Technology Acceptance in Health Insurance: Focus on Insurtech

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ABSTRACT

The use of technology in the insurance sector has been on the rise in recent years, with many benefits such as personalized services, elimination of intermediaries, and better payment interfaces. Health insurance is no exception to this trend, with the potential for technology to improve the efficiency and accuracy of claims processing, risk assessment, and customer service.

The objective of this research is to examine the level of technology acceptance within the health insurance industry by exploring the factors that impact customers' attitudes towards adopting technology. The theoretical framework utilized is the Technology Acceptance Model (TAM 3 & e-TAM), which considers perceived ease of use and e-Trust as the primary factors influencing technology acceptance.

A survey was conducted among health insurance customers to collect data on their attitudes towards technology acceptance, perceived ease of use, and e-Trust. The data was analysed using one way anova to test the hypotheses and identify the factors that influence technology acceptance in the health insurance sector. The study's results demonstrated that perceived ease of use and e-Trust play a vital role in shaping customers' attitudes towards technology adoption in health insurance. The study emphasizes the significance of establishing trust and providing user-friendly technology to encourage technology acceptance in the health insurance sector.

KEYWORDS

Technology acceptance, TAM 3, e- TAM, Insurtech, Health insurance, Insurance

INTRODUCTION

Individuals use insurance purchases as a primary means to mitigate financial risk occurred by uncertain events. As per OECD 2022 insurance data, the proportion to GDP by annual insurance premiums has been steadily increasing, reaching a significant 4.9% in 2020from 3.6% in 2010. These statistics illustrate the importance of insurance as a significant sector of the economy. The insurance industry in India is one of the premium sectors experiencing growth, which can be attributed to the rising income levels and growing awareness in the sector. India's life insurance market is the fifth-largest among emerging insurance markets globally and has beengrowing at an annual rate of 32-34%.

In today's world, innovation is widely recognized as a driving force for progress, enabling increased convenience and efficiency across various industries. One such sector is the insurance industry, where the advent of technology has brought forth a wave of new possibilities, commonly known as "InsurTech". These advancements offer novel ways of service provision and enhanced data collection, which can aid in the identification and mitigation of risks, ultimately leading to improved outcomes for insurers and their clients. The insurance industry is on the verge of experiencing significant technological advancements that will lead to a disruptive transformation. Insurance companies are currently competing in a technology race within the market. They have realized that their ability to adopt and innovate using insurance technology software will be the most significant factor that sets them apart from the competition. With technology emerging in the insurance sector, it is anticipated that it will provide a significant boost to the industry, ultimately leading to increased insurance penetration in India.

The insurance sector has undergone significant transformation in recent years due to the adoption of technology, specifically the rise of insurtech companies. The Technology Acceptance Model (TAM) offers a schema for comprehending the variables that affect the adoption of technologyin the insurance sector. According to the TAM, an individual's adoption of technology is affected by means of usefulness and ease of use. In the insurance context, customers are seeking digital solutions that simplify the purchase, management, and utilization oftheir insurance policies. In response, Insurtech companies have developed inventive solutions that streamline the insurance process and provide customers with a more personalized experience.

INSURTECH IN HEALTH INSURANCE:

Technology has brought about a significant transformation in the insurance industry, particularly in health insurance. By leveraging technology, insurance providers can offer more personalized services to their clients. Insurers can leverage data analytics and machine learning algorithms to analyze customer data and customize policies that align with their unique requirements. This not only enhances the customer experience but also helps insurance providers to reduce their costs by offering relevant policies and reducing the risk of fraudulent claims.

Technology has also enabled insurers to eliminate the need for third-party intermediaries between the consumer and the insurance provider. This has made the process of purchasing and managing insurance policies more efficient, transparent, and cost-effective. By leveraging digital platforms, insurers can offer their products directly to consumers, which eliminates the need for brokers or agents. This not only reduces costs but also provides consumers with more control over their policies. Moreover, technology has enabled insurers to offer better payment interfaces, which have made it easier for clients to pay their premiums on time. By offering digital payment options, insurers can eliminate the need for paper-based transactions and streamline the payment process. This has not only made it easier for clients to pay their premiums but also reduced the administrative burden for insurance providers. Lastly, technology has enabled insurers to improve their risk assessment processes associated with claims.

Overall, the use of technology in health insurance has brought about numerous benefits, including personalized services, cost savings, improved payment interfaces, and better risk assessment processes.

MOTIVATION:

The motivation for this study is to obtain a better knowledge of the extent of technology acceptance in the health insurance sector. As technology becomes more prevalent in the insurance industry, it is crucial to investigate how customers perceive, accept, and adopt these technological advancements in their health insurance services. This study look forward to understand determinants of technology acceptance in the health insurance sector and the impact of such acceptance on the customer experience. By identifying these factors, insurance companies can

make informed decisions about the design and implementation of their technological solutions, ultimately leading to improved customer satisfaction and loyalty. Additionally, this study can help policy-makers and regulators understand the role of technology in the insurance industry and develop guidelines to ensure the protection of consumer rights and privacy.

OBJECTIVE

- To analyse and examine the extent of technology acceptance in insurance sector keeping focus on health insurance
- To point out the major drivers of technology adoption in insurance sector

PROBLEM DEFINITION

Slowly and steadily technology has been encroaching every aspects of insurance, be it policy payments, inquiry, relationship management etc. Even with huge surge in technology, health insurance consumers are skeptical about usage of latest insuretech. This creates a need to investigate the acceptance of insurtech features among consumers of health insurance.

The health insurance industry has experienced a shift towards digitalization in recent years, with the emergence of Insurtech startups offering innovative technological solutions to enhance customer experiences. However, the adoption and acceptance of these technologies among health insurance consumers remain relatively low. This study looks into the variables influencingthe acceptance of technology in health insurance, with a focus on the role of insurtech in enhancing customer experiences. Through an exploratory research approach, this study seeks to identify the key barriers and enablers to technology acceptance in health insurance, as well as the drivers of customer loyalty towards insurtech-enabled health insurance offerings. The results of this study will aid in the formulation of efficacious approaches for insurtech firms and health insurance providers to improve technology adoption and customer engagement in the health insurance sector.

