Claim Pattern & Fraud Insights DashBoard (in Power BI)



1. What insights can you draw from this data around claims patterns and fraud?

INSIGHTS:- From the provided datasets, we can draw several insights regarding claims patterns and potential fraud:

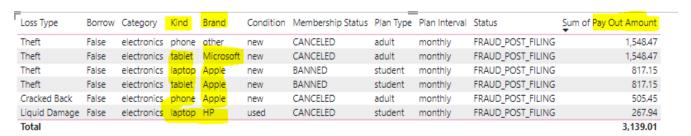
- a. **Claim Frequency by Device Type: Phones > Laptop > Tablet > Headphones** consistently have higher claim frequencies compared to others, it indicate that a potential fraudulent activity targeting these devices.
- b. **Plan Type**: Monthly Plan Users Specially the Adult Age Category of users are Most Prone to making claims or engaging in fraudulent behavior.
- **c. Device Condition:** The **New Devices** has the Majority Target Sector for the Fraudsters rather than Used & Refurbished Devices.
- d. **LOSS TYPE**: The loss type **THEFT** > **Cracked Back** > **Cracked Screen** > **Liquid Damage** reported by the users are the Major Reasons for the Fraudulent.



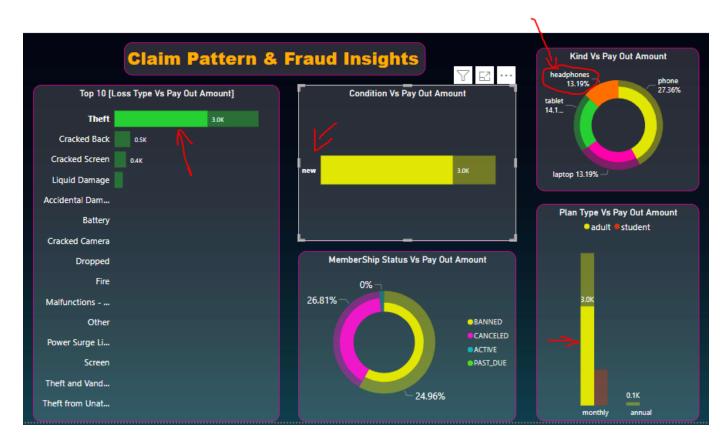
2. What other data points would you want to include/track to derive further insights?

INSIGHTS:-

a. The **Device Type** Like **Phones, Laptops, Tablet of Brand type Apple, Microsoft, HP** are been Targeted more in all Categories.



All the users who purchased the New Headphones are Been Claimed as THEFT by the Adults of Monthly Plan
Type only.



- c. Too many attempts in too little time could raise flags for Fraudulent Activity.
- d. Newer the Account, Greater the Chances of Fraud.

3. What are some shortcomings of this data / What would you improve in this data?

The provided data offers valuable insights into claims patterns and potential fraud, it also has several shortcomings and areas for improvement:

- Limited Context: The data lacks contextual information surrounding the claims, such as detailed descriptions of the incidents leading to claims, which could provide deeper insights into the nature and severity of damages.
- Incomplete Claim Information: Some fields in the claims table, such as Borrow and Resolution, appear to be empty or incomplete.
- Limited Historical Data: The datasets seem to cover a relatively short time period, which may limit the ability to identify long-term trends or patterns in claims behavior.
- User Behavior Analysis: The data lacks detailed information on user behavior and interactions with the insurance platform, such as claim submission history, communication logs, or user activity logs, which could provide valuable insights into user engagement and potential fraud indicators.
- Lack of data on claims investigation process and outcomes.
- Absence of geographic or demographic data for users and claims.
- No data on customer satisfaction or feedback related to claims experience.

4. What other data points would you have provided if you had more time?

- Temporal Analysis: Investigate trends in claim frequency over time to identify seasonal patterns or potential external factors influencing claims.
- User Segmentation: Segment users based on demographics, geographic location, or usage patterns to identify high-risk groups or segments with distinct claims behavior.
- Claims Severity Analysis: Analyze the distribution of claim payout amounts and their relationship with device types, loss types, and user characteristics to understand the severity of claims.
- Network Analysis: Conduct network analysis to identify connections between users, devices, and claims, uncovering potential collusion or organized fraudulent schemes.
- User Journey Mapping: Create user journey maps to visualize the end-to-end claims process and identify pain points or opportunities for improvement in the customer experience.
- Text Analysis: Perform sentiment analysis on user feedback or communication logs related to claims to gauge customer satisfaction and uncover any recurring issues or complaints.