

A STUDY OF IMPACT OF TECHNOLOGY ON ENHANCING CUSTOMER EXPERIENCE WITH REFERENCE TO STAR HEALTH INSURANCE

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Introduction:

In today's competitive business environment, customer experience has become a key factor influencing organizational success. The rapid growth of digital technologies has transformed how companies interact with customers and deliver services. The insurance sector, traditionally dependent on manual procedures and complex documentation, is now shifting toward digital platforms to improve efficiency, transparency, and service quality. Technologies such as mobile applications, artificial intelligence (AI), chatbots, and data analytics enable faster communication, reduce operational errors, and enhance customer satisfaction.

Customer experience (CX) plays an important role in the insurance industry as it directly affects customer loyalty, policy renewal, and brand reputation. The integration of advanced technologies like AI, Machine Learning (ML), Big Data, and digital service platforms helps insurers provide personalized services, quick claim settlement, and convenient self-service options. These innovations also improve accessibility of insurance services in rural and semi-urban areas. The Indian health insurance sector has experienced significant growth due to rising medical costs, increased health awareness, and government initiatives such as Ayushman Bharat and PMJAY. However, challenges

Thus, technological transformation such as complex procedures and limited customer awareness still exist. Technological advancements such as mobile apps, telemedicine services, and automated claim processing systems have helped address these issues by making insurance services faster, transparent, and customer-friendly. Plays a crucial role in enhancing customer experience in the health insurance sector by improving service efficiency, accessibility, and customer trust.

Statement of Problem

IT plays a vital role in transforming business operations by enabling digital communication, automation, and efficient service delivery. Customer engagement, conversion, and post-service support are key factors that determine satisfaction and loyalty. Tools like chatbots, mobile apps, and AI systems aim to make interactions faster, smoother, and more personalized. A lot of investment goes into adopting IT to enhance customer interaction and engagement. However, the actual impact of these tools on long-term customer relationships and retention remains uncertain. This study examines the impact of investment in IT-driven initiatives on customer satisfaction, trust, and overall business growth.

Review of Literature

Rao and Ramesh (2020) examined the role of digitalization in improving customer convenience in the health insurance sector. Their study highlighted that digital platform such as mobile applications, online policy issuance systems, and electronic claim submission processes significantly simplify customer interactions. The researchers observed that younger customers particularly prefer technology-enabled services because of their speed, accessibility, and transparency. The study concluded that the adoption of digital tools enhances customer satisfaction and strengthens long-term customer loyalty by delivering seamless and time-efficient services.

Kumar and Rajasekar (2016) emphasized that claim settlement efficiency is a critical determinant of customer satisfaction in the insurance industry. Their findings revealed that automated claim processing systems and digital tracking mechanisms reduce processing time and improve service reliability. The study further indicated that faster claim settlement supported by technological infrastructure builds trust and confidence among policyholders and contributes to operational efficiency and service credibility of insurance companies.

Srivastava and Singh (2019) analyzed the importance of responsiveness in digital customer service within the health insurance sector. The study found that customers expect quick responses, continuous availability of services, and clear communication through digital platforms. Tools such as chatbots, automated responses, and online support systems significantly enhance customer experience. The researchers concluded that responsiveness through digital channels plays an important role in improving customer satisfaction and retention in the technology-driven insurance environment.

The collaboration between **Star Health Insurance and Medi Assist (2025)** represents a significant advancement in AI-based claim settlement processes. The integration of Artificial Intelligence enabled automation in document verification and anomaly detection, which reduced claim processing time and increased transparency. This technological partnership demonstrated how digital innovation can improve operational accuracy and enhance customer trust in claim management systems.

Similarly, the introduction of **Star Health Insurance's AI-based Face Scan Tool (2024)** reflected the company's initiative toward preventive healthcare and personalized digital engagement. The tool provides instant insights into health indicators through facial analysis, helping customers monitor wellness status conveniently. This innovation strengthened customer interaction and engagement by combining healthcare monitoring with insurance services, thereby improving the overall customer experience.

Research Gap

Although previous studies have highlighted the importance of digital technologies such as automated claim systems, chatbots, and mobile platforms in improving customer satisfaction, most research has focused on the general insurance sector rather than specifically examining standalone health insurance providers like Star Health Insurance. Additionally, limited studies have analyzed the combined impact of multiple digital initiatives—such as mobile applications, AI-based claim processing, telemedicine services, and wellness technologies like Face Scan tools—on customer engagement, satisfaction, and loyalty.

Furthermore, there is a lack of empirical research focusing on customer perceptions at the regional level, particularly among policyholders in cities such as Amravati. Therefore, the present study attempts to bridge this gap by evaluating how Star Health Insurance’s digital initiatives influence customer experience, engagement, satisfaction, and loyalty through primary data collected from policyholders. This study provides a more focused and practical understanding of technology-driven customer experience in the health insurance sector.

Research Objectives

1. To study the Star Health Insurance’s different digital initiatives for increasing customer engagement
2. To examine the impact of Star Health Insurance’s digital initiative on customer engagement
3. To evaluate the measure the impact of Star Health Insurance’s digital initiative on customer satisfaction and loyalty

Research hypothesis

H₀ (Null Hypothesis):

Technology adoption does not significantly influence customer satisfaction at Star Health Insurance.

H₁ (Alternative Hypothesis):

Technology adoption significantly influences customer satisfaction at Star Health Insurance.

