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A Perspective on Prevalent Insurance Frauds Focused on Types of Frauds, Methodologies Adopted and Preventive Solutions Available

Vishesh Bhatnagar[1], Dr Nischol Mishra[2]
M.Tech Student[1] (Cyber Forensics), Associate Professor[2]
[1,2]School of Information Technology *(SOIT)*, RGTU, Bhopal, M.P., INDIA
vb.eduportal22@gmail.com[1]

***Abstract*—Indian Insurance market stands at $131 Bn as of Financial Year 2022. The Indian Insurance industry grew at a CAGR of 17 % over the last two decades and is expected to continue its commendable growth trajectory in future years. India is presently ranked 11th in Global Insurance Business. The Life Insurance Industry in India recorded a total premium of INR 5.73 Trillion (approximately $ 81.3 Bn) in FY 20 with addition of 28.847 million new individual policies. The Indian Insurance market is poised for further growth driven multiple favorable scenarios including favorable demographics (almost 55% within the working age group of 20-59), expanding middle-class (as per estimates, by 2030, India will add 140 Mn to middle class), rising mobile / digital technology penetration raising digital insurance, spur in insurance demand owing to pandemic and new Government insurance / social benefit programs including PM-JAY, PMFBY, PMSBY, etc.The Insurance Industry in India presently has 58 insurance companies, including 34 non-life insurers (including 25 general insurers, 07 standalone health, 02 specialized insurers).Considering the conservative financial inclination of an average Indian investor, the insurance market, therefore, makes for a perfect trap for an unvigilant bread-earner.**

Keywords—Life Insurance frauds, Automobile Insurance, Health Care Insurance, Property Insurance, Premium frauds.etc.

I. Introduction

The category of technology influenced digital / cyber-crimes wherein the victim is trapped through insurance related fraudulent telephone calls / e-mail spams are being categorized / recorded under the term Insurance Frauds. Insurance Frauds are also committed for premium diversion, fee churning, asset diversion and workers compensation frauds, etc. Insurance Frauds are diverse and occur in almost all areas of insurance including property, auto, health, etc. Insurance claims also range in severity, from slightly exaggerating claims to deliberately causing accidents or damage. Fraudulent activities affect the lives of innocent people, both directly, through accidental or intentional injury or damage, and indirectly by the crimes leading to higher insurance premiums. Insurance policies / contracts offer both the insurer and the insured the opportunities for exploitation of same for frauds with the chief motive being to extract financial profit. Insurance Frauds can also make for a low-risk and lucrative enterprise with court sentences to insurance frauds being lenient, reducing the risk of extended punishment. Additionally, the insurance providers also succumb to the pressures of maintaining reputation for safe operations, thereby, preferring settling claims rather than opting for legal discourse which itself can prove to be a dearer choice over the claim amount itself.

II.TYPES OF INSURANCE FRAUDS

Insurance Frauds prevail in all insurance sectors including Life Insurance, Health Care insurance, Automobile Insurance, Property Insurance, Premium frauds, etc. the same are detailed herein as under:

a) Life Insurance. Reportedly, majority of life insurance claims occur at the application stage with the applicants misinterpreting their health, and other personal information in order to get cheaper premiums. Life insurance frauds may also involve incidents of customers faking their own deaths to claim life insurance. Fraudsters may also sometimes turn up after a few years claiming loss of memory.

b) Health Care Insurance. These frauds are described as intentional act of deceiving, concealing or misrepresenting information that results in health care benefits being paid to an individual or group. Frauds in this category can be done by both the insurance provider and the person insured. Customer / member can commit frauds by making claims on behalf of ineligible members and /or dependents, alterations on enrollment forms, pre-existing conditions, failure to report other coverage, not reporting prescription drugs, frauds relating to work-related injury, etc. Insurance company agents can also commit similar frauds

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by submitting bogus physician certifications, billings of services not rendered, billing for higher level of services, diagnosis or treatments that are outside the scope of practice, alterations on claims submissions and providing services while medical licenses are either suspended or revoked.

c) Automobile Frauds. The fake claims made involve the fraudsters faking accidental deaths or staging collisions to make false or exaggerated claims and collect insurance money. Staged collision fraudsters use a motor vehicle to stage an accident with the innocent party. Typically, the fraudsters' vehicle carries four or five passengers. Its driver makes an unexpected maneuver, forcing an innocent party to collide with the fraudster's vehicle. Each of the fraudsters then files claims for injuries sustained in the vehicle. The ring may also involve a recruited medical practitioner diagnoses whiplash or other soft-tissue injuries that are hard to dispute later. Exaggerated claims are frauds wherein fraudsters claim all previous pending damages, in case of a minor accident at the garage, thereby, exaggerating it.

