Original Article

IMPACT OF DIGITALISATION ON INSURANCE BUSINESS AMONG POLICYHOLDERS: A CASE STUDY ON OTTAPALAM MUNICIPALITY

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Abstract

Purpose: One of the most innovations in the insurance business is the introduction of e-insurance. The study has been conducted to analyze the usage pattern of e-insurance among policyholders, especially life insurance policyholders.

Methodology: Percentage Analysis was used for studying the demographic profile of policyholders. Chi-square Test was used to study the goodness of fit between gender and satisfaction level towards e-Insurance. Co-efficient of correlation was calculated to analyze the relationship between age and the number of e-insurance policies purchased. The ratings of policyholders were done using the Weighted Average Score method. The effectiveness of e-insurance facilities was studied by using hypothesis testing.

Findings: As a result of the analysis conducted it was revealed that there has been a significant relationship between gender and satisfaction level of e-Insurance facilities. As per the result of the hypothesis analysis, it can be concluded that e-Insurance was effective.

Research Implications: Effective promotional activities should be conducted by insurance companies to make e-insurance popular. Internet connection should be made available to policyholders at concessional rates. Frequent meetings should be arranged with policyholders to make them aware of the facility. Banc assurance will be the most important channel for insurers to rapidly acquire new customers.

Originality: In India, the concept of Bancassurance and E-insurance is just an emerging package fulfilling both banking and insurance needs. High fixed costs in retail branches can be minimized by introducing this, as it improves productivity and economies of scale. The study proved that there is a significant difference in the purchasing pattern of policyholders as a result of e-insurance and the number of purchases increased as a result of the adoption of the e-insurance facility.

Keywords: Digitalization, Artificial Intelligence (AI) E-insurance, IRDA, Niche Insurance, Bancassurance, Life insurance.

INTRODUCTION

Globalization has integrated markets worldwide and contributed to advances in financial innovation and computer technologies accelerating product engineering and service enhancement. Insurance in India used to be tightly regulated and monopolized by state-run insurers. Following the move towards economic reforms in the early 1990s, various plans to revamp the sector finally resulted in the passage of the Insurance Regulatory and Development Authority Act of 1999. Insurance occupies an important place in the multifaceted modern world since risk, which can be insured, has increased very much in every walk of life. One of the most innovations in the insurance business is the introduction of e-insurance. The Indian Insurance market was the 19th largest in the world. Insurance is designed to protect an individual, company, or other entity's financial well-being in case of unexpected loss. The insurance sector provides long-term funds for infrastructural development and strengthens the risk-bearing capacity of the country. Insurance companies can sell insurance policies online through e-insurance, bringing efficiency, transparency, and cost reduction.

LITERATURE REVIEW

Klapkiv, L., & Klapkiv, J. (2017) stated that an overview of the use of technological innovations (such as software, analytics, sensors, and algorithmic) for the effective insurance value chain. Eling, M., & Lehmann, M. (2018) specified the three key areas of change concerning insurability: the effect of new and more information-on-information asymmetry and risk pooling, the implications of new technologies on loss frequency, severity, and the increasing dependencies of systems through

connectivity. Balasubramanian, R., Libarikian, A., & McElhaney D. (2018) stated that AI and its related technologies will have a seismic impact on all aspects of the insurance industry, from distribution to underwriting and pricing to claims and an in-depth examination of what insurance may look like in 2030 highlights dramatic changes across the insurance value chain. Mustafina, A. A., Kaigorodova, G. N., Alyakina, P. D., Velichko, N. Y., & Zainullina, M. R. (2020), stated that practical importance for insurers because it gives the concept of a correlation between business digitalization and its level of profitability. Ostrowska, M. (2021) claims it is possible to obtain a full risk profile based merely on the information provided by 'smart' devices and it raises the specific question of whether the traditional policyholder's risk declaration is still needed and discusses whether the use of telemetric will alter the nature of insurance relationships in such a way that the doctrine of utmost good faith will no longer apply, or will apply only to a limited extent. Mahale, P., & Hebbar, C. K. (2022) Digitalization, E-insurance, etc. are the new concepts in this sector and an attempt has been made to identify the level of awareness of life insurance policyholders regarding the innovations in the life insurance sector.