Research Methodology

A) Research Design

The study will use a descriptive and analytical research design to evaluate how technology affects customer experience. The descriptive part will help understand customer perceptions. The analytical part will help interpret the relationship between technology adoption and customer satisfaction.

B) Sampling Design:

- **Universe:** The universe consists of all individuals availing health insurance services in Amravati city.
- **Population:** The population consists of all existing customers of Star Health Insurance having health insurance cover.

- **Sampling Unit:** Customers drawn from list of customers of Star Health Insurance
- **Sample Size:** A sample of 100 respondents will be chosen to ensure the results are reliable and valid.
- **Sampling Technique:** convenience sampling technique has been adopted for this study, as respondents were selected based on their easy availability and willingness to participate.”

Sources of Data Collection

a) Primary Data

Primary data were collected through the use of a structured questionnaire for the selected respondents.

Limitations of the Study

- The study was limited to Amravati city, which may not represent the experiences of customers in other regions
- The research was conducted with a sample size of 100 respondents, which may not fully represent the entire customer base of the company.
- The study relied mainly on customer perceptions and opinions, which may vary from person to person.
- Time and resource constraints limited the scope of data collection.

The key elements that the questionnaire covers are:

Digital Awareness and Accessibility

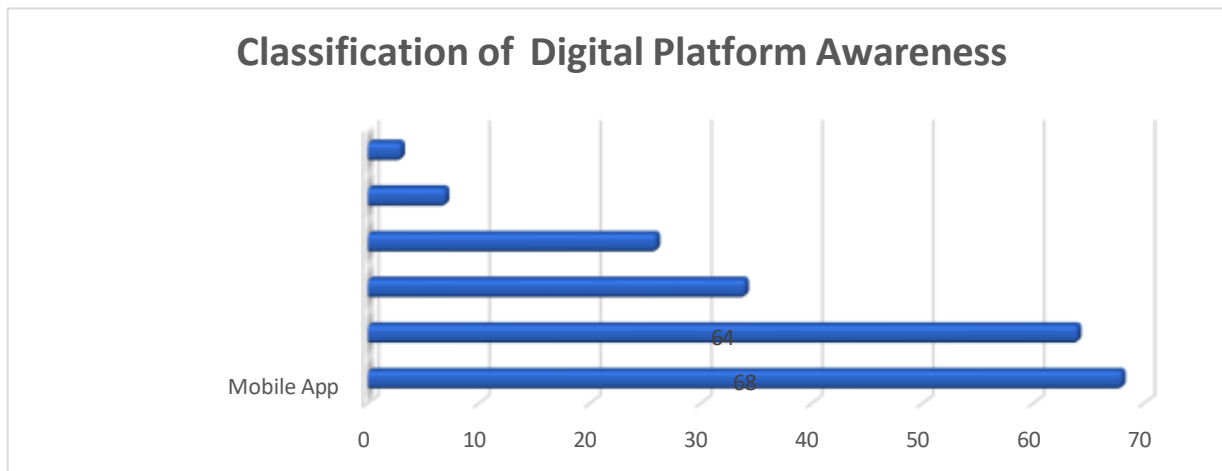
Digital Service Quality and Platform Performance Security, Personalization, and Integration Customer Engagement and Satisfaction

Customer Loyalty and Advocacy

Q1. Among the following digital platforms provided by Star Health Insurance, which ones are you aware of?

Name of Digital Platforms	No. of Respondents	Percentage (%)
Mobile App	68	68
Website Services	64	64
Online Policy Purchase	34	34
Chatbot / Virtual Assistant	26	26
AI-based Face Scan Tool	7	7
Telemedicine / E-consultation	3	3
Total		100

Telemedicine / E-consultation	3
AI-based Face Scan Tool	7
Chatbot / Virtual Assistant	2
Online Policy Purchase	6
Website Services	3
	4

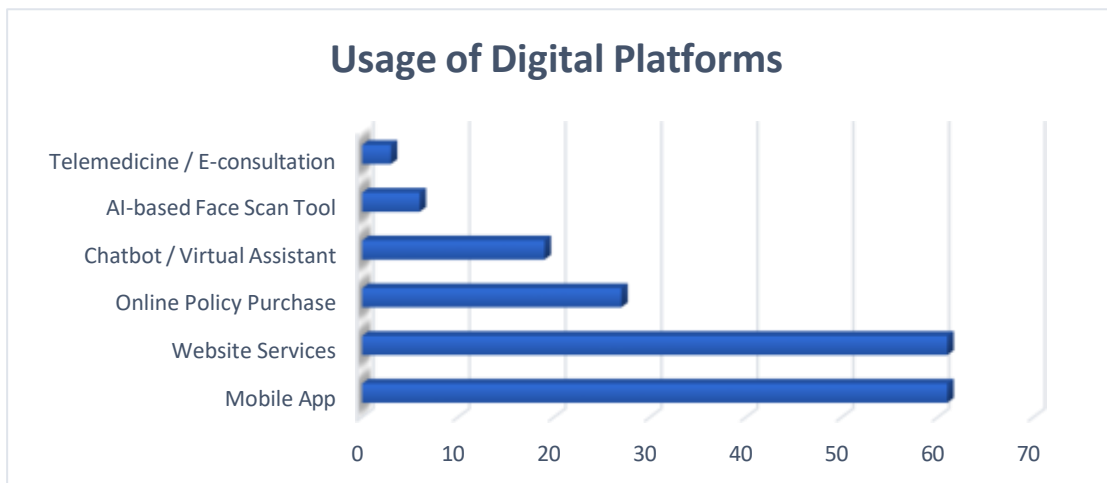


Interpretation:

The table shows the awareness of various digital platforms provided by Star Health Insurance among respondents. Out of 100 respondents, 68% are aware of the mobile app and 64% of website services, making them the most recognized platforms. 34% know about online policy purchase, while 26% are aware of the chatbot. Only 7% know about the AI-based face scan tool and 3% about telemedicine services, indicating very low awareness of advanced digital features. This suggests that customers are more familiar with basic digital platforms, while newer technologies require greater awareness efforts

Q2. Which of the following digital platforms have you used?

