

# Brainstorming session

In this brainstorming session, we will explore potential statistical and business insights that can be derived from an insurance pricing dataset. The objective is to uncover possible statistical and business insights that can benefit insurance partners in terms of cost and time efficiency.

## 1. Overall Pricing Analysis:

- Calculate the median, 25th and 75th percentile, minimum, and maximum prices across all insurers.
- Analyze the price distribution to understand the overall pricing landscape.
- Visualize the price distribution.
- Identify any outliers or extreme pricing values.
- Analyze the overall pricing trends over time using the 'createdAt' field.

## 2. Insurer-Specific Pricing Analysis:

- Analyze the pricing variations among different insurers and different categories, such as customer age, car age, location and seasonality.
- Calculate the median, 25th and 75th percentile, minimum, and maximum prices for each insurer and each category
- Compare the pricing distribution of each insurer using box plots.
- Identify insurers with consistently high or low prices.
- Investigate factors influencing pricing differences among insurers.

## 3. Price Elasticity Analysis:

- Analyze the price elasticity of demand to understand customer behavior.
- Calculate the price elasticity for different insurance products.
- Determine the optimal price points that maximize revenue or market share.
- Identify price thresholds where customers become more price-sensitive or price-inelastic.

## 4. Competitive Pricing Analysis:

- Compare the pricing strategies of different insurers.
- Analyze price differentials between insurers offering similar coverage options.
- Identify pricing gaps in the market and potential opportunities for insurers.
- Monitor competitor pricing changes over time and assess their impact on market dynamics.

## 5. Proposed Data Products for Insurer Clients:

- Pricing Insights Dashboard: Provide a user-friendly dashboard to insurers, summarizing key pricing metrics, trends, and comparisons among insurers.
- Pricing Optimization Tool: Develop a tool that suggests optimal price points based on market data and price elasticity analysis, allowing insurers to improve profitability.
- Competitor Pricing Monitoring System: Implement a system that automatically tracks and alerts insurers about changes in competitor pricing, enabling them to make timely adjustments.

## Conclusion:

The analysis of the insurance pricing dataset can provide insurers with valuable insights and potential benefits in terms of cost and time efficiency. By understanding pricing trends, insurer-specific variations, price elasticity, and competitive dynamics, insurers can enhance their pricing strategies, optimize revenue, and gain a competitive edge in the market. The proposed data products aim to provide insurers with actionable information and tools to make informed pricing decisions.