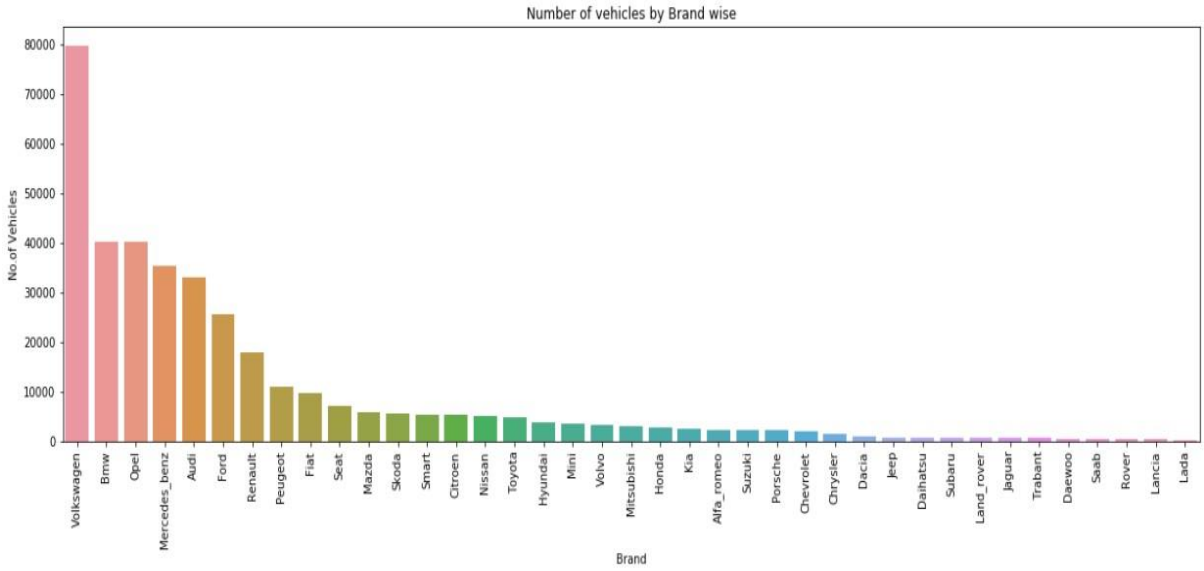
Analysis-2 Report

Q1) Can you tell me No of Vehicles by Brand Available on ebay for sale with the help of visualization.



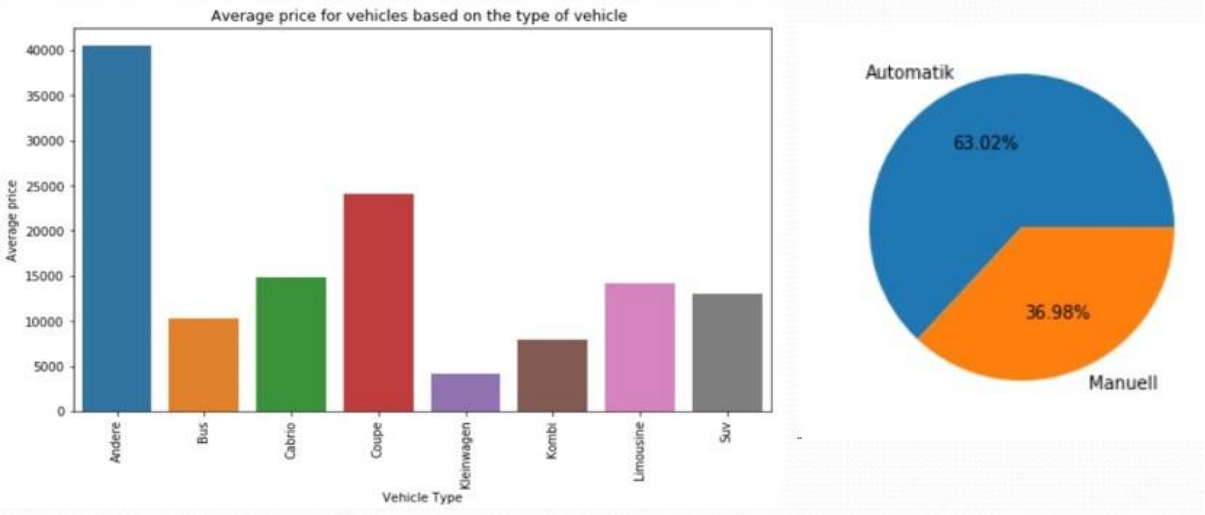
Summary:

- Based on above plot, clearly shows that Volkswagen brand vehicles has more available than remaining brands.
- Volkswagen's Price is very less compare to the other brands, so the company has increase manufactures this brand vehicle most.
- Peoples are also very liking to buy this type of vehicles very most, Because most of the peoples are coming from middle class, so this is very suitable brand for middle class.
- Both BMW and Opel brands has almost equal No.of vehicles. So these cost is greater than Volkswagen's cost.

2) What is the Average price for vehicles based on the type of vehicle as well as on the type of gearbox. Explain me with both numerical and visualization analysis

	vehicleType	price
0	Andere	40483.537217
1	Bus	10302.154602
2	Cabrio	14818.152195
3	Coupe	24073.071794
4	Kleinwagen	4188.791819
5	Kombi	7882.399545
6	Limousine	14210.157136
7	Suv	12995.190972

	gearbox	price
0	Automatik	16027.504194
1	Manuell	9403.267766



Summary:

- Based on above plot , Andere type of vehicles has highest Average price and also more comfort than other type of vehicles.
- So Andere type of vehicles are more costliest.So more people has not willing to buy this type of vehicles ,because these cost is very high.
- Coming to Gearbox types,there are two types of gearboxes.those are Automatic and Manual.
- Most peoples are liking automatic gear system.Becauase less risk in Automatic gear system.So Automatic Gearbox cost is very high compare to manual type.
- So peoples are liking automatic gearbox vehicles,but that the cost is very high.So peoples choose Manual gear box vehicles.

3) What is the marginal probability of private seller

```
# marginal probability=count of private sellers / Total count of sellers
count_privat = df.seller.value_counts().get("Privat",0)              # count of privat sellers
count_Gewerblich = df.seller.value_counts().get("Gewerblich",0)      # count of Gewerblich sellers
count_seller = count_privat + count_Gewerblich                       # Total count of sellers
```

```
marginal_prob=count_privat/count_seller
marginal_prob
```

```
0.9999918376675319
```

Summary:

- From above picture, marginal probability of private sellers is 0.999(approximately).
- Clearly Shows that probability is close to 1. So the role of private sellers is very important in most vehicles sales.
- Compare to private sellers Gewerblinch sellers purchase less vehicles.