Name of Digital Platforms	No. of Respondents	Percentage (%)
Mobile App	61	61
Website Services	61	61
Online Policy Purchase	27	27
Chatbot / Virtual Assistant	19	19
AI-based Face Scan Tool	6	6
Telemedicine / E-consultation	3	3
Total		100

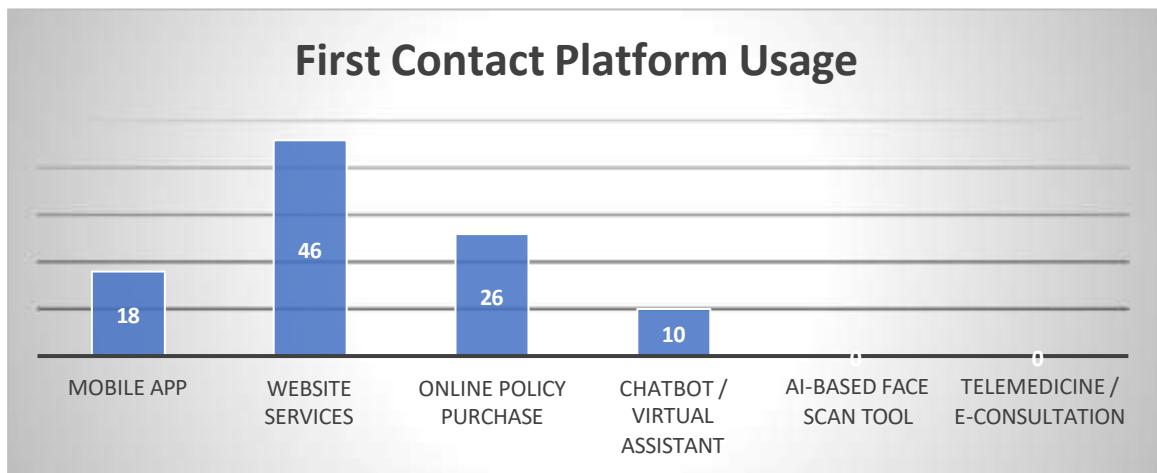


Interpretation:

The table shows the usage of digital platforms by respondents. Mobile app (61%) and website services (61%) are the most used platforms. Online policy purchase (27%) and chatbot/virtual assistant (19%) are moderately used, while AI-based face scan tool (6%) and telemedicine/e-consultation (3%) are rarely used. This indicates that traditional digital platforms are widely used, whereas emerging services have low adoption

Q3. For your first interaction, which digital platform did you use?

Name of Digital Platforms	No. of Respondents	Percentage (%)
Mobile App	18	18
Website Services	46	46
Online Policy Purchase	26	26
Chatbot / Virtual Assistant	10	10
AI-based Face Scan Tool	00	00
Telemedicine / E-consultation	00	00
Total	100	100

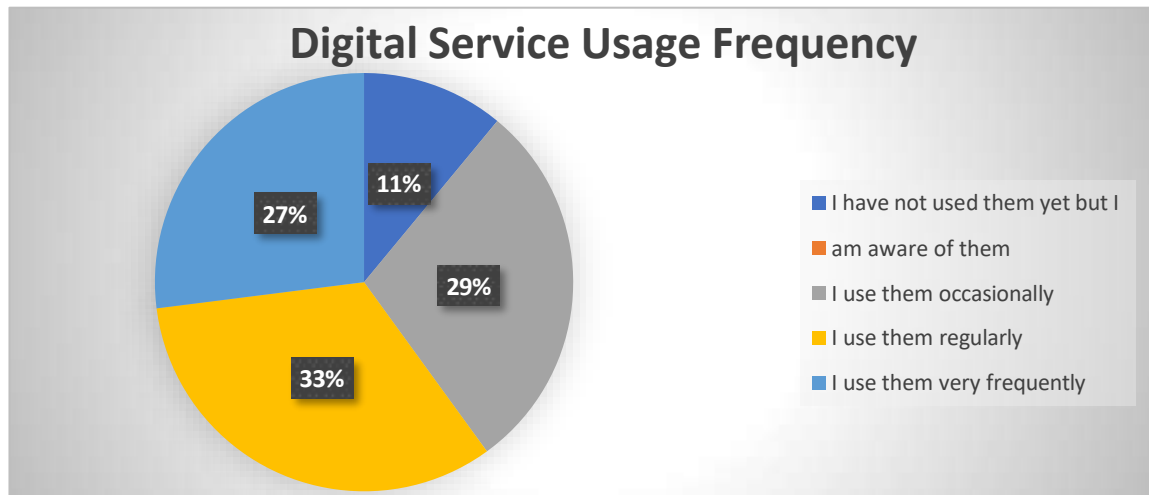


Interpretation:

The table shows the digital platforms used by respondents during their first interaction with Star Health Insurance. Website services (46%) were the most used platform, followed by online policy purchase (26%) and mobile app (18%). Chatbot/virtual assistant (10%) was used by a few respondents, while AI-based face scan tool and telemedicine/e-consultation were not used. This indicates that most respondents initially preferred traditional online channels like websites and online policy purchase, whereas emerging digital services were not utilized during first interactions.

