

Revolutionary Impact of Insurtech on the Traditional Insurance Sector: Challenges and Benefits

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Abstract: Purpose: This research study will explore about the changes observed from traditional insurance services to modern technology-based insurance services. This research study will help to analyse about the positive and negative impact on insurance sector due to influence of modern digital technology (known as fintech or Insurtech). In the recent years impact of Insurtech has led to many changes in the insurance sector. Insurance sector which was considered to be most time taking has now evolved and the insurance buying procedures have now become quicker and easy. In recent times due to impact of Insurtech insurance sector has been time efficient as getting insurance claim before it used to take more than a week but now due to the impact of Insurtech claim getting within 24 hours but also there are some challenges there like frauds and scams has led to many challenges arise in modern digital insurance sector but also many insurance fraud scams are getting detected easily due to impact of technologies involved. Methodology: Secondary data was taken for this research study which was collected from various journal research paper and other various big four company's document Findings: It was clearly seen that Insurtech market is expected to grow rapidly but also there are many scams happening in insurance sector but Insurtech has also made many tools available for fraud detection Scope: This research study is analysing the changes that have been done through implication of Insurtech technology also to understand the risks of digital system.

Keywords: Insurtech, Fintech, Insurance sector, Artificial Intelligence.

Introduction:

Digital technology has revolutionized lives of everyone from every sector as it has helped services to be quick, easy and accessible in just one phone click making it accessible from any part of the world at any time. Many sector such as Banking Sector and Financial Sector have greatly been revolutionized making these sector services easily accessible to anyone has also been revolutionising with the help of Insurtech (a subset of fintech) sector making insurance sector updated and accessible to anyone form any place. Technological advancements such as AI (Artificial Intelligence), ML (Machine Learning) and blockchain and also impact of technologies such as IOT (Internet on things) and big data analysis.



In Traditional insurance sector insurance procedures used to take a lot of time to get claims sometimes more than 5 days in getting the claim it used to be difficult for the customers. During traditional times. In earlier times as technology was not so advanced insurance services used to rely heavily on human man force which led to delays in getting insurance claims. Traditionally buying an insurance for any purpose was a very tough and lengthy process as it used to require agent person used to come and meet people they used to decide and after weeks it used to take to buy an insurance. Earlier Buying insurance and other process were paper which means evidence used to be in physical and paper format leading to damage of evidence and disputes. Traditionally underwritings (means what type of insurance policy should be suggested to you based on your health and your financial status and also what rate of premium should be charged) was done based on human fixed criteria, also the customer services used to be on phone calls or in person meeting. Earlier detecting frauds in insurance policies were less detected leading to customers losing trust on insurance sector. Also buying insurance policies and their awareness was only common in Urban or Semi Urban Areas and they were uncommon in rural areas.

But in today's time with the evolution of Insurtech has made claim procedures easy and getting claim in 24 hours making customer experience easier and satisfaction. Insurtech has also made every procedure form buying an insurance policy of any type has been made simpler and quick procedure. Insurtech has made buying insurance policy easier as it not requires any physical meeting with agents or brokers unlike traditional procedure as it used to take lot of times in meeting with brokers. Also, Insurtech has also made insurance policy into digital formats making it safe from getting damaged or lost making the evidence available at any time at any place without getting damage. Similarly, underwritings used to be based on human parameters set up by human agents and companies but now it is based on Artificial Intelligence, also detecting frauds in earlier times were not so easy and many times it used to undetected leading to customers losing their trust on insurance sector but today with the help of technology such as using passwords, biometric pins and face detection system to prevent fraud from happening and also helping in detecting frauds. In today's time with the help of internet and social media awareness about insurance has reached mass audience in urban, semi urban and rural as well with the help of internet.