CONCEPTUAL FRAMEWORK

E-insurance: This refers to buying and selling insurance online. Insurance is subject to the principle of utmost good faith, which makes it convenient for people to conduct business online as both parties have absolute duties to disclose all material facts; otherwise, any contract will be void. Conducting a complete insurance transaction is difficult due to the necessity of underwriting, sales, and a whole network of employees to ensure the contract is up to company standards. Because of this, many types of personal insurance are now sold online including car, travel, and medical insurance.

Niche Insurance: Niche insurance is sold directly to customers by an insurance carrier or a specialist broker. This has the advantage of consolidated marketing to a single audience, the use of coverage forms, and a broader underwriting appetite. This reduces a lot of paperwork otherwise required by niche Insurers.

Life Insurance: This is a contract of insuring the life of individuals. The agreed amount will be paid in the event of death or maturity of policy whichever is earlier. A Life Insurance contract is a contingent contract. The payment of the amount is certain but its time is uncertain. Today various types of Life Insurance Policies are available each with special benefits attached to it.

Bancassurance: It is a partnership relationship between a bank and an insurance company, the relationship is aimed at offering insurance products or insurance benefits to the bank's customers.

SIGNIFICANCE OF THE STUDY

Insurance is designed to protect an individual, company, or other entity's financial well-being in case of unexpected loss. The insurance sector provides long-term funds for infrastructural development and strengthens the risk-bearing capacity of the country. Insurance companies can sell insurance policies online. E-insurance policies bring efficiency, transparency, and cost reduction. The most recent development in the field of insurance is e-insurance. This involves advertisement, recommendation, and purchase of insurance policies through the Internet. We can see that the e-insurance facilities are mostly enjoyed by middle-class and low-income people. Now a day's technology is growing fast. So, it is essential to analyze the usage of e-insurance facilities by the policyholders. The study has been conducted to analyze the usage pattern of e-insurance among policyholders. More emphasis was given to Life insurance policies in this study. An analysis was also made to determine whether there is any relationship between gender and the satisfaction level of E Insurance facilities.

OBJECTIVES OF THE STUDY

- To study the demographic profile of policyholders
- To test the goodness of fit between gender and satisfaction level towards e-Insurance.
- To analyze the relationship between age and the number of e-Insurance policies purchased

- To study the ratings of policyholders regarding various facilities of e-insurance
- To test the effectiveness of e-insurance facilities

RESEARCH METHODOLOGY

A sample of 120 e-insurance holders was selected for the study. The population of the study comprised Palakkad district, in Kerala state. The policyholders residing in ottapalam municipality were selected for the study. Both primary data and secondary data were used for the study. Primary data was collected through a questionnaire. Secondary data was collected through journals, magazines, and websites. Percentage Analysis was used for studying the demographic profile of policyholders. Chi-square Test was used to study the goodness of fit between gender and satisfaction level towards e-Insurance. Co-efficient of correlation was calculated to analyze the relationship between age and the number of e-insurance policies purchased. The ratings of policyholders were done using the Weighted Average Score method. The effectiveness of e-insurance facilities was studied by using hypothesis testing.

DATA ANALYSIS

DEMOGRAPHIC PROFILE OF POLICYHOLDERS

Table 1: Table showing the demographic profile of e-Insurance holders

S.No.	Factors	Classification	No of Respondents	Percentage
1	Age	20-30	18	15
		30-40	54	45
		40-50	30	25
		50-60	18	15
		Total	**120**	**100**
2	Sex	Male	78	65
		Female	42	35
		Total	**120**	**100**
3	Educational status	Higher Secondary and Diploma Holder	24	20
		Graduates	66	55
		Postgraduate	18	15
		Professional studies	12	10
		Total	**120**	**100**
4	Occupation	Private	48	40
		Professional	12	10

		Business	60	50
		Total	**120**	**100**
5	Income	Rs 25000-50000 Rs 50000-75000 Above Rs 75000	54 42 24	45 35 20
		Total	**120**	**100**
6	Recommendation to others	Recommended Not Recommended	96 24	80 20
		Total	**120**	**100**
7	Source of influence	Self Parents Friends and Relatives Insurance agents	84 12 18 06	70 10 15 05
		Total	**120**	**100**