LITERATURE REVIEW

- **InsurTech**

InsurTech, a term coined by merging the words insurance and technology, refers to the integration of technology into the insurance industry to improve efficiency, customer experience and reduce costs. In recent years, InsurTech has gained considerable attention from both researchers and practitioners, as it is expected to revolutionize the traditional insurance industry (Cao et al., 2020).

The development and impact of InsurTech have been explored in various studies. Cao et al. (2020) examined the development of InsurTech in China and found that the InsurTech sector has been growing rapidly in the country, with a significant increase in investment and funding. Chang (2023) analysed technology investments on the activities of companies in the InsurTech sector and reported a favorable correlation between the two.

Bittini et al. (2022) found that InsurTech firms tend to prioritize customer-centricity and innovation in their business models. Stoeckli et al. (2018) conducted a study on the traits and transformative abilities of InsurTech innovations and their influence on thegeneration of insurance value in the digital era. Zarifis and Cheng (2022) developed a model of trust in FinTech and InsurTech, exploring the influence of artificial intelligence and context on trust. Similarly, in 2021, Lanfranchi examined the implementation of disruptive technologies, while in 2022, Grassi focused on the use of technology for innovation by insurance companies.

The potential of InsurTech to transform the insurance industry has also been explored in studies examining specific areas of insurance. For example, Saeed et al. (2022) reviewed the challenges and potential solutions for the adaptation of the Internet of Things (IoT) in the Indian insurance industry, while Njegomir and Bojanić (2021) explored the impact of disruptive technologies on the operation of the insurance industry. Saliba et al. (2021) examined the use of insurance and wearables in managing risk in sports.

Finally, Gupta et al. (2022) explored the adoption of artificial intelligence in the insurance industry, using the technology-organization-environment (TOE) framework to understand the factors influencing adoption.

Overall, the studies reviewed indicate that InsurTech is a rapidly developing field that has the potential to revolutionize the traditional insurance industry. However, its impact and potential must be explored further to fully understand its implications for the industry.

- **TAM**

TAM provides a systematic way to evaluate the factors that determine users' behavioural intentions to use new technologies.

Marangunić and Granić (2012) provided a comprehensive review of TAM research. They highlighted that the model has undergone significant changes and enhancements since its inception. The original TAM focused on two factors to understand the intention of user towards adoption of technology are perceived usefulness and ease of use. Later, several studies suggested adding new variables to the model, such as subjective norm, perceived behavioral control, trust, and anxiety, to enhance the explanatory power of TAM. Additionally, researchers have tested the model in various contexts, including healthcare, education, and e-commerce, to name a few. Overall, the review showed that TAM has evolved into a versatile and robust theoretical framework that can explain users' acceptance behaviour in diverse settings.

Anderson, Al-Gahtani, and Hubona (2011) found that TAM can be a valuable tool for understanding users' acceptance behaviour in global IS development projects. Theresearchers identified several antecedents of TAM that affect users' behavioral intentions, including social influence, language differences, cultural norms, and technological infrastructure. The study concluded that TAM could help global IS developers and researchers to identify the factors that affect users' acceptance behaviour in different cultural and linguistic settings and, thus,facilitate the development of culturally sensitive IS solutions.

TAM is a powerful framework used in different research domainsto understand users' acceptance behaviour towards new technologies. TAM has also been appliedin diverse contexts, including healthcare, education, and e-commerce, among others. Overall, TAM remains a relevant and valuable theoretical framework for studying users' acceptance behaviour in the era of rapidly evolving technologies.

- **TAM** 3

TAM 3 is an extension of the original TAM, which was developed to explain the adoption of information technology by individuals. TAM 3 incorporates additional constructs such as social influence, cognitive instrumental processes, and hedonic motivation, which were not included in the original TAM. In a study by Lim et al. (2013), different models of social media involvement and satisfaction were examined using the variables of TAM 3. Theresults conveys that perceived usefulness, ease of use, and social influence were all important factors in predicting an individual's satisfaction with social media.

Barabadi et al. (2022) research revealed that students' intention to use social networking sites was affected by their perception of the sites' ease of use, usefulness, and the influence of their social networks. Additionally, the study found that students who used social network siteshad better academic performance than those who did not. Usmanova et al. (2020) used TAM 3 to investigate the acceptability and barriers to the use of electronic health records in public health facilities in India. The study found that usefulness, ease of use, social influence, and supporting conditions were essential variables of electronic health records' acceptance by healthcare providers.

Tan (2019) employed TAM 3 to investigate the impact of college students' attitudes towards English e-tutoring websites on the website's sustainability. The study found that perceived usefulness and attitude towards use were significant forecasters in conveying user’s intention to e-tutoring websites. Canavari et al. (2021) utilized the constructs of TAM 3 to create a path in order to determine the variables that influence farmers' willingness to adopt variable rate irrigation in Northeast Italy. The study demonstrated that usefulness, ease of use, social influence, and supporting conditions were the major construct of the farmers' intention to adopt variable rate irrigation.

Finally, Han and Nam (2021) applied TAM 3 to investigate the factors that influence older adults' perceptions of digital technology. The study found that perceived usefulness, perceived ease of use, and facilitating conditions significantly affected older adults' attitudes towards digital technology.

- **e- TAM**

Researchers have extended the TAMmodel to include other variables that may also influence technology acceptance, such as trust, social influence, and personal innovativeness

According to research by Kim and Forsythe (2008) on the usage of virtual try-on technology for online clothing buying, customers' intentions to use e-TAM technology are substantially influenced by their perceptions of its usefulness and usability. The study also indicated that users' intentions to utilise e-TAM technology are significantly predicted by the quality of the website and previous online buying experience. The extended TAM model was utilised by Eraslan Yalcin and Kutlu (2019) to assess how well students accepted and intended to use learning management systems (LMS) with e-TAM technology. According to the study, students' intentions to utilise e-TAM technology in LMS are significantly predicted by perceived ease of use, perceived utility, and social impact.