Challenges in insurance sector

From discussing the above point, it results that Insurtech has made insurance services for people of any age group, with any health condition, with acclaim within any finance condition has made easier and quick and anyone can get within 24 hours. But still Insurtech also has many challenges such as:

- 1. Lack of availability of digital devices leading people not able to access these instant and quick services
- 2. Lack of internet also makes accessing these services difficult to access especially in cities with poor infrastructure growth and lack of internet connectivity
- 3. Server down problems also lead to payment failure and multiple issue
- 4. Senior Citizens and people who are not tech savvy might find difficulty in accessing insurance procedure through digital platform.
- 5. Many fraudulent have made many fake websites and make fake calls leading to people falling in frauds and scams leading to losing faith in insurance sector
- 6. There are many regulatory compliance problems with Insurtech



- 7. Also, many people face Language barrier while accessing these services as this services applications mostly focus on English language which makes difficult for people to understand the process
- 8. Lack of human touch which leads to less trust on application as some people are dependent on human agent or brokers advices
- 9. Many people fear to use Insurtech applications as people might be afraid of sharing of their confidential data like Identity proof (Aadhar Card, Pan Card etc) as they might think that this data will be leaked publicly.
- 10. Still today many people have this misconception that digital insurance = fake insurance.
- 11. Many people thinks that insurance is only for rich class people only.

Solutions for improvements

As discussed from the above point it can be clearly seen that there are many challenges there in Insurtech which leads to many problems but there are many solutions which can be taken to make sure to solve these problems lead to customers losing trust on these applications leading to lack of public interest in these platforms.

Scope of the study:

The scope of this research study emphasizes on studying about the working of traditional insurance sector, to research about the changes and revolution occurred due to implications of fintech, what are the benefits of fintech in insurance sector, what are the challenges faced by people while accessing these services on phone and websites frauds and also other problems and to discuss on what are solutions that can be taken by new Insurtech or fintech startups, companies and regulatory bodies like IRDAI (Insurance Regulatory and Development Authority of India) that can help to regulate insurance sector.

Limitations of the study:

The present research study is only limited to studying the revolutionary impact of fintech or Insurtech on the traditional insurance sector and also the benefits and challenges. This research study cannot be taken into consideration for taking any professional decisions:

Time Limitations Present research study is conducted in limited time only Due to time limitations analysing the large number of data was not possible.

Data collection method: Present research study is limited only analysing the secondary data available from different official sources, research journals and news article. Primary data was not collected to study the personal opinions.

Objectives of the Research study

- 1. To study about the problems faced by traditional insurance companies.
- 2. To study bout the benefits of impact of Insurtech on the insurance sector
- 3. To study about the changes occurred due to impact of Insurtech on the traditional insurance sector
- 4. Study about the challenges faced by customers while accessing this Insurtech
- 5. To study the solutions and steps that can be taken to improve the customer satisfaction and also to gain more public interest on these services.

Literature Review



- 1. (Baumann, 2018) has discussed that how fintech or Insurtech have made many advancements in the insurance sector. Impact of technology has led to many improvements while buying a personalized insurance especially in life insurance as it uses technology such as big data analytics, Artificial intelligence and Machine learning which helps to read analysis of huge volume of data which is available based on lifestyle, prior diseases, appetite and finance which helps the person to choose insurance based on his choice finance premium paid and also based on health conditions of the insured person. Traditional insurance sector was high costing it used to be so costly because mostly insurance sector used to work on paperwork based only and also it used to work on physical infrastructure which used to be heavily costly as paying rents and bills (Electricity bills) of the infrastructure used to cost more. With the help of use of technology.
- 2. The **(Koprivica, 2018)** have discussed that Insurtech companies are attracting more funds and becoming unicorn companies. It is believed that Insurtech companies have grown 12 times of the size in last 5 years. Indian Insurance sector has been mobilised and have attracted more than 2.5 US Dollar and expected to attract more fund in the coming years. As per the research going on it can be clearly seen that due to rapid development in the size of the Insurtech market can play a vital role in the growth of the Indian economy by 2047. As India's is the 3rd biggest Insurtech market.
- 3. According to (Piero Gancia, 2025) impact of Insurtech has made insurance sector faster and quick. Due to impact of ai and technologies like machine learning has made detecting huge data easier and quick especially for taking quick decision with less time required for data analysing. As per their research have also studied that impact on ai in insurance sector has made insurance sector challenges resistant which mean due to impact of ai in insurance sector has made easier to identify the challenges and solutions can be made while identifying the risks earlier. Ai has also made filling the protection gaps. It has also made earlier to detect fraudulent claims in less time. AI has also made identifying the solutions and creative ideas.
- 4. According to **(PTI, 2024)** have mentioned about the opportunities which have been created due to impact of Insurtech in the insurance sector as insurance sector it has made many advancements in the insurance sector as it has help in developing many new ideas and bringing efficiency in insurance sector operations challenges which were being faced by people while accessing Insurtech services in the recent years. In India due to lack of technology knowing people for them it is developing a challenge as major part of the population of the country is unable to access the data.
- 5. According to (What Is InsurTech, 2025) have mentioned about the basic meaning of insurtech meaning using technology for using insurance procedure ai it becomes time savier as in olden traditional times buying insurance was the most difficult things as it used to take lot of time first agents used to meet clients then it used to take lot of procedure for taking insurance and also it was very difficult for the agents ti identify which type of insurance is suitable for the customer thus buying insurance was a big problem since introduction of insurtech solutions buying insurance has become easier. Apart from that it was also observed that imapet of insurtech has also made insurance claim getting easier and quick, before times it used to take one week to 15 days for getting insurance claims by the company. Now it was seen that claims get approved within 24 hours thus it porves that imacpt of insurtech has made insurance sector quick, efficient and sustainable.