Q4. How often do you use Star Health’s digital services (mobile app, website, online claim)?

Frequency of Usage	No. of Respondents	Percentage (%)
I have not used them yet but I am aware of them	11	11
I use them occasionally	29	29
I use them regularly	33	33
I use them very frequently	27	27
Total	100	100



Interpretation:

The table shows the frequency of use of Star Health’s digital services (mobile app, website, online claim) among respondents. Out of the total 100 respondents, 33 respondents (33%) use the digital services regularly, representing the largest group. 27 respondents (27%) use these services very frequently, while 29 respondents (29%) use them occasionally. The remaining 11 respondents (11%) have not used the digital services yet but are aware of them. This indicates that a majority of respondents actively use Star Health’s digital services, reflecting a growing adoption of online tools for insurance management, while a small portion of respondents are still aware but have not yet engaged with these services.

Q.5 Do you think the digital platform makes it easy to find the required pages or information?

Responses	No. of Respondents	Percentage (%)
Strongly Disagree	6	6
Disagree	4	4
Neutral	22	22
Agree	49	49
Strongly Agree	19	19
Total	100	100

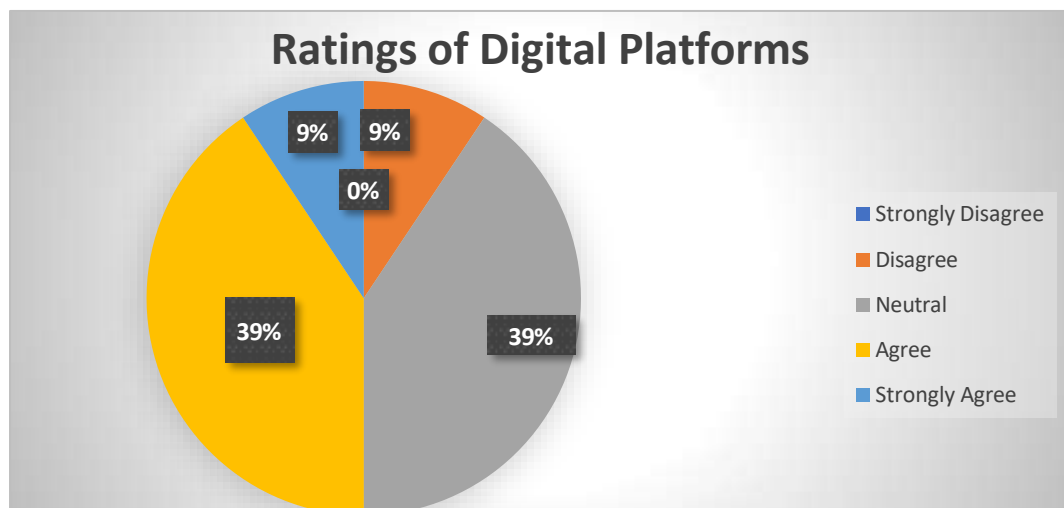


Interpretation:

The table shows the respondents' perception regarding the ease of finding required pages or information on Star Health Insurance digital platforms. Out of 100 respondents, 49% agreed and 19% strongly agreed that the platform makes it easy to find the required information. 22% of respondents remained neutral, while 4% disagreed and 6% strongly disagreed. This indicates that most respondents find the digital platform easy to navigate and locate the required information, though a small proportion feel that improvements in navigation and accessibility could still be beneficial.

Q6. Rate the digital platform in terms of functionality and responsiveness

Responses	No. of Respondents	Percentage (%)
1	0	0
2	9	9
3	39	39
4	39	39
5	9	9
Total	100	100



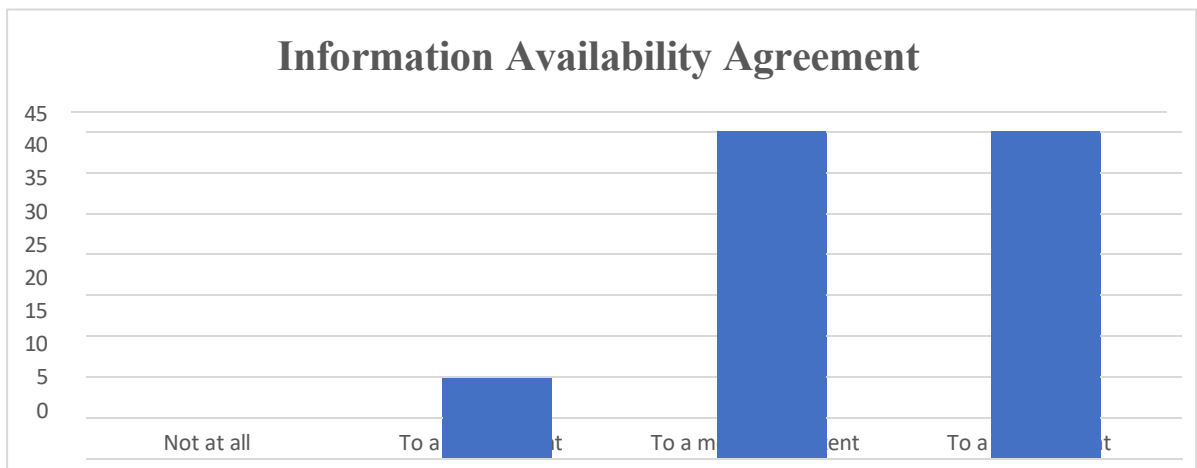
Interpretation:

(The 1 is indicating strongly disagree and 5 is indicating strongly Agree)

The table shows the respondents' ratings of Star Health Insurance digital platforms in terms of functionality and responsiveness. Out of 100 respondents, 39% agreed and 39% remained neutral about the platforms' performance, while 9% strongly agreed. 9% of respondents disagreed, and none strongly disagreed. This indicates that the majority of respondents are satisfied or neutral regarding the functionality and responsiveness of the digital platforms, suggesting that while the platforms are generally acceptable, there is room for further improvement.

Q.7 Did you get complete and convincing information about different insurance policies on digital platforms?

Responses	No. of Respondents	Percentage (%)
Not at all	0	0
To a small extent	9	9
To a moderate extent	41	41
To a great extent	41	41
To a very great extent	9	9
Total	100	100

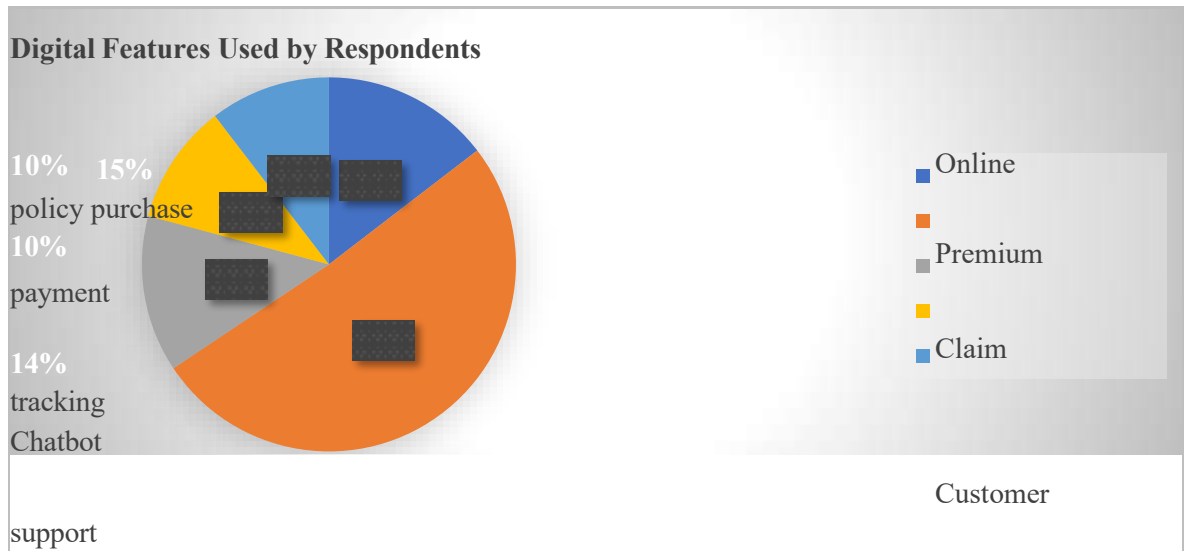


Interpretation:

The table shows respondents’ perceptions of the sufficiency of information about insurance policies on Star Health digital platforms. Out of 100 respondents, **41% reported a moderate extent** and **41% a great extent** of information availability, while **9% reported a very great extent** and **9% a small extent**. This indicates that most respondents are satisfied with the information provided, though some feel there is scope for improvement.

Q.8 Which digital features have you used on Star Health’s platform?

Responses	No. of Respondents	Percentage (%)
Online policy purchase	14	14
Premium payment	49	49
Claim tracking	13	13
Chatbot	10	10
Customer support	10	10
Document download	4	4
Total	100	100

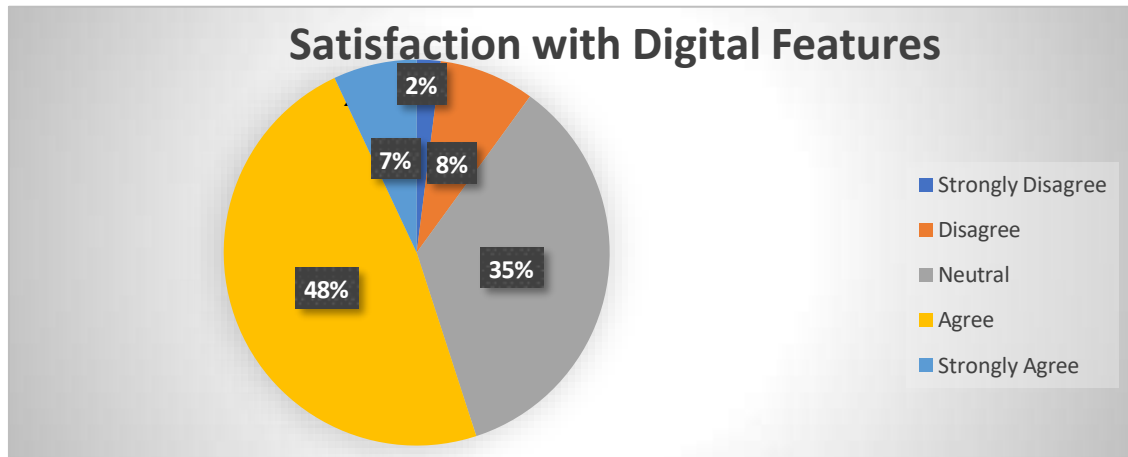


Interpretation:

