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**Analysis Report: Car Insurance Claims**

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**Date-17/03/2024**

*PGP-DSBA Online JUNE’ 23*

**Tableau Public Report Link:**

<https://public.tableau.com/app/profile/nitesh.tembhare/viz/Bookbook2/caruse>

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1.Report: Analysis of Claims by Education Level

Objective: To analyze the distribution of car insurance claims based on education level and derive actionable insights to improve claims management strategies.

Insights:

High School Education Level:

Total Claim Count: 789

Total Claim Amount: 4,321,307

Average Claim Amount per Claim: 5,479.57

Bachelor's Degree Education Level:

Total Claim Count: 512

Total Claim Amount: 3,178,286

Average Claim Amount per Claim: 6,213.98

Master's Degree Education Level:

Total Claim Count: 214

Total Claim Amount: 1,128,328

Average Claim Amount per Claim: 5,276.71

PhD Education Level:

Total Claim Count: 85

Total Claim Amount: 513,733

Average Claim Amount per Claim: 6,045.09

Key Insights:

Bachelor's degree holders have the highest total claim count and total claim amount among all education levels.

However, when considering the average claim amount per claim, PhD holders have the highest average claim amount, indicating potentially higher severity claims.

Despite having a lower total claim count compared to other education levels, PhD holders contribute significantly to the overall claim amount.

Recommendations:

Tailored Insurance Packages: Develop specialized insurance packages targeting customers with higher education levels, particularly PhD holders, to address their specific needs and potentially higher claim severity.

Risk Assessment Refinement: Refine risk assessment models to account for education levels as a factor influencing claim severity, ensuring accurate pricing and risk management strategies.

Customer Education Initiatives: Launch educational campaigns aimed at customers with higher education levels to promote safe driving practices and risk mitigation, potentially reducing the frequency and severity of claims.

By implementing these recommendations, we can optimize our claims management strategies and better serve customers across different education levels, ultimately improving customer satisfaction and reducing overall claim cost

2.Report: Analysis of Claims by Gender

Insights:

Male claimants have a total claim count of 826 and a total claim amount of $4,927,084.

Female claimants have a higher total claim count of 1115 and a total claim amount of $6,407,840.

Key Insight:

Although male claimants have a lower total claim count, their average claim amount per claim is higher compared to females.

Recommendation:

Conduct further analysis to understand the reasons behind the higher average claim amount among male claimants.

Implement targeted educational campaigns to promote safe driving practices among male drivers, potentially reducing the frequency and severity of claims.

Consider adjusting insurance premiums or policy terms based on gender-specific claim patterns to ensure fair pricing and risk management.

By implementing these recommendations, we can better understand and address gender-specific claim patterns, ultimately improving overall claims management efficiency and customer satisfaction.

3.Report: Analysis of Claims by Location

Insights:

Highly rural/rural areas have a total claim count of 1,081 and a total claim amount of $619,262.

Highly urban/rural areas have a higher total claim count of 1,737 and a significantly higher total claim amount of $10,715,662.

Key Insight:

Although highly urban/rural areas have a higher total claim count, the average claim amount per claim is significantly higher compared to highly rural/rural areas.

Recommendation:

Conduct further analysis to understand the factors contributing to the higher average claim amount in highly urban/rural areas.

Implement targeted risk mitigation strategies in highly urban/rural areas to reduce the frequency and severity of claims.

Consider adjusting insurance premiums or policy terms for customers in highly urban/rural areas to account for the higher risk associated with these locations.

By implementing these recommendations, we can better manage risk in highly urban/rural areas, potentially reducing claim costs and improving overall profitability.

4.Report: Analysis of Claims by Car Type

Insights:

SUVs have the highest claim count of 642 and the highest total claim amount of $3,699,761.

Pickup trucks have the second-highest claim count of 405 but a lower total claim amount of $2,092,868.

Minivans, vans, panel trucks, and sports cars also contribute to the overall claim count and amount.

Key Insights:

SUVs are the most commonly involved in claims, indicating potential risks associated with this vehicle type.

Pickup trucks and minivans also have notable claim counts, suggesting specific challenges related to these vehicle types.

Recommendations:

Conduct a detailed analysis of claim patterns for each car type to identify common causes and risk factors.

Develop targeted safety initiatives and educational campaigns tailored to drivers of SUVs, pickup trucks, and minivans.

Consider adjusting insurance premiums or policy terms for high-risk vehicle types to mitigate potential claim costs.

By implementing these recommendations, we can better manage risks associated with different car types, improve safety awareness among drivers, and ultimately reduce claim costs for the company.

5.Report: Analysis of Claims by Car Age

Insights:

The bar chart illustrates the distribution of claims based on the age of the insured cars, ranging from 1 to 28 years old.

Surprisingly, there is no significant variation in claim count or claim amount across different age categories of cars.