d) Property Insurance. With an intention to extract financial gains, fraudsters claim more than the actual damages / value of the property destroyed. Cases also involve destruction of goods which otherwise were not getting sold in the market.

e) Premium Frauds. These frauds are committed by under reporting the risk being insured, essentially to make the premiums cheaper. This can be done for any type of insurable risk and is most noteworthy in workers compensation insurance, wherein the parties involved report fewer employees, less payroll, and less risky employees than is actually intended to be covered by the policy.

III. CYBER-CRIME PERSPECTIVE ON INSURANCE FRAUDS

From the cyber-crime perspective, Insurance Frauds are generally committed by making victim fall in trap of convincing fake insurance related telephone calls. The fraudulent callers are increasingly ingenious and appeal to our sense of fear and greed to part with details and money. Fraudulent callers / tele-operatives modus operandi for conduct of Insurance Frauds essentially comprises different types of fraudulent telephone calls, which are compiled, as following:

a) The caller pretends to be from the service branch of LIC (Life Insurance Corporation of India Ltd.) and offers transfer of existing policy to newer policy, in lieu of better returns.

b) The caller claims that there is an annual equity bonus lying unclaimed in the victim's account, which will be transferred to your insurance Agent/Govt. Then the fake caller asks to deposit money in a certain bank account to avoid the due transfer.

c) The caller pretends that the victim's Insurance agent purchased insurance policy of a company at the time of the victim's policy purchase. The victim is further convinced that the dividend from policy will be transferred to the agent & the insurance company. Victim is on this pretext asked to deposit money into another bank account to avoid this transfer / get the dividend money.

d) The victim is trapped by claiming that he/she is entitled for loyalty bonus for being a valued customer. The bonus will be transferred to the agent instead of the customer / victim. The caller thus lures the victim to give away his/her policy details.

e) The caller pretends to be calling from Insurance Verification Department. The caller than asks for PAN card number, bank details and AADHAR number to complete verification process.

f) The caller pretends to the victim that the policy is due for expiry/cancellation and the money will be transferred to the insurance agent and LIC. The caller than extracts personal details, policy details, bank account details and code behind card to complete electronic transfer of money.

g) The caller pretends that there was a bonus due on the customer's policy and the same is being cancelled. The caller convinces customer that incase of cancellation 40 % would be transferred to LIC agent and 60% would go to local branch. By pretending to be raising an objection against cancellation, caller seeks AADHAR and PAN card details.

h) The caller extracts insurance policy and other details citing verification reasons. In case, of on-submission the caller pretends that the payments and pension plan will be cancelled.

i) The caller convinces victim to stop paying insurance premium as it has got lapsed due to some reasons. The caller convinces customer that a new policy must be bought and extracts personal details.

j) The caller claims that the insurance policy is running in loss and offers new policy which will recover the money and make profit for the customer.

k) The caller asks to surrender existing policy as a new policy is being offered with better terms which would make for a better offering than the existing one.

l) The caller impersonates to be a LIC employee and offer bonus and better returns upon purchase thereby extracting details.

m) The caller pretends the customer that he/she has been cheated and citing moral grounds / compulsions has called to inform and offer a new product to cancel the old policy and recover the money for the customer.

n) The caller pretends to be calling from IRDAI. The caller than convinces the customer that he/she is entitled for bonus on the life insurance policy and to realize the payment / amount transfer, the customer has to make an investment first, and claims it to be the last day.

o) The caller claims that the agents make a lot of money in bonuses and policy purchases, offer to transfer the benefits back to the victim by offering new policy.

IV. PREVENTIVE MEASURES / PRECAUTIONS

a) Never respond to fraudulent callers trying to extract any sort of information.
b) Maintain a record in hard copy (example bank passbook) of policies, etc.
c) Report the incident to the nearest branch, in writing, immediately upon any such incident.
d) Always make payments through cheque or credit cards. Cheque or credit card payments usually can be traced and verified.
e) Immediately submit application to bank to stop payments / cheque, incase, any payment is made.
f) Intimate in writing to the insurance company of the attempted fraud.

