10 Questions from Audience

1. What is the value of only estimating an appropriate car insurance premium for low-risk customers?
   - In this case, low risk customers could be considered as steady revenue since they have no history of claims. Medium and high-risk policies would potentially have a cost associated with the customers' accidents and should be adjusted accordingly to cover the risk.
2. What percentage of the policies that have gone through underwriting would fall under low-risk?
   - 25% of the policies effective in 2018 were considered low-risk.
3. Why were only small to medium vehicles chosen with at least 100 samples?
   - The focus of the project was to focus on regular consumer vehicles that had enough history to accurately predict popular car models.
4. What would be the risks of implementing this model?
   - The largest risk is that the data is over 6 years old.
5. How do we estimate that the model may change from 2018 to 2024?
   - It should be expected that the variance of premium will continue to be affected from 2018 to 2014.
6. What steps could be taken to provide up-to-date data to refine the model?
   - A current list of policies held by an insurance company should undergo the same methodology to build a model to predict low-risk policies.
7. Considering the strong correlation between the motorcycle type and the premium, what percentage of low-risk customers are this type?
   - 77% of the low-risk customers had a motorcycle.
8. How does sex come into play with the premium charged?
   - It appears to be approximately distributed between all 3 potential values.
9. The residuals plotted for Policy ID seem to become more varied and dispersing away from 0 as the Policy ID increases. Why does that happen?
   - It’s possible that another feature not included in the model is another significant influence on the premium price.
10. What percentage of the dataset would be considered as a liability policy?
    - 45% of the policies would be considered liability policies