The table shows the digital features used by respondents on Star Health Insurance platforms. Out of 100 respondents, **49% use the platform for premium payment**, making it the most commonly used feature. **14% use online policy purchase**, **13% use claim tracking**, **10% use chatbot and customer support**, and **4% use document download**. This indicates that premium payment is the primary digital activity among respondents.

Q.9 Do digital features meet your insurance service needs effectively?

Responses	No. of Respondents	Percentage (%)
Strongly Disagree	2	2
Disagree	8	8
Neutral	35	35
Agree	48	48
Strongly Agree	7	7
Total	100	100

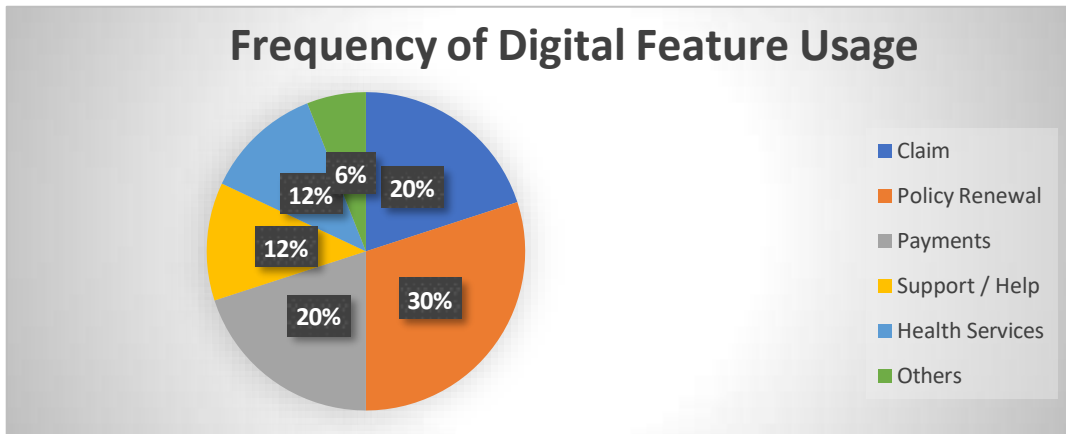


Interpretation:

The table shows the respondents’ satisfaction with the digital features of Star Health Insurance in meeting their insurance service needs. Out of 100 respondents, 48% agreed that the digital features effectively met their needs, while 7% strongly agreed. 35% of respondents remained neutral, whereas 8% disagreed and 2% strongly disagreed. This indicates that most respondents are generally satisfied with the effectiveness of the digital features, although a moderate proportion of users remain neutral, suggesting scope for further enhancement of digital services.

Q.10 Which section do you use the most?

Responses	No. of Respondents	Percentage (%)
Claim	20	20
Policy Renewal	30	30
Payments	20	20
Support / Help	12	12
Health Services	12	12
Others	6	6
Total	100	100



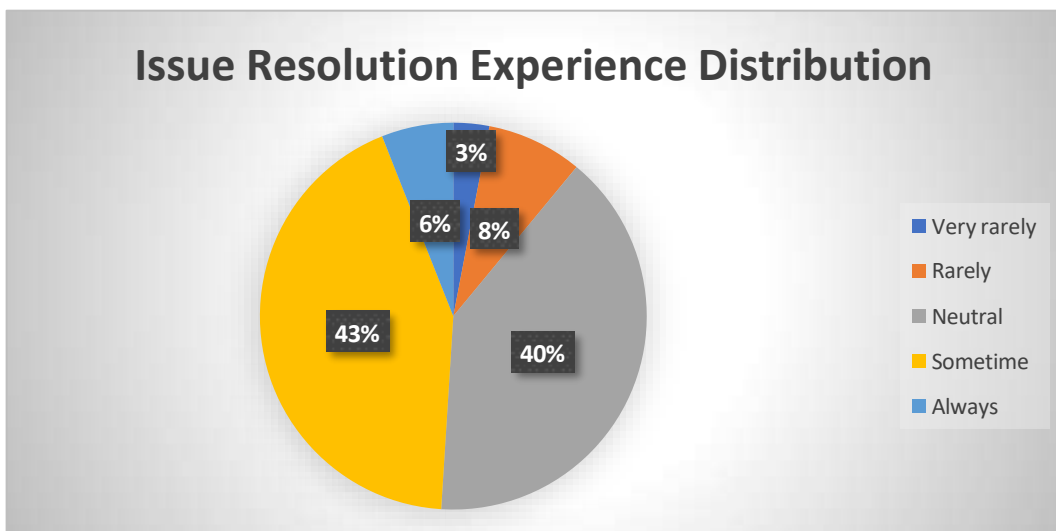
Interpretation:

The table shows the most frequently used digital feature sections on Star Health Insurance platforms. Out of 100 respondents, 30% use the policy renewal section, while 20% use claim services and 20% use payment features. 12% use support/help and health services, and 6% use other sections, indicating that renewal, claim, and payment features are the most commonly used digital services.