Candra, Nuruttarwiyah, and Hapsari (2020) analysed the TAM model with e-trust for peer-to-peer lending in Indonesia and found that e-trust is a significant predictor of users' acceptance of e-TAM technology. The study also found that perceptions of usefulness and usability relates significantly to users' intentions to use e-TAM technology. Similarly, Ben Mansour (2016) analysed business' acceptance of internet banking and found that e-trust significantly influences users' acceptance of e-TAM technology. The study also found that perceptions of its usefulness and usability and attitude towards using technology significantly influence users' acceptance of e- TAM technology.

Ghazali, Mutum, Chong, and Nguyen (2018) investigated whether consumers in Malaysia want to use mobile commerce and examined the factors that influence user intention towards use m-shopping technology. The study found that perceptions of its usefulness and usability, and personal innovativeness significantly influence users' intentions to use m-shopping technology, which incorporates e-TAM technology.

- **Technology Acceptance & Health Insurance**

In today's era, technology has made a significant impact on various industries, including the healthcare industry. The adoption of electronic logistics information systems, mHealth apps, and

mobile apps has brought a significant change in the healthcare industry. However, the acceptance and adoption of technology in the healthcare industry are still not at a satisfactory level. Technology acceptance has become a crucial factor for the success of healthcare systems, especially in the health insurance sector.

Tung et al. (2008) examined acceptance in medical industry logistics informationsystems. The study incorporated the trust and technology acceptance model(TAM) with the innovation diffusion theory (IDT). The values showed that perceivedusefulness and trust were the most variables in the use of electronic logistics information systems. The study emphasized the need for trust in technology acceptance and adoption.

Liu and Lee (2018) conducted a study to investigate the acceptance of National Health Insurance (NHI)-PharmaCloud among pharmacists in Taiwan. The results shows that perceived usefulness, ease of use, and subjective norms were oneof the significant factors that influenced pharmacists' acceptance of NHI-PharmaCloud. Dahlhausen et al. (2021) examined the variables that affects physicians' acceptance of prescribable mHealth apps. The results of the study conveys that their perceptions of its usefulness and usability and trust were the most influential constructs in physicians' acceptance of prescribable mHealth apps.

Also Ngo et al. (2020) investigated the acceptance of the mobile app for personal health among patients andclinicians. The results of the study showed that the personal health network mobile app was well-accepted by both patients and clinicians. The study emphasized the need for user-centered designand user acceptance in developing mobile health apps for healthcare systems.

- **Health insurance & TAM**

Health insurance is an essential tool for people to safeguard themselves against the rising costs of healthcare. The importance of health insurance has gone up with the growth of healthcare costs and the increasing prevalence of chronic diseases.

Trinh et al. (2023) evaluated the impact of culture, finance, and the pandemic on the consumption of private health insurance and public healthcare provision in OECD countries. The study used a panel data analysis of 34 OECD countries, covering the period 2000-2018. The results indicated that cultural factors, such as individualism and masculinity, have a significant impact on the

consumption of private health insurance. The study also found that the availability of public healthcare services has a negative effect on the consumption of private health insurance, while the pandemic had a positive impact on private health insurance consumption.

Tam et al. (2021) researched to identify the variables of attitudes and intentions to private health insurance among insured and uninsured young adults in Australia. The study used across-sectional survey of 307 young adults aged between 18 and 35 years. The results conveys thatperceived usefulness, ease of use, and subjective norms significantly influenced attitudestowards private health insurance. The study also found that perceived behavioral control, health status, and financial situation significantly influenced the health insurance buying intention.

METHODOLOGY

Data Collection:

The study is conducted on the basis of using primary data. The primary data is collected from the respondents by meansof online Google forms circulated through what's app. The questionnaire is designed using TAM3 and extended- TAM model. The variables used in the study includes:

- Socio-economic profile:
  - Age
  - Gender
  - Occupation
  - Income

- TAM Variables:

  - Awareness:

  Awareness refers to the extent to which users are aware of the existence and features of the technology.

  - Usage:

  Usage refers to the extent to which users actually use the technology. This variable is often measured as the frequency or duration of use.

  - Perceived ease of use:

  Perceived ease of use refers to the user's perception of how easy or difficult it is to use the technology. It is influenced by factors such as the user interface, system features, and training materials.

  - Perceived usefulness:

  Perceived usefulness refers to the user's perception of how useful the technology is in achieving their goals. It is influenced by factors such as the features of the technology, the user's needs and goals, and the context in which the technology is used.

  - E- Trust:

E-Trust refers to the user's level of trust in the technology and the people or organizations that develop and maintain it. It is influenced by factors such as the security and privacy of the technology, the reputation of the developers, and the user's past experiences with the technology.

- Self-efficacy:

Self-efficacy refers to the user's confidence in their ability to use the technology to achieve their goals. It is influenced by factors such as the user's experience with similar technologies, their knowledge and skills, and the perceived ease of use of the technology.

- Online playfulness:

Online playfulness refers to the user's attitude towards using the technology in a playful and enjoyable way. It is influenced by factors such as the design and features of the technology, the user's personality, and the social context in which the technology is used.

- Anxiety:

Anxiety refers to the user's feelings of nervousness or apprehension related to using the technology. It can be influenced by factors such as the complexity of the technology, the user's prior experiences with technology, and the consequences of using the technology.

- Attitude:

Attitude refers to the user's overall evaluation of the technology, including their beliefs and feelings about its usefulness, ease of use, trustworthiness, and other factors. It is a key predictor of technology adoption and usage.

