16/2/17 Consultation Minutes

- Explore Anova for verifying visual interpretation
- Need to follow up with client to chart further direction for project
- Need to conduct more literature review to understand the insurance industry, common benchmarks and indicators. E.g Claim rate of 15% must be contextualized

To Follow up for brainstorming:

- Find out business model of Tokio Marine. Getting more accounts or more profitable accounts
- To find out what is **NC** as their **loss ratio** is high and **claim ratio. Claim Rate** vs **Usage** is also high for NC
- To further divide dataset into Corporate and Personal accounts
- To investigate if **Claim Rate,Loss Ratio, GWPTotal** is higher for Corporate accounts
- For **Vehicle Segment vs loss ratio:** might make sense to group according to corporate and personal use.
- Investigate if Corporate Clients stay longer than personal clients.
- Data Cleaning for **Driver Age** (less than 17 yrs old and more than 100 yrs old)
- Data cleaning for **ClaimPaid** (those 0 and those outliers of over 17 Billion Rupiah)
- To investigate fire and flood claims over a period of 3 years and not consolidate the months
- For Cars, Channel mix in Jakarta is a mix of Agent+Bank+Broker+Dealer+Direct vs Leasing. Compared to Motorcycle, Leasing is the sole major method.
- Need to compare market share of motorcycles if Suzuki and Honda are market leaders and compare with dataset
- Treemap to revise, not to confuse absolute size with relative size. Size = Total Number of Vehicles Insured, Color=% of Claim
- For Marketing Campaigns need to see how long they run for
- Investigate **New Business vs Renewal Business,** possible marketing insights as they know which channels they should cultivate
- From Revenue graph, early 2014, they changed the policy to give low discounts and high commissions. From 2015, the business is declining, need to investigate. Might want to investigate number of policies in 2015 onwards vs 2012-2014
- Explore Parallel Plots with Renewals, Claim Amount and Loss Amount
- Explore Clustering methods with Key Indicators like Loss Ratios, GWP_Total, Commission. Find out which groups are more profitable and match it back to the dataset. Plot the revenue graph to see if the pattern is similar and correlated

For further project deliverables:

- Explore prediction models like Temporal Forecasting and Multiple Linear Regression
- Compare against real data to see which model is more accurate