Research Methodology:



Method of data collection: This research study is based on Quantitative and Secondary data collected from various official and credible sources to understand the trends and patterns occurring in the insurance sector for this research study.

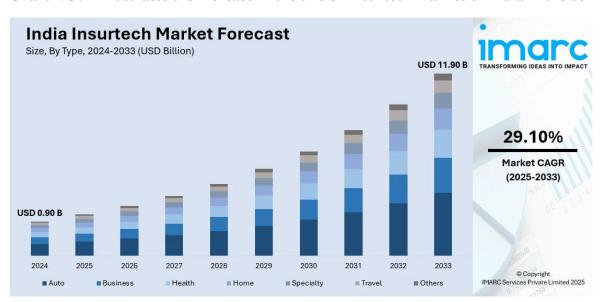
Data type: The data for the present research study is based on Quantitative data in nature use for analysing measurable trends in the insurance market and to measure the growth rate in the past few years and to understand to future assumptions for the global insurance sector market.

Sources: The data was collected from various official sources like new articles, research paper, annual reports and statistics published by various multinational companies and Bigs fours.

Statistical Tools and Techniques: Percentage has been used as a statistical tool for analysing for this research study.

Data analysis and interpretation:

Chart NO: 1 Illustrates the increase in the size of Insurtech market of India in the coming years.

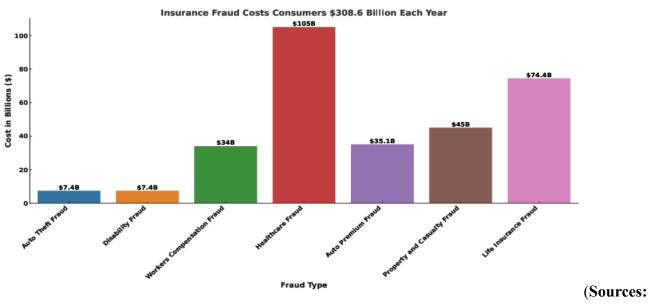


(Secondary Data compiled from the IMARC group)

Interpretation: Chart no lillustrates the expected growth of Insurtech market in the coming years. As per the global trends Insurtech market is completely growing by double speed it is expected to grow by more than double in 8 years especially in India.

Chart No: 2 Illustrates the distribution of frauds cases in different types of frauds





Secondary Data)

Interpretation: The chart above illustrates the distribution of fraud cases in different types of insurance due to impact of Insurtech. As the above picture illustrates that the healthcare insurance has most high consumer fraud cost 105 us dollar following life insurance fraud cost value by 74.48 us dollar.

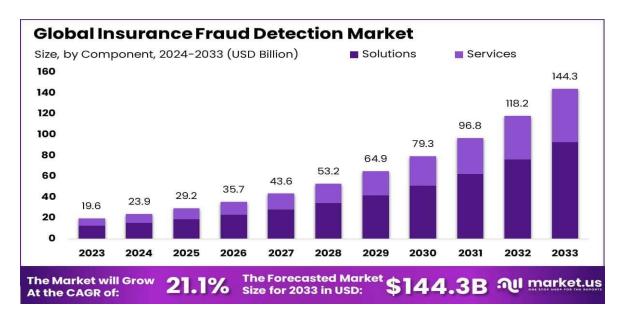
Table no 1 Types of major fraud occurring in global Insurtech market.