Sample Design:

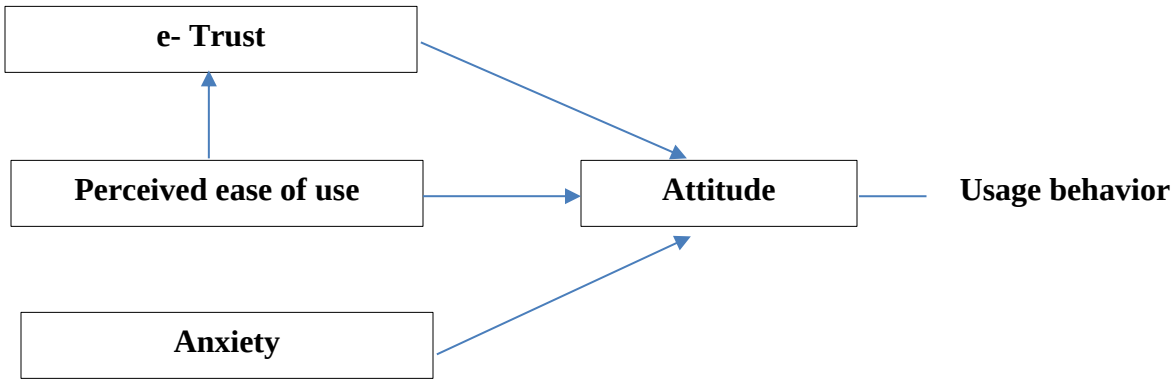
- Sample unit: respondent who is having a health insurance
- Sampling method: Purposive sampling
- Sample size: 100
- Area of study: PAN India

Hypothesis:

- H1: There is significant relationship between perceived ease of use and e-Trust in the context of health insurance technology acceptance.
- H2: There is significant relationship between perceived ease of use and attitude in the context of health insurance technology acceptance.
- H3: There is significant relationship between e-Trust and attitude regarding technology acceptance in the context of health insurance.
- H4: There is no significant relationship between anxiety and attitude towards using the technology acceptance in the context of health insurance.

Theoretical Framework:

Fig. 3.1 Theoretical framework



Data measurement Tools:

The hypothesis developed were analysed using Analysis of Variance (ANOVA) technique using SPSS.

- **One way anova**

Table 3.1 One way anova table

Source of variation	Sum of squares	Degrees of freedom	Mean squares	F statistic
Between groups (treatment)	SSC	c-1	$MSC = \frac{SSC}{c-1}$	F= MSC/MSE
Within groups (error)	SSE	N-c	$MSE = \frac{SSE}{N-c}$	
Total	SST	n-1		

- Sum of Squares Total (SST): This is the total variability in the data. It represents the total deviation of each observation from the grand mean of the entire dataset.
- Sum of Squares Group (SSG): This is the variability between the group means and the overall mean. It represents the deviation of each group mean from the grand mean.
- Sum of Squares Error (SSE): This is the variability within each group. It represents the deviation of each observation from its group mean.
- Mean Square Error (MSE): This represents the average amount of error in each group, which is used to calculate the F statistic.
- Mean Square Group (MSC): This represents the average amount of variation between groups, which is used to calculate the F statistic.
- F statistic: This is a test statistic used to determine if there are significant differences between the group means.

$$F\ statistic = \frac{Varaiance\ between\ the\ samples}{Variance\ within\ the\ samples}$$

- Degrees of freedom (df): This is the number of values in a statistical calculation that are free to vary.

  Degrees of freedom between groups = Number of groups - 1

  Degrees of freedom within groups = Total number of observations - Number of groups

ANALYSIS

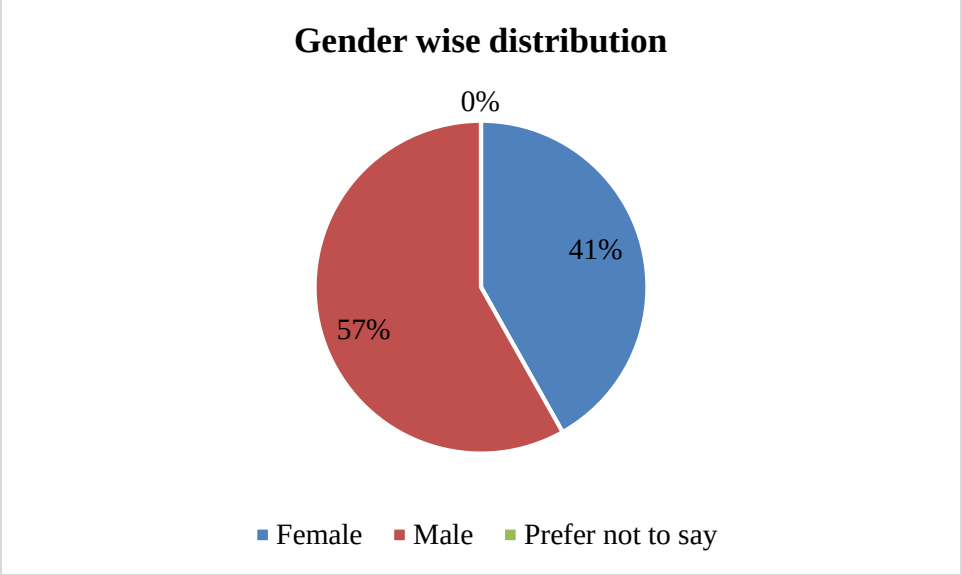
SOCIO- ECONOMIC PROFILE OF RESPONDENTS:

Behavior of consumers towards a particular product or service depends upon the Gender, his or her age, income, occupation, educational qualification etc., which constitute the socio-economic profile of the consumer.