Q.11

How often are your issues or queries resolved effectively through digital platforms?

Responses	No. of Respondents	Percentage (%)
Very rarely	3	3
Rarely	8	8
Neutral	40	40
Sometime	43	43
Always	6	6
Total	100	100

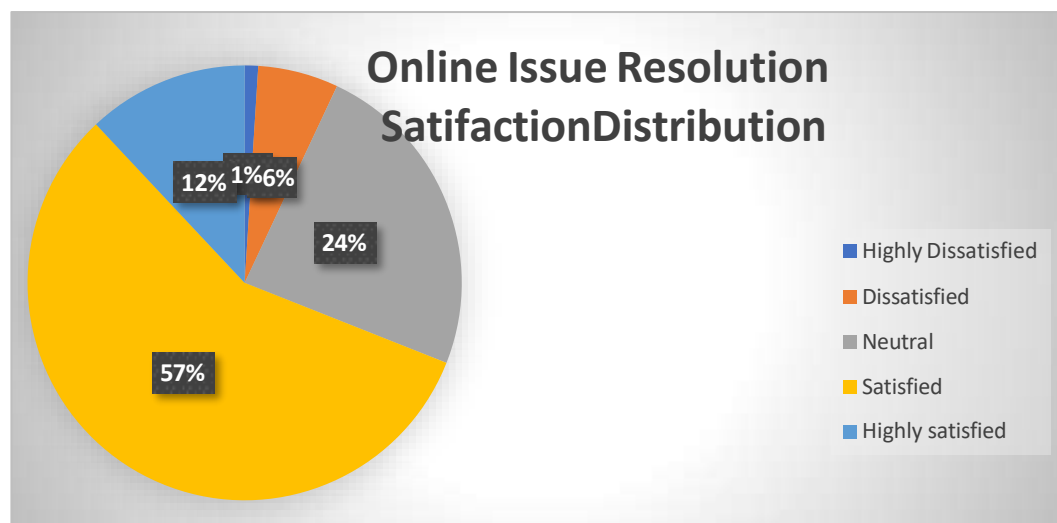


Interpretation:

The table shows the frequency of effective resolution of issues or queries through Star Health Insurance digital platforms. Out of 100 respondents, 43% stated that their issues are resolved sometimes, while 40% remained neutral. 8% reported that their issues are resolved rarely, and 3% stated very rarely, whereas 6% indicated that their issues are always resolved effectively. This indicates that most respondents experience only occasional resolution of their issues through digital platforms, suggesting that while the system provides some support, there is scope for improving the effectiveness and consistency of query resolution services.

Q12. How satisfied are you with the online issue resolution process?

Responses	No. of Respondents	Percentage (%)
Highly Dissatisfied	1	1
Dissatisfied	6	6
Neutral	24	24
Satisfied	57	57
Highly satisfied	12	12
Total	100	100



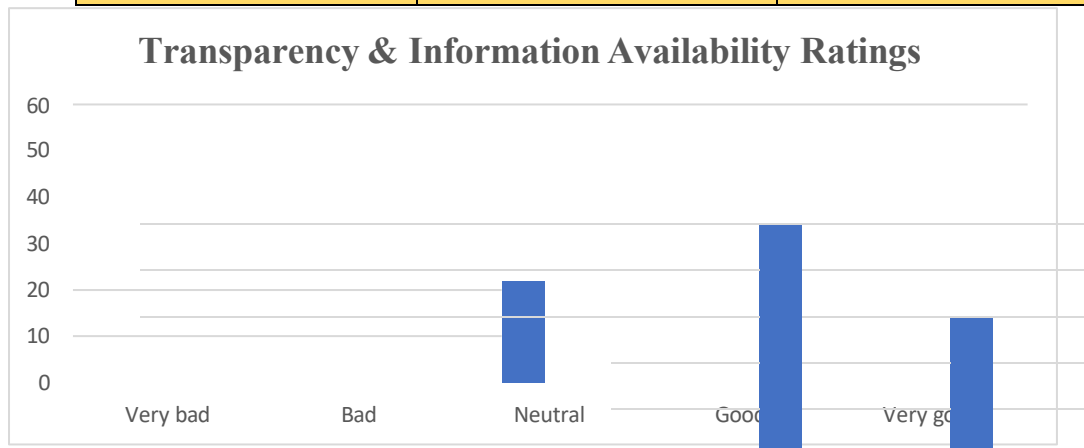
Interpretation:

The table shows the respondents' satisfaction with the online issue resolution process of Star Health Insurance. Out of 100 respondents, 57% reported that they are satisfied, while 12% are highly satisfied with the process. 24% of respondents remained neutral, whereas 6% are dissatisfied and 1% are highly dissatisfied. This indicates that the majority of respondents are satisfied with the online issue resolution process, suggesting that the digital platforms are generally effective in addressing customer queries and concerns.