Region/Sector	Losses/Impact	
		(Sources
US economy (annual fraud costs)	\$308.6 billion	Secondary Data)
Europe insurance fraud losses	€13 billion (10% of payouts)	
Asia-Pacific fraudulent claims	22% YoY increase (2023)	
Savings via fraud prevention tech	\$4 billion	
Ghost broking scams in the UK	£20 million (2023)	
Life insurance fraud losses (2023)	Over \$2 billion	
Fraud recovery globally (2023)	\$1.3 billion	

Interpretation: It can be clearly seen that the major frauds occurring in the global Insurtech market. It can be clearly seen that us economy annual fraud cost is 308.6 billion dollars. It can be seen even in developed countries insurance fraud scams are brig

Chart no 3: Illustrates the global insurance fraud detection market.





(Sources: Secondary Data)

Interpretation: The above chart illustrates the global insurance fraud detection market trends. It can be clearly seen that global trends suggest that Insurtech fraud detection is growing by 21.1% CAGR and it is forecasted that by 2033 \$144.3B forecasted market.

Findings of the Research study:

- 1. It was clearly seen that Indian Insurtech market is growing it is estimated by 2033 Insurtech market will grow double in size.
- 2. It was clearly seen that healthcare insurance sector faces frauds on a large-scale following life insurance.
- 3. Data suggests that US economy faces highest number of Insurtech frauds in the global market by 308.6 billion dollars, following European insurance fraud losses by 13 billion dollars.
- 4. Research analyse that global fraud insurance detection market leads by 21.1% means that

Conclusion:

Final words would be that impact of fintech on insurance sector has made insurance sector procedure easier from buying the insurance now don't requires any prior meeting or any formal meetings with agents just with the one click anyone can buy any type of insurance according to their preference from any part of the world at any time in just one click Thus fintech implications have revolutionary impact on insurance sector as it has reduced the time of getting a claim within 24 hours is possible without any big Hussle also earlier many times getting insurance policy was difficult but now with the help of Artificial intelligence anyone with any one with any health condition or any financial condition. Fintech has made many advancements in detecting fraud in insurance sector in traditional insurance sector it was difficult to diagnose frauds in the insurance sector leading to customers losing trust on insurance sector. Fintech has made awareness about insurance sector and has also resulted in mass reach to every part of the country not limited to only urban or semi urban areas but has also made reached to rural areas as well. Fintech has also made evidence document of buying insurance in digital platform helping in storing data in digital mode which saves the document from getting document destroy or damaged or lost.



So fintech in insurance sector has made many improvements in the insurance sector but has also made concerns on may problems at first sharing confidential details like Aadhar card, Pan card details on the digital application or platforms might have a risk of getting leak to fraudsters and it might cause frauds and scams. Similarly, there are many fake websites and insurance policy made giving greed to customers of less premium payment which leads to frauds and scams and may lead to people stop buying insurance and people might lose trust in buying insurance. Many times, in rural areas due to less infrastructure development it might cause poor network connectivity cause many times payment failure leading to double payment of disputes. Sometimes there are server down from the websites or from the institutions leading to slow procedures. In India there are many people who don't have accesses to smartphones or good internet connectivity which makes difficult for the population to accesses these online services. In still today many people believe that digital insurance means frauds and still today people also believe that insurance is a luxury thing which means insurance is only for rich people. These all factors resulted in loss of public interest in fintech insurance platforms or on Insurtech.

Thus, many companies try to fix the current issues like fixing bug issue results in server down or frauds. Similarly, many companies and government regulatory bodies have introduced many regulatory compliance tools to detect cyberfraud scams and digital arrest happening due negligence. IRDAI (Insurance Regulatory and Development Authority) has also made many advancements in detecting insurance frauds and scams and also using tools like forensic accounting to detect frauds and solve the problem and also to prevent peoples trust on losing these websites.

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