Table 4.1 Gender wise classification of Respondents

Gender	No of respondents	Percentage
Female	41	41
Male	57	57
Prefer not to say	0	0
Total	100	100

Fig 4.1 Gender wise classification of Respondents

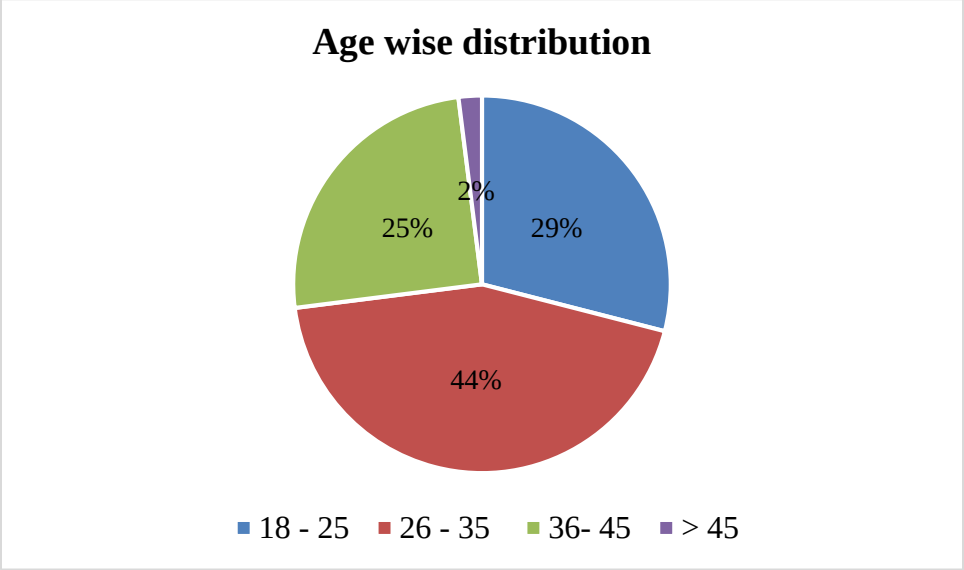


Among the 100 responses 57 respondents were male. Rest 41% is female i.e.41 respondents.

Table 4.2 Age wise classification of respondents

Age	No of respondents	Percentage
18 - 25	29	29
26 - 35	44	44
36- 45	25	25
> 45	2	2
Total	100	100

Fig 4.2 Age wise classification of respondents

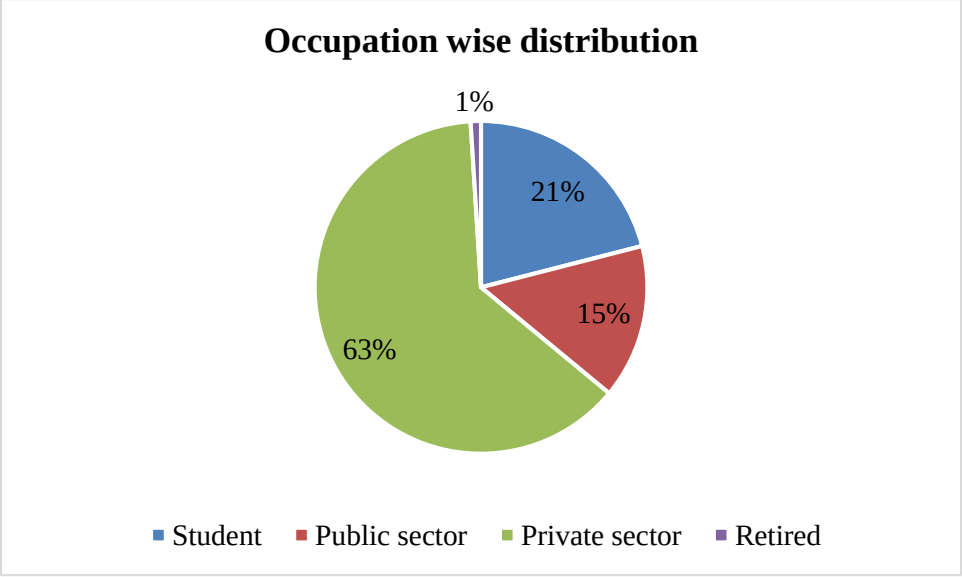


Major portion of respondents falls in between 26 to 35 which accounts to 44 percent of respondents. 29 percent comes in the 18 to 25 category and 25 respondents were in the 36 to 45 category. Remaining 2% of the respondents were above the age of 45.

Table 4.3 Occupation wise classification of respondents

Occupation	No of respondents	Percentage
Student	21	21
Public sector	15	15
Private sector	63	63
Retired	1	1
Total	100	100

Fig 4.3 Occupation wise classification of respondents

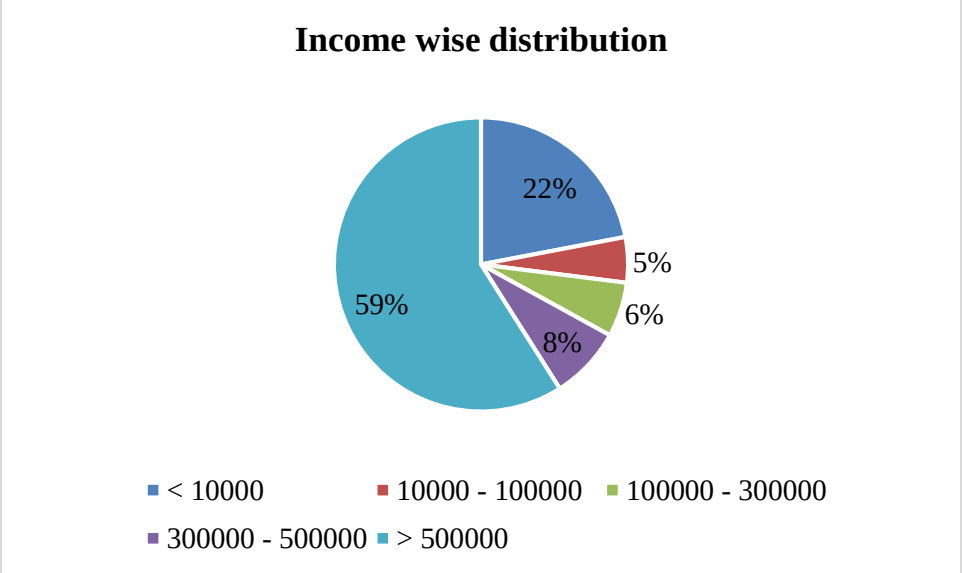


It shows that major respondents werefrom Private sector i.e.63%. 21 respondents were students and 15% were from public sector. Remaining 1% from retired category.