Source: Primary data

RATINGS OF POLICYHOLDERS

Table 2: Table showing ratings of policyholders

Rank/Facilities		I (5)		II (4)		III (3)		IV (2)		V (1)	Weighted score	Mean score	Rank
Premium remittance	5	25	6	24	3	9	3	6	3	3	67	13.4	II
Accessibility to policy details	8	40	5	20	4	12	2	4	1	1	77	15.4	I
Proposal of insurance	3	15	4	16	7	21	4	8	2	2	62	12.4	III
Intimation of the renewal notice	2	10	3	12	2	6	7	14	6	6	48	9.6	IV
Claim status	2	10	2	8	4	12	4	8	8	8	46	9.2	V
Total	20		20		20		20		20				

Source: Primary data

Table 3: Table showing the classification of policyholders based on the level of satisfaction

Gender	Satisfied	Not satisfied	Total
Male	58	20	78
Female	30	12	42
Total	88	32	120

Source: Primary data

Correlation between age and usage of the e-insurance facility

Table 4: Table showing the Correlation coefficient

Age (X)	Mid (X)	% Of users (Y)	XY	X^2	Y^2
20-30	25	15	375	625	225
30-40	35	45	1575	1225	2025
40-50	45	25	1125	2025	625
50-60	55	15	825	3025	225
Total	160	100	3900	6900	3100

$n = 4 \qquad \sum(xy) = 3900$

$\sum(x) = 160 \qquad \sum(y) = 100$

$\sum(x)^2 = 6900 \qquad \sum(y)^2 = 3100$

$$\mathbf{r} = \frac{4 \times 3900 - 160 \times 100}{\sqrt{[(4 \times 6900 - (160)^2][(4 \times 3100) - (100)^2]}}$$

$$= \frac{15600 - 16000}{\sqrt{2000 \times 2400}} = \frac{-400}{2190.89} = \mathbf{-\underline{0.183}}$$

Source: Primary data

Effectiveness of e-insurance facilities

A sample of 10 policyholders' mean number of purchases was taken to test whether the number of policies increased.

Null Hypothesis (H0) There has been no significant difference in the purchasing pattern of policyholders as a result of e-insurance

Alternate Hypothesis (H1) There has been a significant difference in the purchasing pattern of policyholders as a result of e-insurance.

The number of purchases increased which means e-insurance was effective.

Test Statistic-T- test

Level of Significance: 5%

Table 5: Table showing the Result of Hypothesis testing (paired t-test)

Particulars	**Level of Significance**	**Degrees of freedom**	**Value**
Calculated value	5%	9(n-1)	2.5
Table value	5%	9(n-1)	1.833

Source: Primary data

Decision

As the calculated value is more than the table value, we reject H0. So, accept H1. It can be concluded that there is a significant difference in the purchasing pattern of policyholders as a result of e-insurance. The number of purchases increased as a result of the adoption of the e-insurance facility

Findings

- The Insurance business has been showing an increasing trend. The maximum percentage of increase is for the Life Insurance business.
- Policyholders under the age group of 30-40 are using e-insurance facilities to the maximum.
- Business persons are availing the facilities more.
- Most of the policyholders are using e-insurance facilities according to their own opinion.
- A Maximum number of policyholders are highly satisfied with the e-insurance facility.
- Majority of policyholders recommend availing e-insurance facilities to others.
- Co-efficient of correlation is -0. 183. This means that usage is not related to age.
- The maximum rated e-insurance facility by the policyholders is accessibility to policy details. They can retrieve policy details within a fraction of a second.
- E-insurance facilities were effective for policyholders.

Recommendations

- Effective promotional activities should be conducted by insurance companies to make e-insurance popular.
- Internet connection should be made available to policyholders at concessional rates.
- Frequent meetings should be arranged with policyholders to make them aware of the facility.
- Banc assurance will be the most important channel for insurers to rapidly acquire new customers.

Limitations of the study and scope for further research

The present study is limited to Ottapalam city and was conducted for three months. The sample size is also limited to 120. Hence future studies can be made by covering a larger area for an extended period with more samples, which may result in better information.

Conclusion

Globalization has integrated markets across the world and has contributed to advances in financial innovation. Developments in information and computer technologies accelerated product engineering and service enhancement. In India, the concept of Banc assurance is just emerging-a package fulfilling both banking and insurance needs. High fixed costs in retail branches can be minimized by introducing this, as it improves productivity and economies of scale. As per the testing of the hypothesis, it can be concluded that there is a significant difference in the purchasing pattern of policyholders as a result of e-insurance and the number of purchases increased as a result of the adoption of the e-insurance facility.

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