First Project
(Proposal)

SDAIA T5 Bootcamp

Health Insurance to Vehicle Insurance Prediction

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Introduction:

Accidents happen across all walks of life, and we cannot always prevent them. Therefore, the insurance sector is made up of companies that offer risk management in form of insurance contracts and the insurer will guarantee payment for an uncertain future event.
In this project an insurance company that has provided Health Insurance to its customers now need to predict whether the policyholders (customers) from past year will also be interested in Vehicle Insurance provided by the company.

Resource:

I got the dataset from Kaggle website
https://www.kaggle.com/anmolkumar/health-insurance-cross-sell-prediction

Description of Dataset:

Number of Rows: 381110
Number of Columns: 12

Feature	Description
ID	Unique ID for the customer
Gender	Gender of the customer
Age	Age of the customer
Driving_License	0 : Customer does not have DL, 1 : Customer already has DL
Region_Code	Unique code for the region of the customer

Previously_Insured	1 : Customer already has Vehicle Insurance, 0 : Customer doesn't have Vehicle Insurance
Vehicle_Age	Age of the vehicle.
Vehicle_Damage	1 : Customer got his/her vehicle damaged in the past. 0 : Customer didn't get his/her vehicle damaged in the past.
Annual_Premium	The amount the customer needs to pay as premium in year.
Policy*Sales*Channel	Anonymized code for the channel of outreaching to the customer ie. Different Agents, Over Mail, Over Phone, In Person, etc.
Vintage	Number of days the customer has been associated with the company.
Response	1 : Customer is interested, 0 : Customer is not interested

Tools:

- Jupyter
- Pandas
- Matplotlib
- Word
- Numpy
- Github

Questions this project will answer:

1- Number of customers with vehicle insurance?
2- Whether the customer has a damage to its vehicle in the past?
3- Number of customers who needs to pay premium in a year?
4- Whether the customers are interested in paying for vehicle insurance?