**Health Insurance to Vehicle Insurance Prediction**

**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.

I got the data from Kaggle website

https://www.kaggle.com/anmolkumar/health-insurance-cross-sell-prediction

**About the Dataset:**

Contains 381110 Rows, and 12 Columns

|  |  |
| --- | --- |
| **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 ustomer has been associated with the company. |
| **Response** | 1 : Customer is interested, 0 : Customer is not interested |

**Tools:**

- Jupyter

- Pandas

- Matplotlib

**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?