V.NECESSARY STEPS FOR REGISTERING COMPLAINT WITH CYBER CRIME DEPARTMENT

a) Compile / collect all emails/SMSs received related to the alleged transaction. Collect bank statement from the concerned bank of last six months. Brief on facts related to the complaint as to how the fraudulent caller / impersonator approached you, etc. Share all possible links related to the tele-caller including the calling number, in case of the fraud being related to tele-calling, etc. Compile / collect all emails/SMSs received related to the alleged transaction.
b) Collect bank statement from the concerned bank of last six months.
c) Brief on facts related to the complaint as to how the fraudulent caller / impersonator approached you, etc.
d) Share all possible links related to the tele-caller including the calling number, in case of the fraud being related to tele-calling, etc.

VI. ARTIFICIAL INTELLIGENCE BASED INSURANCE FRAUD DETECTION SOLUTIONS

Insurance providers are now increasingly utilizing Artificial Intelligence based solutions for the audit of insurance claims made, instead of deploying manual checks. For example, an Insurance provider of Turkey, viz. ***Anadolu Sigorta,*** upon deploying predictive analysis software called ***FRISS***, reported a 210 % ROI within one year of using the software. The company reported that it had nearly 25000 to 3000 claims to scrutinize for fraud indicators each month and it took nearly two weeks of manual process for checking each claim. The firm wanted to speed up the process, thereby make space for faster claim settlements. After implementing FRISS software, the company was able to gauge the fraud risk of a claim in real time. The firm, ***FRISS*** claims that ***ANADOLU SIGORTA*** saved nearly $5.7 million in fraud detection and prevention costs.***AXA***, one of France's largest insurance providers opted for UK-based startup ***DarkTrace*** to employ solution that could help them detect and handle threats from advanced cyber-criminals. ***DarkTrace*** claims AXA was primarily concerned with monitoring their entire network and the ability to contain emerging threats. ***Dark Trace Enterprise Immune System*** software is trained on the behavior of computer-and-networking-using employees and detects their patterns across the workdays. The software is packaged with ***Antigena***, the company's autonomous response software that then takes action against detected threats. ***Antigena*** is advertised as able to shut down users within a client's network whose behavior is consistent with what it has been trained to detect as a security threat, etc.***CNA Financial,*** uses **Shift Technology's FORCE** software solution for fraud detection. The insurer wanted to ensure all known fraud methods are investigated within their claims. Shift Technology claims their FORCE software includes predetermined analytical paths for fraud analysis and provides contextual information regarding the next best step for the client.

VII. ARTIFICIAL INTELLIGENCE APPROACHES FOR FRAUD DETECTION

Two main approaches are prevailing for designing AI based solutions for fraud detection namely Anomaly Detection based fraud detection and Predictive Analysis based Fraud Detection.

Anomaly Detection method essentially utilizes machine learning models that are trained on stream of labeled data. This allows the machine learning model to establish a baseline of what a normal claim might look like, and thus a general sense of how to recognize any anomalies. When a given event or claim deviates from established normal pattern, the software will notify a human monitor.

In addition to anomaly detection software machine learning models for insurance frauds can be used as basis for predictive analysis and prescriptive analytics software. Prescriptive analytics software takes the correlative predictions of predictive analytics one step further to provide the user with recommendations for the next best step when fraud is detected. Predictive analytics-based fraud detection software requires insurer to label a large number of claims as fraudulent and legitimate respectively. This way, the machine learning model will discern fraud methods according to fraud methods present in the labeled fraudulent claims. Some of the other AI / Machine Learning focused tools include *SEON* (Blocks bad users and prevents frauds), *ACTICO* (for smarter digital decision making), *AMLcheck* (Spanish Market expert), *Dow Jones Risk & Compliance* (Eponymous AML Risk Mitigation), *FEEDZAI* (Fight financial market with AI), *HM Treasury* (Official UK and EU Sanctions list), *iCOMPLY* (Seamless

KYC experience), *Ondato* (KYC checks), *Refinitiv World Check* (discover risk), etc.

VIII. FUTURE WORK

Future Studies on the topic could be undertaken to cover similar frauds relating to insurance covering newer technology based financial products like block chain related products, bitcoin, etc. Studies can also be undertaken on the extent of sector specific crimes within any Geographical region like say Asia or specific to any country. Additionally, a dedicated comparative study on AI based tools for fraud detection can also be undertaken**.**

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