Table 4.4 Income wise classification of respondents

Income	No of respondents	Percentage
< 10000	22	21
10000 - 100000	5	5
100000 - 300000	6	6
300000 - 500000	8	8
> 500000	59	59
Total	100	100

Fig 4.4 Income wise classification of respondents

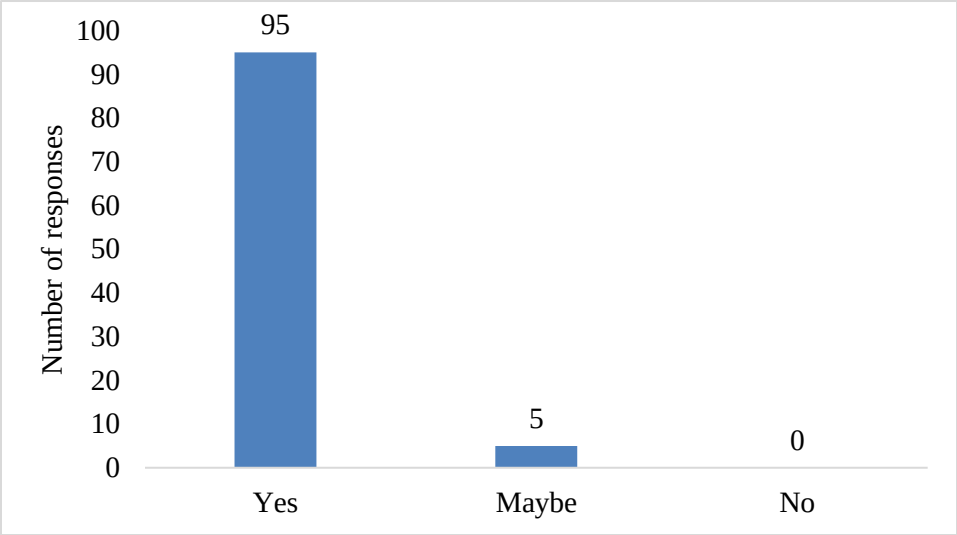


Majority comes in the income level of above Rs 5, 00, 000. 59% of total respondents wereunder this category. 22% respondents were having an annual income of less than Rs.10, 000. Only8% responses in Rs 3, 00, 000 - 5, 00, 000 and 6% in Rs 1, 00, 000 - 3, 00, 000 category. Remaining 5% from Rs.10, 000 – 1, 00, 000 category.

DESCRIPTIVE ANALYSIS:

- Have you ever heard about Insurtech?

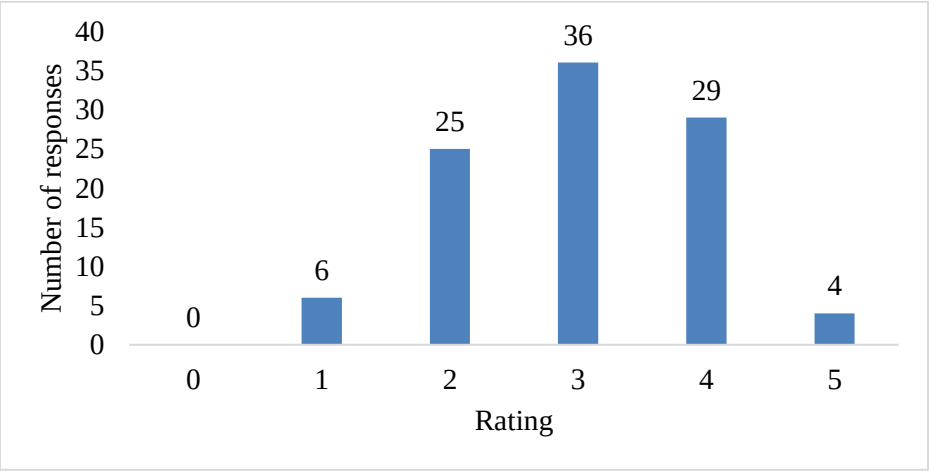
Fig 4.5 Insurtech awareness



Majority of people (95%) have heard about Insurtech, while a small minority (5%) responded with "maybe," indicating that they may or may not be familiar with the term. Nobody responded with "no," indicating that everyone surveyed at least had some knowledge of Insurtech, which conveys that respondents are aware about the term insurtech

- Rate your knowledge on Insurtech (between 0 to 5)

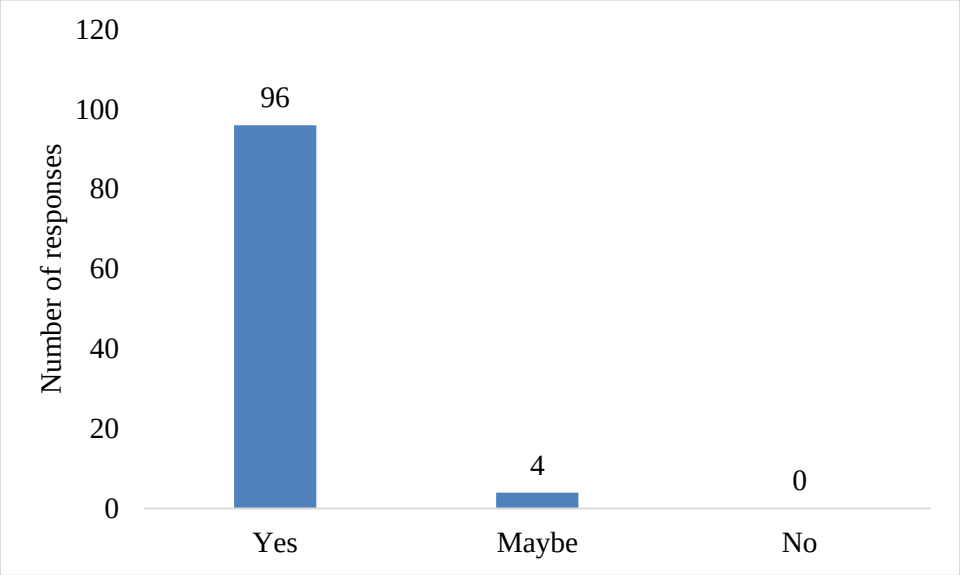
Fig 4.6 Knowledge on Insurtech



The most common rating were a 3, which suggests that a majority of respondents believe that their knowledge on Insurtech is moderate. The ratings of 2 and 4 were also relatively common, which suggests that some respondents believe their knowledge is somewhat limited, while others believe it is quite extensive. The ratings of 1 and 5 were less common, suggesting that a smaller number of respondents believe their knowledge is either very limited or very extensive. Overall, the data suggests that the knowledge on Insurtech is generally perceived as moderate.

