

Insurance Risk & Claims Analysis

Domain Knowledge Document

1. Dataset Overview

- Contains car insurance policyholder data including demographics, vehicle details, and claim history.
- Supports risk profiling, claim analysis, premium optimization, and fraud detection.
- Designed for Power BI dashboard development and insurance analytics.

2. Business Objectives

- Identify high-risk customer segments.
- Analyze claim frequency and severity.
- Support risk-based premium pricing.
- Detect unusual or fraudulent claim behavior.
- Improve underwriting and segmentation strategies.

3. Data Categories

Category	Key Fields
Customer Demographics	Birthdate, Gender, Marital Status, Parent, Education, Income, Kids Driving
Vehicle Information	Car Make, Model, Year, Use, Color
Geographic Data	Coverage Zone
Claims Data	Claim Amount, Claim Frequency

4. Core Analytical Concepts

- Claim Frequency: Number of claims filed by policyholder.
- Claim Severity: Monetary value of claims filed.
- Vehicle Age Risk: Current Year - Car Year.
- Household Risk: Impact of Kids Driving on accident probability.
- Geographic Risk: Claim variation by coverage zone.

5. Recommended KPIs

- Total Claim Amount
- Total Claims Filed
- Average Claim Amount
- Claim Frequency Rate
- Loss Ratio
- Risk Segmentation by Age & Income
- Claims by Coverage Zone
- Claims by Vehicle Make & Model