

Group Project

Team 5

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**1. What analytics question are you planning to address in the report?
How is it relevant for a business or an industry?**

What are the different factors that influence the price of the Toyota car?

Can we predict how well people will like and make a purchase?

What drives the purchase, Eg Price, Model, or combination of multiple factors.

Cost

2. List the null hypotheses for this project.

The null hypothesis will be data points where there is no significant difference due to sampling or experimental error. For this project the null hypotheses would be CC of the car, alongside the weight and the color, since things like horsepower and transmission do have significant difference on the dataset.

**3. Have you identified any dataset(s) on this topic in the public domain?
Provide a link for the dataset(s).**

The dataset we are going to use for this project is from Kaggle. The link is provided under the reference section.

4. Have you done any preliminary analysis (e.g., generating summary statistics, generating charts and tables) using those datasets?

- Goal Seek Method : For purchasing decision or look to work with one variable that can generate a different datapoint and result.
- TrendLines for overall sales : Predictive Analysis to see the growth or fall in sales with respect to other data points.
- EDA(Exploratory Data Analysis)

5. What statistical and/machine learning algorithm(s) you expect to use for running this algorithm?

- Predictive analytics
- Logistic Regression
- Ridge Regression
- LASSO

Reference

<https://www.kaggle.com/klkwak/toyotacorollacsv>

Dataset: ToyotaCorolla.csv