- Do you use online payments and renewals of health insurance?

Fig 4.7 Usage of online payments of health insurance

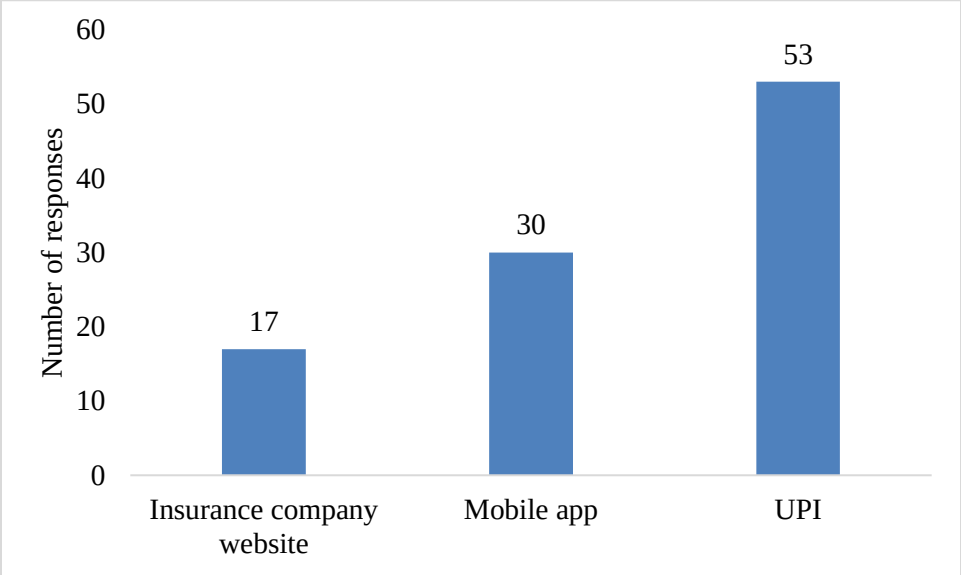


Out of 100 respondents, 96 respondents use online payments and renewals for their health insurance, while 4 respondents indicated that they may use it, and none of the respondents indicated that they do not use it.

This conveys that a large majority of people are comfortable with using online payments and renewals for their health insurance, indicating a growing trend towards digital adoption in the insurance industry. It also suggests that there is potential for further growth in the online health insurance market, as more people become accustomed to using digital platforms for their insurance needs.

- Which platform you prefer for online payments and renewals of health insurance

Fig 4.8 Preferred platform for online payments



The majority of respondents (53) prefer using UPI for online payments and renewals of health insurance. The second most popular choice is a mobile app, with 30 respondents and 17 respondents were using the insurance company's website.

TECHNOLOGY ACCEPTANCE ANALYSIS

Technology acceptance refers to the process of an individual or a group of individuals accepting and integrating a new technology into their daily lives or work routines. This process involves various factors such as perceived usefulness, perceived ease of use, and attitudes towards the technology.

In the context of insurtech, which is the application of technology in the insurance industry, technology acceptance is crucial for the successful adoption and implementation of digital solutions. Specifically, in the domain of health insurance, the integration of insurtech solutions can significantly improve the efficiency and effectiveness of healthcare delivery. Therefore, it is essential to understand the factors that influence technology acceptance among healthcare

providers, insurers, and patients to ensure successful adoption and utilization of insurtech solutions in the health insurance industry.

Technology acceptance in health insurance sector is studied using TAM model with variables perceived ease of use, perceived usefulness, attitude, anxiety, self-efficacy, e- trustand online playfulness. The variables hold a good amount of reliability with Cronbach's alpha value more than 0.70.

Table 4.5 Reliability measurement analysis

Variables	**Measurement**	**Cronbach's alpha value (27 items)**
Perceived ease of use	PE1 PE2 PE3 PE4	**0.705**
Perceived usefulness	PU1 PU2 PU3	
e- Trust	ET1 ET2 ET3 ET4 ET5	
Self-efficacy	SE1 SE2 SE3 SE4	
Online playfulness	OP1 OP2 OP3 OP4	
Anxiety	AY1 AY2 AY3	
Attitude	AE1 AE2 AE3 AE4	

- **Hypothesis Testing:**

The hypothesis formulated for the study is been analysed using one way anova.

- **H1: There is significant relationship between perceived ease of use and e-Trust in the context of health insurance technology acceptance.**

Table 4.6 Anova result of H1

ANOVA					
ET Mean					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.512	10	.551	3.392	.001
Within Groups	14.461	89	.162		
Total	19.972	99			

The result of the one-way ANOVA shows that there is a significant difference between the means of e-Trust scores among the groups based on Perceived Ease of Use. The between-groups sum of squares (SSB) is 5.512, which indicates the variation in e-Trust scores between the groups based on Perceived Ease of Use and the within-groups sum of squares (SSW) is 14.461, indicating variation in e-Trust scores within each group. The MSB value is 0.551 and the MSW is 0.162. The F-value is 3.392 indicates that the variation in e-Trust scores between the groups based on Perceived Ease of Use is significantly larger than the variation within each group.

The F-value for the between-groups variance is 3.392.The significance level (Sig.) is .001, which is lower than alpha value of .05, indicating that the result is statistically significant. Taken together, these results suggest that there is a significant difference in e-Trust across the levels of perceived ease of use. Specifically, it appears that perceived ease of use has a positive effect on e-Trust in the context of health insurance technology acceptance.

