

# Vehicle Insurance Cross Selling

Function : #Insurance | Industry : #Automobile Industry

## Goal

- To improve up-sell and cross-sell processes in the insurance industry.
- To increase the breadth of coverage within a single category of insurance products.
- To offer different types of insurance coverage to meet different customer needs.

## Technique

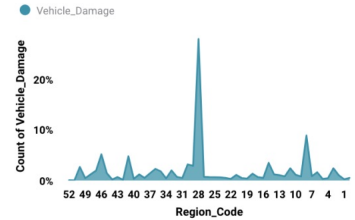
- Statistical Analysis
- Sampling Techniques
- Classification Algorithms
- Visualisation

## Impact

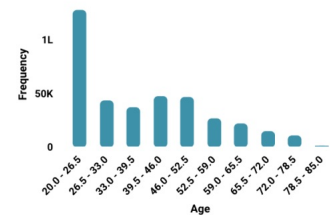
- Increased sales and revenue through precise predictions and focused communication.
- Boosted conversions for the Vehicle Insurance product line and driving business growth.

## Result

Percentage of Damaged vehicles by Regions



Distribution of Age Parameter



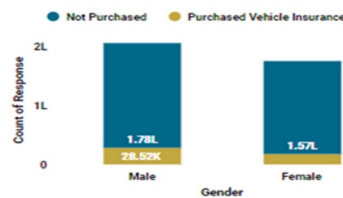
## Value Points

Understand the what, why, when, where & how

### Exploratory Analysis

Exploratory Data Analysis On The Preprocessed Data To Derive Meaningful Data Insights

GenderBased Analysis of Vehicle Insurance Purchas



Gender based analysis of Vehicle Insurance Purchase

Exploratory data analysis enables business owners to derive meaningful insights and making better data-driven decisions as opposed to intuitive ones.

### Feature Engineering

#### Correlation and Covariance

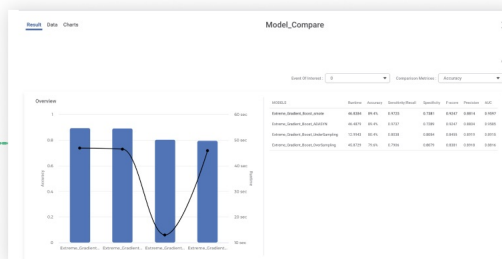
- Covariance
- Pearson Correlation

City	Gender	Age	Vehicle Type	Insurance Type
Delhi	Male	25	Car	Life
Delhi	Male	45	Car	Life
Delhi	Male	47	Car	Life
Delhi	Male	34	Car	Life
Delhi	Male	22	Car	Life
Delhi	Male	27	Car	Life
Delhi	Female	41	Car	Life

Feature engineering extracts best features for our analysis and further modelling

Feature engineering has a direct impact on the performance and adaptability of machine learning models, contributing to better decision-making and cost savings.

### Classification



Applied multiple classification algorithms and then based on accuracy metric best fit is identified

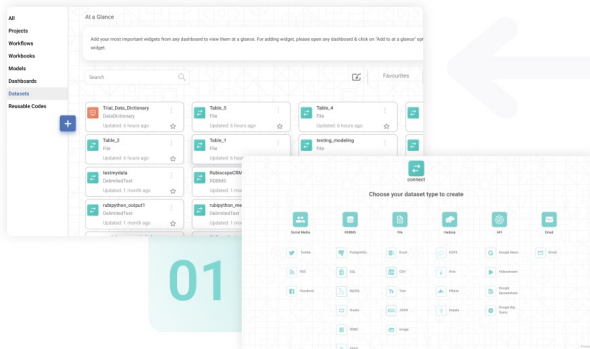
Classification model helps the company to plan its communication strategy to reach out to those customers and optimise its business model and revenue.

# Multi Persona DSML Platform

For all your data needs- Data Engineering, Data Science, Data Visualisation, IoT



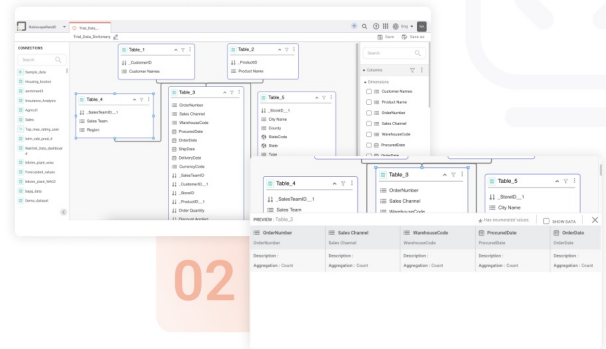
## Data Connect



01

Data Source: Vehicle\_Insurance\_Cross\_Selling

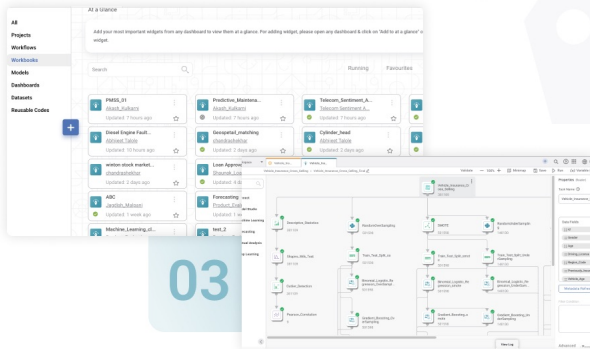
## Metadata Manger



02

Comprehensive Data Operations, encompassing Metadata Management

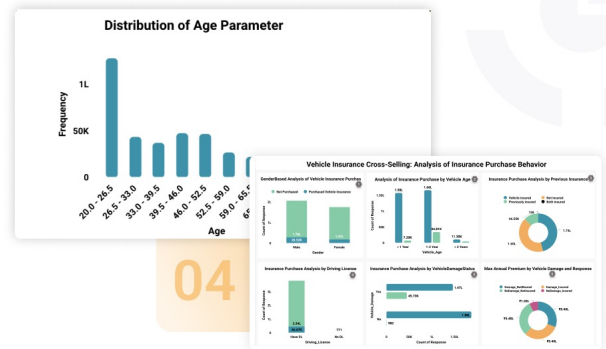
## Model Studio



03

Modelling, encompassing the selection and configuration of models

## Visualisation



04

Viz Ops, Illustrating The Core Trends And Graphical Representations

## Agile Data Science

Encapsulating best practices, tools and methods

### Data Ops

Data Architect Data Manager

### ML Ops

ML Experts Data Scientist

### Viz Ops

CXO Analyst

### Tech Ops

Administrator Cloud architect

### Ideate

- What is the goal?
- How can you leverage the data?
- What do you want to predict?

### Acquire

- How is data sampled?
- Which data is relevant?
- Any data privacy issue?

### Explore

- Plot the data
- Are there anomalies?
- Are there patterns?

### Model

- Build a model
- Fit the model
- Validate the model

### Present

- What did we learn?
- Do the results make sense?
- Can we tell a story?

### Deploy

- Where to Deploy?
- What is the Structure of Pipeline?
- How to Optimise and Scale?