

## Forecasting Cross-Sell Opportunities for Insurance

The client is an insurance company that has provided health insurance to its customers. Now, they need your help to build a predictive model capable of forecasting whether the policyholders from the previous year might be interested in purchasing vehicle insurance as well.

The dataset consists of the following properties:

- **id**: Unique ID of the buyer.
- **Gender**: Gender of the buyer.
- **Age**: Age of the buyer.
- **Driving\_License**: 1 if the user has a driver's license, 0 otherwise.
- **Region\_Code**: Unique code for the buyer's region.
- **Previously\_Insured**: 1 if the user already has a vehicle insured, 0 otherwise.
- **Vehicle\_Age**: Age of the vehicle.
- **Vehicle\_Damage**: 1 if the user has damaged the vehicle in the past, 0 otherwise.
- **Annual\_Premium**: The amount the user has to pay as a premium during the year.
- **Policy\_Sales\_Channel**: Anonymized code of the channel used for the proposal (e.g., by email, by phone, in person, etc.).
- **Vintage**: Number of days since the user has been a customer of the company.
- **Response**: 1 if the buyer responded positively to the sales proposal, 0 otherwise.

The goal of the model is to predict the value of **Response**.