# Research Paper (First Draft)

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### 1 Introduction

- Leasing or buying a car has been a debating issue for decades and there lies numerous pros and cons on each side in which they are considered based on a person's needs. It has been known that car brand and cost are two major factors that affect this important decision [1,6].
- On average, every car owner will change or upgrade their car within 71.4 months [3] and it can even be shorter for car enthusiasts. There are many reasons why car owners would like to replace their old car for a new, better equipped one, due to novelty design, state-of-the-art technology, gas-saving, etc., [5].

### 2 Literature Review

• A car's brand is a strong influential factor that impacts a customer's decision to buy or lease it. As time goes on, a car would require extensive maintenance to ensure its performance and endurance on the road. Brands like Honda or Toyota would obviously cost less for maintenance as opposed to BMW or Audi. Their reputation is recognized for their reliability in the industry, which is why many 20+ age Honda/Toyota vehicles are commonly spotted on the street.

### 3 Methodology

#### (a) Research Question

• Does car brand influence the decision of buying or leasing for person who is shopping for a car?

#### (b) Hypothesis

• In my opinion, regular car brands will have more buying rate compared to luxurious brands. Reason for that is because regular brands is cheaper to buy as well as maintenance in the long term, therefore it fits more buying target than luxury brands. In the same 10 years life span, regular brands might cost as low as 5 times yearly compared to luxurious brands.

#### (c) Variable

• Cost and Brand are the key aspects that influence a customer's buying decision. Dependent variables such as car brand would strongly determine which criteria a customer may choose. Based on [2,4], Luxury and High-end car brand such as Audi, BMW, Mercedes-Benz, etc., generally has higher percentage of leasing rate compared to buying rate, and the gap is even bigger among urban areas. An important reason is because luxury brands don't hold as much values as affordable brands like Toyota or Honda when it comes to reselling, since the market for luxury car brand consumption is

relatively minor, partly due to leisure needs.

• Other Independent variables are the average time a person change a car, the brand, type of car and maintenance. There is a possibility that affordable brands like Toyota or Honda still have some expensive cars when it comes to trim options and customization, but because they are holding the great values and low maintenance fee compared to other car brands (same price), it is more ideal to buy the vehicle instead of leasing it. With the low maintenance cost, car owners may perform maintenance more frequently and therefore, helps keeping the car performs longer and smoother.

#### (d) Experimental Design

- The experiment will be based on Matched Pairs Design in form of Survey. The experiment will be perform for people in range between 20 to 65 years old, where the group will be spread out into 20s, 30s, 40s, 50s and 60s. Using the result in each group to compare with the result in the other group to observe the behaviours.
- The target of this survey is to have as many closed answer question as possible or some question that doesn't have user type too much. Reason is, research participant will likely to spend time to do a survey that is easy and fast, without any thinking or trying to understand the question (unless they really want to share the opinion) Some of the questions could be:
  - i. What is your current car make and model?
  - ii. What was your age when you get the car?
  - iii. Did you buy it or lease it? What was your reason for the selection?
    - A. If buy, How long are you expect to use the car?

- B. If lease, How long is your lease term?
- iv. If you get to choose between buying or leasing your current car again, would you change your method?
- v. Do you think leasing or buying is a better option for luxurious brands? (ex. BMW, Audi,...)
- vi. Do you think leasing or buying is a better option for regular brands? (ex. Honda, Toyota,...)
- vii. Do you think buying a car is always better than leasing/renting a car?

  If possible, please explain your reasons.
- With that ready, the survey will be fair enough that follow the doublemasking study, which the research participant and the person who assess the outcome doesn't know which answer belong to which person.

## References

- [1] 5 Factors in the Buy-or-Lease Decision | Spending | US News.
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- [5] Tom Harbid. Upgrade: 11 Reasons to Buy a New Car and Scrap Your Old One, October 2019. Section: Blog.
- [6] Consumer Reports. Leasing vs. Buying a New Car.