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| **PROJECT NAME** | **Cross-Sell Prediction** | | |
| **PROJECT LOCATION** | **George Washington University** | | |
| **EST. START DATE** | 11/22/2021 | **EST. FINISH DATE** | 12/7/2021 |
| **Team Name** | T3-Linear Boost | **Git Hub** | <https://github.com/hemangikinger/LinearBoost> |
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| **SMART QUESTION** | To analyze what factors, suggest whether a customer would be interested in Vehicle Insurance | | |
| **DESIRED OUTCOME** | Impact Factors and Classification Model | | |
| **ACTION TO COMPLETION** | Answer SMART question using classification models | | |
| **DATA SOURCE** | Kaggle (<https://www.kaggle.com/ishandutta/analytics-vidhya-insurance-cross-sell-prediction>)  There are nearly 380,000 observations and 12 features in our dataset. | | |
| **PROJECTED TEAM** | Hemangi Kinger, Sara Sanchez, Mahtab Barkhordarian, Ishan Kuchroo | | |
| **SUMMARY** | **SMART Problem**? Whether a customer would be interested in an additional insurance service like vehicle Insurance is extremely helpful for the company because it can then accordingly plan its communication strategy to reach out to those customers and optimize its business model and revenue.  From our EDA, we found that vehicle damage, previously insured and vehicle age have significant impact on whether a customer will buy vehicle insurance or not. We’ll use this understanding to build a classification model.  **Introduction**  An insurance company that provides medical insurance to its customers wants to know how many of their existing policyholders (customers) from last year will also be interested in Vehicle Insurance provided by the company.  What is an Insurance Policy? An insurance policy is an arrangement by which a company undertakes to provide a guarantee of compensation for specified loss, damage, illness, or death in return for the payment of a specified premium.  A premium is a sum of money that the customer needs to pay regularly to an insurance company for this guarantee.  What is Vehicle Insurance? Vehicle insurance is insurance for cars, trucks, motorcycles, and other road vehicles where every year customer needs to pay a premium of certain amount to insurance provider so that they provide financial protection against physical damage or bodily injury resulting from traffic collisions and against liability that could also arise from incidents in a vehicle. | | |

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| **ACCEPTANCE OF PROPOSAL** | | | |
| **PROFESSOR SIGNATURE** |  | **DATE OF ACCEPTANCE** |  |