- **H2: There is significant relationship between perceived ease of use and attitude in the context of health insurance technology acceptance.**

Table 4.7 Anova result of H2

ANOVA					
PE Mean					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.073	8	.759	5.594	.000
Within Groups	12.349	91	.136		
Total	18.422	99			

The results of the one-way ANOVA show that there is a significant variation in attitude towards technology acceptance across the levels of perceived ease of use. The between-groups sum of squares (SSB) is 6.073, which indicates the variation in attitude scores between the groups based on Perceived Ease of Use and the within-groups sum of squares (SSW) is 12.349, indicating variation in attitude scores within each group. The MSB value is0.759 and the MSW value is 0.136.

The F-value is 5.594, which indicates that the variation in attitude towards technology acceptance between the groups based on Perceived Ease of Use is significantly larger than the variation within each group. The F-value for the between-groups variance is 5.594. The significance level (Sig.) is .000, which is lower to alpha value of .05, indicating that the result is statisticallysignificant.

Based on these results, we can conclude that perceived ease of use has a significant positive effect on attitude towards technology acceptance in the context of health insurance. This supports that there is significant relationship between perceived ease of use and attitude in the context of health insurance technology acceptance.

- **H3: There is significant relationship between e-Trust and attitude regarding technology acceptance in the context of health insurance.**

Table 4.8 Anova result of H3

ANOVA					
AE Mean					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4.880	11	.444	2.671	.005
Within Groups	14.617	88	.166		
Total	19.498	99			

The one-way ANOVA result shows that the F-value is 2.671, which is significant at the 0.005 level ($p < 0.05$). This indicates a difference in the means of the groups being compared (i.e., those who have high e-Trust and those who have low e-Trust).

The between-groups mean square (MS) is .444, indicating that there is a significant difference in attitude for technology acceptance between those with high e-Trust and those with low e-Trust. The within-groups MS is .166, indicating that there is also variability within each group.

Overall, these results suggest that e-Trust has a significant positive effect on attitude for technology acceptance in the context of health insurance, supporting the hypothesis H3.

- **H4: There is no significant relationship between anxiety and attitude towards using the technology acceptance in the context of health insurance.**

Table 4.9 Anova result of H4

ANOVA					
AE Mean					
	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	5.357	11	.487	3.031	.002
Within Groups	14.141	88	.161		
Total	19.497	99			

The one-way ANOVA result shows that the F-value is 3.031, which is significant at the 0.002 level ($p < 0.05$). This indicates that there is a significant difference in the means of the groups being compared (i.e., those who have high anxiety and those who have low anxiety).

The between-groups mean square (MS) is .487, indicating that there is a significant difference in attitude towards using technology between those with high anxiety and those with low anxiety. The within-groups MS is .161, indicating that there is also variability within each group.

Overall, these results suggest that anxiety holds a negative effect on attitude towards using technology, supporting the hypothesis H4. The higher the level of anxiety, the more negativethe attitude towards using technology. This could have implications for the adoption and use of technology in various settings, as anxiety may act as a barrier to technology acceptance.

CONCLUSION

The master project titled 'Technology acceptance in health insurance: Focus on insurtech' aimed to analyse and examine the extent of technology acceptance in the insurance sector, with a particular focus on health insurance. The study also aimed to identify the major drivers of technology adoption in the insurance sector and barriers for the same from the consumer's perspective. The study used the TAM 3 model and focused on constructs like perceived ease of use, perceived usefulness, e-Trust, anxiety, self-efficacy, attitude, and online playfulness.

The study found that the most of the respondents had knowledge about insurtech and used online payments and renewals for their health insurance. Among the respondents, the most popular choice for online payments and renewals was UPI, followed by a mobile app and the insurance company's website. This finding highlights the importance of online platforms for health insurance and the need for insurance companies to offer user-friendly digital services.

The study also found that perceived ease of use had a positive effect on e-Trust and attitude towards acceptance of technology with respect to health insurance. The results support the hypothesis that perceived ease of use affects attitude positively for acceptance of technology with respect to health insurance. Additionally, e-Trust had a relatively positive effect on attitude for acceptance of technology with respect to health insurance, supporting the hypothesis that e-Trust mediates positively to attitude for acceptance of technology with respect to health insurance. These findings emphasize the importance of building trust and making the technology easy to use to promote technology acceptance in health insurance. Moreover, anxiety has a negative impact on attitude towards using technology, supporting the hypothesis that anxiety negatively affects attitude towards using technology.

These findings highlights the need to address consumer concerns and anxiety related to the use of technology. If we specifically talk about health insurance sector, when consumers considers there is ease in using technology, they start trusting it and develop a positive attitude towards using it and ultimately make the user to get appropriate health claim services as well as the insurance provider can also reach out to their all category of clients and provide personalized services.

Overall, the study highlights the importance of technology acceptance in the health insurance sector and provides insights into the drivers and barriers of technology acceptance among consumers.

FUTURE SCOPE & RECOMMENDATIONS:

- Future studies could explore the influence of other factors, such as perceived usefulness, on technology acceptance in health insurance. This would give a more comprehensive understanding of the factors that drive technology acceptance among health insurance clients.

- Health insurance companies should focus on building trust with their clients by ensuring transparency and security in their use of technology. They should also prioritize making their technology easy to use and accessible for all clients.

- The study highlights the importance of educating clients on the benefits of using technology in health insurance, which could help increase technology adoption and acceptance.

- Policymakers should also consider the role of technology in improving access and affordability of health insurance for all individuals, including those in underserved communities.

LIMITATIONS:

- Demographic representativeness: The data were collected from 100 different respondents. But only a limited amount of responses were collected from retired class of people. So this may not represent the broader population of health insurance consumers, and thus, the results may not be generalizable to all demographic groups.

- Self-reporting bias: The study relied on primary data, hence there may be chances of social biasness, where respondents doesn’t accurately convey their feelings or behaviors.
- Sample size: The sample size used in this study is relatively small, which may limit the generalizability of the findings to the broader population of health insurance consumers.

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