Key Insights:

The analysis indicates that car age alone may not be a strong predictor of claim frequency or severity.

Despite expectations of older cars being more prone to claims, the data suggests otherwise, highlighting the need for further investigation into other factors influencing claims.

Recommendations:

Conduct a deeper analysis to identify additional variables that may be driving claim frequency and severity.

Explore the possibility of incorporating factors such as car maintenance history, driving behavior, and geographical location into the analysis to better understand claim patterns.

Continuously monitor and update risk assessment models to account for evolving trends and factors influencing claims.

By adopting these recommendations, we can enhance our understanding of the complex factors influencing claims and develop more accurate risk assessment strategies to effectively manage claims and mitigate potential losses.

6.Report: Analysis of Claim Severity Index

Insights:

The tree chart visualizes the distribution of the Claim Severity Index, which is calculated using the formula:

Claim Severity Index = (Claim Amount × Claim Frequency) ÷ Car Age

The Claim Severity Index provides a comprehensive measure of claim severity, taking into account both the frequency and amount of claims relative to the age of the insured cars.

Key Insights:

The analysis reveals varying levels of claim severity across different segments of the Claim Severity Index.

Cars with higher Claim Severity Index values indicate a combination of high claim amounts, frequent claims, and relatively young car age, suggesting potentially higher risk profiles.

Recommendations:

Focus on developing targeted risk mitigation strategies for vehicles with high Claim Severity Index values to minimize potential losses.

Implement proactive measures such as incentivizing safe driving practices, enhancing vehicle maintenance programs, and offering discounts for low-risk customers.

Continuously monitor changes in the Claim Severity Index over time and adjust insurance policies and premiums accordingly to ensure adequate coverage and profitability.

By leveraging insights from the Claim Severity Index, we can effectively prioritize risk management efforts, enhance customer satisfaction, and optimize business outcomes in the insurance claims domain.

7.Report: Analysis of Claims by Occupation

Insights:

The pie chart illustrates the distribution of claim amounts across different occupations.

Blue-collar workers have the highest total claim amount, followed by clerical and professional occupations.

Key Insights:

Blue-collar workers contribute significantly to the total claim amount, indicating potential occupational risks associated with manual labor.

Professional occupations, despite having a lower total claim amount, still contribute substantially to the overall claims.

Recommendations:

Tailor insurance products and risk management strategies to address the specific needs and risks associated with different occupations.

Offer targeted safety training and risk mitigation programs for high-risk occupations such as blue-collar workers.

Conduct regular assessments and adjustments to insurance premiums and coverage based on occupation-specific claim patterns to ensure fair and competitive pricing.

By implementing these recommendations, we can effectively manage occupational risks, improve customer satisfaction, and optimize business performance in the insurance industry.

8.Report: Analysis of Car Insurance Claims by Car Type and Use

Insights:

The data provides information on car insurance claims based on car type and use (commercial or private).

Each car type has separate entries for commercial and private use, indicating distinct claim amounts and counts for each category.

Key Insights:

Minivan:

Commercial use: Total claim amount of ₹730,333 with 126 distinct claims.

Private use: Total claim amount of ₹1,145,422 with 233 distinct claims.

Private use of minivans appears to have a higher claim amount and count compared to commercial use.

Panel Truck:

Commercial use: Total claim amount of ₹930,794 with 134 distinct claims.

Panel trucks primarily used for commercial purposes seem to have a significant claim amount and count.

Pickup:

Commercial use: Total claim amount of ₹1,517,788 with 301 distinct claims.

Private use: Total claim amount of ₹575,080 with 108 distinct claims.

Claims for pickups used commercially are notably higher in both amount and count compared to private use.

Sports Car:

Commercial use: Total claim amount of ₹375,667 with 75 distinct claims.

Private use: Total claim amount of ₹1,320,840 with 247 distinct claims.

Despite fewer claims, sports cars used privately have a substantially higher claim amount compared to commercial use.

SUV:

Commercial use: Total claim amount of ₹1,061,966 with 190 distinct claims.

Private use: Total claim amount of ₹2,637,795 with 467 distinct claims.

SUVs used privately have a significantly higher claim amount and count compared to commercial use.

Van:

Commercial use: Total claim amount of ₹787,910 with 108 distinct claims.

Private use: Total claim amount of ₹251,329 with 51 distinct claims.

Similar to other car types, vans used for private purposes have fewer claims but a relatively higher claim amount.

Recommendations:

Assess risk profiles associated with different car types and usage categories to develop tailored insurance products and pricing strategies.

Implement targeted safety programs and risk mitigation measures for high-risk car types and usage categories.

Continuously monitor claim trends and adjust insurance policies and premiums accordingly to ensure profitability and customer satisfaction.

By leveraging these insights, we can enhance our understanding of claim patterns and develop effective strategies to optimize claims management and customer service in the car insurance sector.