**Cars Sales project :**

* **Business questions :**
* What are the most popular brands among consumers, and which brands have received negative feedback? And why ?
* How have sales trends evolved over the years, and what patterns can be observed on a monthly, quarterly ?
* Which branches consistently perform well in terms of sales, and which branches are underperforming? **What strategic recommendations can you provide to improve sales at underperforming branches?**
* What are the key preferences and characteristics of customers who purchase cars?
* **What strategies can be implemented to increase customer visits and sales?**
* Can you develop a forecasting model to predict whether our revenue will increase or decrease in the future?
* Can you perform customer segmentation analysis and identify which customer categories we should target for marketing efforts?
* What would be the most effective times and locations for promotional campaigns to attract customers?
* Can you create a comprehensive report with recommendations on how to boost our sales, identify branches that require additional inventory, and determine if any branches should be considered for closure?
* Notes of analysis :

**- the best years from where sales : from 2009 - 2015 where the better years was : where sales that are better are exceed 500,000,000**

2013 by sales: 1,514,882,616 $

2012 by sales : 1,436,692,787 $

2014 by sales : 1,387,451,637 $

2011 by sales : 649,317,773 $

**- the popular cars are made was : over all years from 1990 to 2015**

\* Chevrolet : by sales - 651,043,650 $

\* Nissan : by sales - 522,206,275 $

\* Toyota : by sales - 442,449,150 $

\* Ford : ford are the popular one by sales - 1,215,810,650 $

\* BMW : by sales - 374,831,950 $

\* Dodge : by sales - 303,277,700 $

\* Lexus : by sales - 212,043,025 $

\* Honda : by sales - 272,382,350 $

\* Mercedes-Benz : by sales - 303,023,500 $

\* Infiniti : by sales - 289,322,825 $

**- the bottom cars made was : over years**

( Saab ) by sales : 1,555,725 $

( Aston Martin ) by sales : 1,297,800 $

( Fisker ) by sales : 441,900 $

( Oldsmobile ) by sales : 351,925 $

( Lamborghini ) by sales : 341,000 $

( Isuzu ) by sales : 323,650 $

( Plymouth ) by sales : 221,000 $

( Lotus ) by sales : 40,300 $

( Geo ) by sales : 9,575 $

( Daewoo ) by sales : 975 $

* **Models of cars based on the popular cars :**
* **Ford** **Cars** **models** **that attract Customers** :
  + **F-150** by sales : 236,460,500 $ where it are the popular model
  + **Escape** by sales : 153,922,650 $
  + **Fusion** by sales : 152,019,725 $
  + **Explorer** by sales : 124,893,275 $
  + **Edge** by sales : 96,983,200 $
  + **Focus** by sales : 92,111,525 $
* **Nissan car the common models was bought :** **Altima by sales 186,337,250 $**
* **Infiniti car models are bought was : G Sedan by sales : 139,038,000 $**
* **Toyota car models are bought was : Camry by sales : 127,784,000 $**
* **BMW car models are bought was : 3 Series by sales : 121,865,375 $**
* **Chevrolet car models was bought : Silverado 1500 by sales : 96,265,600 $**
* **Trims :**
* **Customer was love looking for specific trims like :**
  + **Ford the common trims :**



* + **BMW the common trims :**

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* + **Chevrolet the common trims :**



* **Infiniti the common trims :**



* **Lexus the common trims :** 
  + **Base by sales : $203,310,900**
* **Mercedes-Benz was trims :**



* **Nissan trims :**



* **Toyota trims :**



* **So the Most popular trims customer attract to it was from 1990 to 2015 :**



* **Bodys are popular over years :**



* **Ford Cars : customer attract more into cars that have type of body : the common ones**



* + and the other body are not the best but still good :



* **BMW bodies : the common ones**



* + The good ones but not popular enough :



* **Chevrolet bodies that are common :**
* **Dodge bodies that are common :**



* **Honda bodies are common :**



* **Infiniti bodies are common :**



* **Lexus bodies are common :**



* **Mercedes-Benz are common :**



* **Nissan bodies are common :**



* **Toyota bodies are common :**



* **Type of transmission in all cases was :**



* **Number of cars that we have : 465,768**
* **Number of cars that bought : 472,325** this mean there are cars are bought 2 or more times
* **List of cars are popular : top 10 models : Top 10 Bodies :**





* **The States are more common for us and customer buy cars from them :**



* **The common cars have good assessment but not perfect but not all cars have better assessment have high sales like :** 
  + **The highest cars prices with high price but not the common : top 5 high cars prices**



* **Top 10 extraior colors in cars : Top 10 interior colors of cars :**



* **Top 10 Sellers in cars market from 1990 to 2015 was :** by sales



* **Years from 1996 to 2015 have good sales of cars that mean customer start buy these cars staring from this years but I found the common months that customer like to sell in it :** **Jan , Feb , Mar , May , Jun , Dec**

**Where the most common ones was :**



**But the exception Months that customer not buy in it :**

* + **July , Apr**
* **And best days for buy was : wed , Tue , Thu , Fri**
* **From sales dates that are the dates where the cars are bought :**
  + **I just have 2 years 2014 , 2015 it show:**
    - **2015 have highest sales** by sales : $6,059,650,200
    - **But 2014 have sales** about : $475,938,675
* **the most sales are done in Q1 and Q2 where:** 
  + **in Q1 :** 
    - **total sales : $4,126,919,975**
    - **common months in this quarter are : Jan , Feb**
  + **in Q2 :** 
    - **total sales : $1,916,839,625**
    - **common months in this quarter are : Jun and May**
* **the most days of month where customer like to buy in it : from where sales**
* **Times of Buying Cars :** 
  + **The most times are in interval between : 1:00AM to 11:00AM**
  + **So the common time are from 1:30 AM to 4:00 AM**

**Business questions :**

* What are the most popular cars among consumers, and which cars are not Good Sold ?
*  **Popular Cars Brands - the Brands Cars Not Sold vey well : where quantity are bought from 1990 to 2015 and this are cause of High Price**