Q.13

Digital platform makes it easy to find required information

Responses	No. of Respondents	Percentage (%)
Very bad	0	0
Bad	0	0
Neutral	22	22
Good	49	49
Very good	29	29
Total	100	100



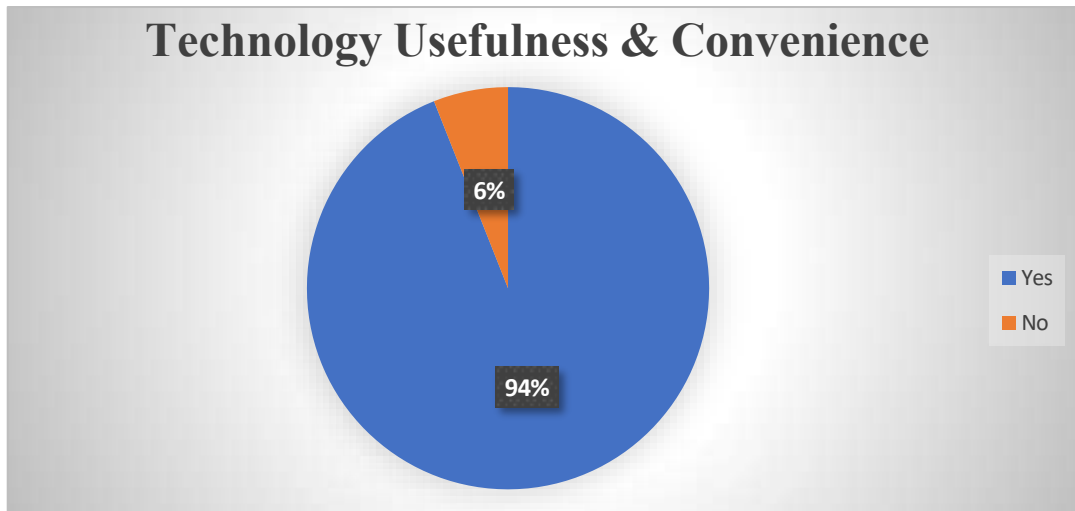
Interpretation:

The table shows the respondents' experience regarding transparency and information availability on Star Health Insurance digital platforms. Out of 100 respondents, 49% rated their experience as good, while 29% rated it as very good. 22% of respondents remained neutral, and none rated the experience as bad or very bad. This indicates that most respondents have a positive experience with the transparency and availability of information on the digital platforms, suggesting that the platforms are generally effective in providing clear and accessible information to users.

Q.14

Digital features meet your service needs effectively?

Responses	No. of Respondents	Percentage (%)
Yes	94	94
No	6	6
Total	100	100



Interpretation:

The table shows the respondents' perception regarding the usefulness and convenience of technology used in Star Health Insurance digital platforms. Out of 100 respondents, 94% stated that the technology used in the digital platforms is useful and convenient, while 6% felt that it is not useful or convenient. This indicates that a large majority of respondents find the technology used in the digital platforms effective and user-friendly, reflecting a high level of satisfaction with the digital services provided by Star Health Insurance

8. Findings of the study:

The study reveals that digital initiatives implemented by Star Health Insurance have positively influenced customer experience, engagement, satisfaction, and loyalty among policyholders. Most respondents are aware of and actively use basic digital platforms such as mobile apps and website services, indicating strong acceptance of technology-based insurance services.

The findings show that customers primarily use digital platforms for premium payment, policy renewal, and claim-related services, highlighting the importance of these features in convenient insurance management. Respondents also reported that digital platforms provide easy access to information, transparency, and sufficient policy-related details, which enhances trust and usability.

Although the majority of respondents are satisfied with digital platform functionality, responsiveness, and issue resolution services, some respondents remained neutral, suggesting scope for further improvement in service efficiency and support systems.

The study also found that awareness and usage of advanced digital services such as chatbot support, AI-based face scan tools, and telemedicine services remain relatively low compared to traditional digital features. This indicates the need for greater customer awareness and promotion of these technologies.

Overall, the research concludes that technology adoption by Star Health Insurance has significantly improved customer engagement, service accessibility, satisfaction levels, and perceived convenience, thereby contributing to stronger customer relationships and loyalty.

Conclusion of the Study

The study concludes that digital initiatives implemented by Star Health Insurance have significantly improved customer experience, engagement, and satisfaction among policyholders. Customers actively use digital platforms such as mobile apps, websites, and online payment systems for managing their insurance services conveniently.

The findings indicate that digital services enhance accessibility, transparency, and efficiency in insurance transactions. Most respondents expressed satisfaction with digital platform usability, information availability, and issue resolution processes. However, awareness and usage of advanced digital services such as AI-based face scan tools, telemedicine services, and chatbot systems remain relatively low.

Overall, technology adoption has positively influenced customer engagement and satisfaction, thereby supported customer loyalty and strengthened long-term relationships between Star Health Insurance and its policyholders.

Suggestions

1. The company should increase awareness of advanced digital services such as AI face scan tools, chatbot support, and telemedicine services through promotional campaigns and customer education programs.
2. Star Health Insurance should improve the effectiveness and speed of issue resolution systems on digital platforms to enhance customer satisfaction further.
3. The organization should strengthen chatbot responsiveness and personalization features to improve customer interaction quality.
4. More user-friendly navigation and interface improvements should be introduced to enhance accessibility for all age groups.
5. The company should expand digital engagement strategies by integrating AI-based personalized recommendations and wellness monitoring tools.
6. Regular feedback mechanisms should be implemented to understand customer expectations regarding digital service improvements.
7. Awareness campaigns should be conducted especially in semi-urban areas like Amravati, where adoption of advanced digital insurance services is still developing.

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