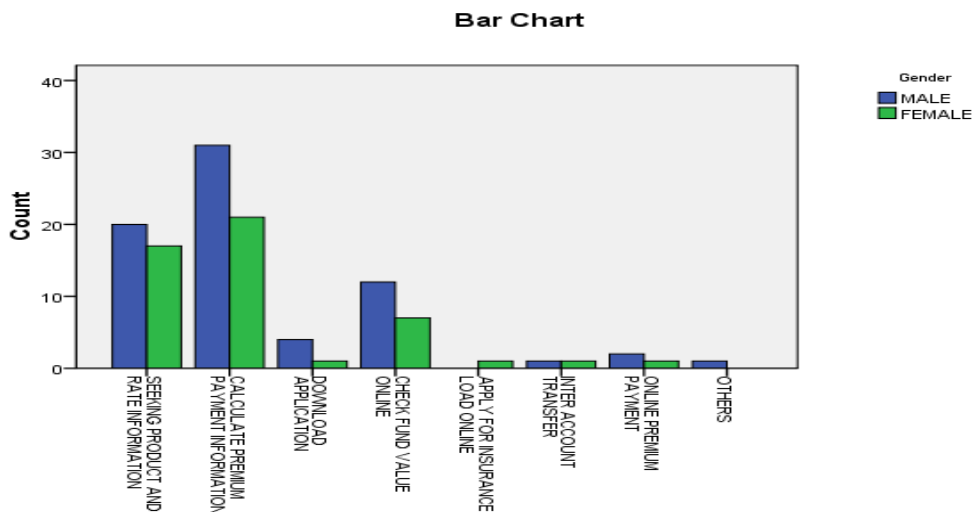


Fig 2: Pictorial representation for the above table



6.0: Findings and Conclusion

An in-depth study of Online insurance users was conducted and some of the findings have been presented. It has also been found that statistically there is no relation between ‘gender and preference of companies, ‘age and customer preference of insurance companies.

Findings of the Study

S. No.	Null Hypotheses	Results
1.	<i>There is no significant relation between age and customers’ Preference of insurance</i>	Rejected
2.	<i>There is no significant relation between gender and customers’ Preference of insurance</i>	Rejected

The online services can be improved with some more efforts of the insurance companies by providing online services as per the users’ expectations. An attempt has also been made to find the most influential source of benefit and awareness regarding online transaction and to find some other sources which can be used for awareness. Only Calculate premium payment and seeking product and rate information from the website is the most preferred service by the respondents. It is also online, except those related to foreign exchange transactions, loan interstate enquiry.

The findings of this study found that insurance firms in India have implemented information technology systems in their firm with private sector slightly lower than public sector. The employees young in age with high potentials easily understand the application and efficient use of new systems. Further, brand and image promotion will create demand for the online insurance. Increase of sales and good knowledge of management and better stakeholder relationship will be considered important with respect to corporate related benefits while transparency, speed of claim management and desired CRM through continuous service and high productivity will be considered important customer related benefits.

Thus, it is believed that insurance companies must try to find out the specific needs of different customers so that pertinent services as per their expectations can be provided to attract customers and retain the market share.

7.0: LIMITATIONS

- The first limitation is personal bias and non-cooperation may have affected the quality of study This study suffered a number of limitations. First, survey limitation can be attributed to the study since research
- This study will not consider opinion from other parts of the country due to economic constraints hence it is a representative study.



- Non adoption of technologies by other firms with non-technology skilled employees and agents could not understand fully technology integration in the insurance industry hence they could give biased answers.
- This study did not survey clients to weigh their views regarding technology integration in the insurance.

8.0: REFERENCES

1. Richard L. Manning & Matilde K. Stephenson, (1985) Information Technology in the Insurance Industry: A Forecast of Utilization and Impact, *The Journal of Risk and Insurance*, Vol. 52, No. 4 (Dec., 1985), pp. 711-722
2. Chiara Francalanci, (1998), Information Technology and Worker Composition: Determinants of Productivity in the Life Insurance Industry, *MiS Quarterly*, June 1998, pp 228-230
3. Mark v. Pauly, bradley herring and David Song, (2006) Information Technology and Consumer Search for Health Insurance, *Int. J. of the Economics of Business*, Vol. 13, No. 1, February 2006, pp. 45-63
4. S Krishnamurthy, S V Mony, Nani Jhaveri, Sandeep Bakhshi, Ramesh Bhat and M R Dixit, and Sunil Maheshwari, (2005), *Vikalpa*, Volume 30, No 3, July - September 2005.
5. Amy Newell, (2002), Online Insurance Industry Enjoys Net Gains, *Banking Technology News*, February 2002, pp 24-25.

WEBSITES

1. <http://www.insurancetech.com>
2. <http://www.networkmagazineindia.com>
3. <http://www.wikipedia.com>
4. <http://www.howstuffworks.com>
5. <http://search.ebscohost.com>