

# Data Analysis Portfolio

# **Great Automotive Toy Company Analysis**

My name is Onipede Opemioniye and I am experienced in data analytics and data science. From my Job experience, I have developed skills in building dashboards with Tableau & Power BI, querying databases using SQL, Data Manipulation using Microsoft Excel. I am passionate about data; I enjoy diving into data to discover trends and uncover valuable insights to help in making business decisions. In this project I used Excel for analysis and created a dashboard using Tableau.

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## Introduction.

In preparation for Great Automotive Toy Company Analysis forthcoming strategy meeting coming up, I have been asked, as an Analyst working for the organization to do the following;

1. Create a dashboard (using Tableau or PowerBI) that demonstrates the company's performance.
  - a. Be sure to illustrate product mix, highest and lowest performing customers and provide your own visualizations on aspects of the data or KPIs that are relevant to the business.
  - b. Include a maximum of four different charts in your dashboard.

In the Report (Word Document)

1. Continued....
  - c. Provide a discussion/explanation of what each dashboard graph/chart is saying, and include why you chose that particular graph/chart to visualize the information.
2. Provide two KPIs for each of the following and any Critical Success Factors (CSFs) to support them based on the data:
  - Overall revenue
  - Sales mix
  - Geographic performance
  - Weakest customer performance (bottom three)
3. Develop two SMART objectives for each of the categories listed above.
4. Calculate the overall NPS for the company. What is this information telling you?
5. What is the revenue churn from Q2 to Q3 in 2017?
6. What is the company's cancellation rate (abandon rate for their orders)?
7. How much revenue was lost due to cancellation

## Explanation of each dashboard graph/chart in the Dashboard

### 1. Task 1; Barchart

A bar chart is used when you want to show a distribution of data points or perform a comparison of metric values across different subgroups of your data.

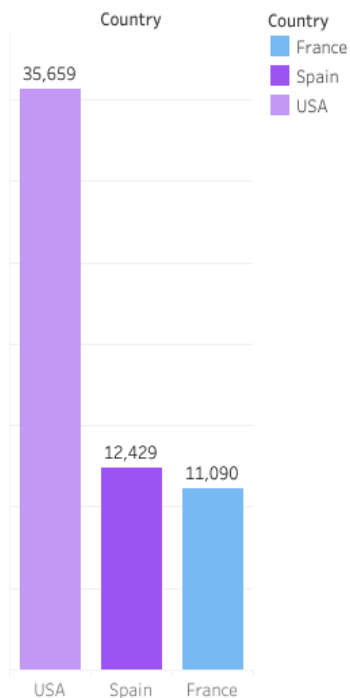
In my Dashboard the Barcharts were used to compare two different subgroups the (Country and Quantity ordered for the Top 3 Countries and the Least 3 countries)

The chart for the Top 3 shows that

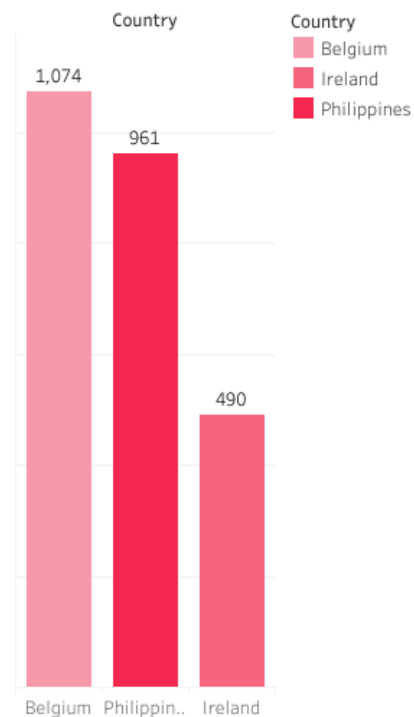
- USA
- SPAIN
- FRANCE

Are the 3 Countries that have the highest order rate in the Companies Dataset

Top three  
Highest Countries  
by Quantity  
Ordered



Least three  
Countries by  
Quantity Ordered



## 2. Line Chart :

A line chart is a graphical representation of an asset's historical price action that connects a series of data points with a continuous line. This is the most basic type of chart used in finance, and it typically only depicts a security's closing prices over time.

I used the Line Chart in my Dashboard to show the connection of the Nps over the time of 3 years.

It was Discovered that in

- November 2016 the Nps was at its first highest at 1,558 and at
- November 2017 it was even higher than the first highest at 1,695

This result shows that in December of both years the Nps survey indicates a great number of people recommending the Company, and if the Company keep up the trend, the company would have a higher value of customers come November 2018.

Nps Graph for Months and Years



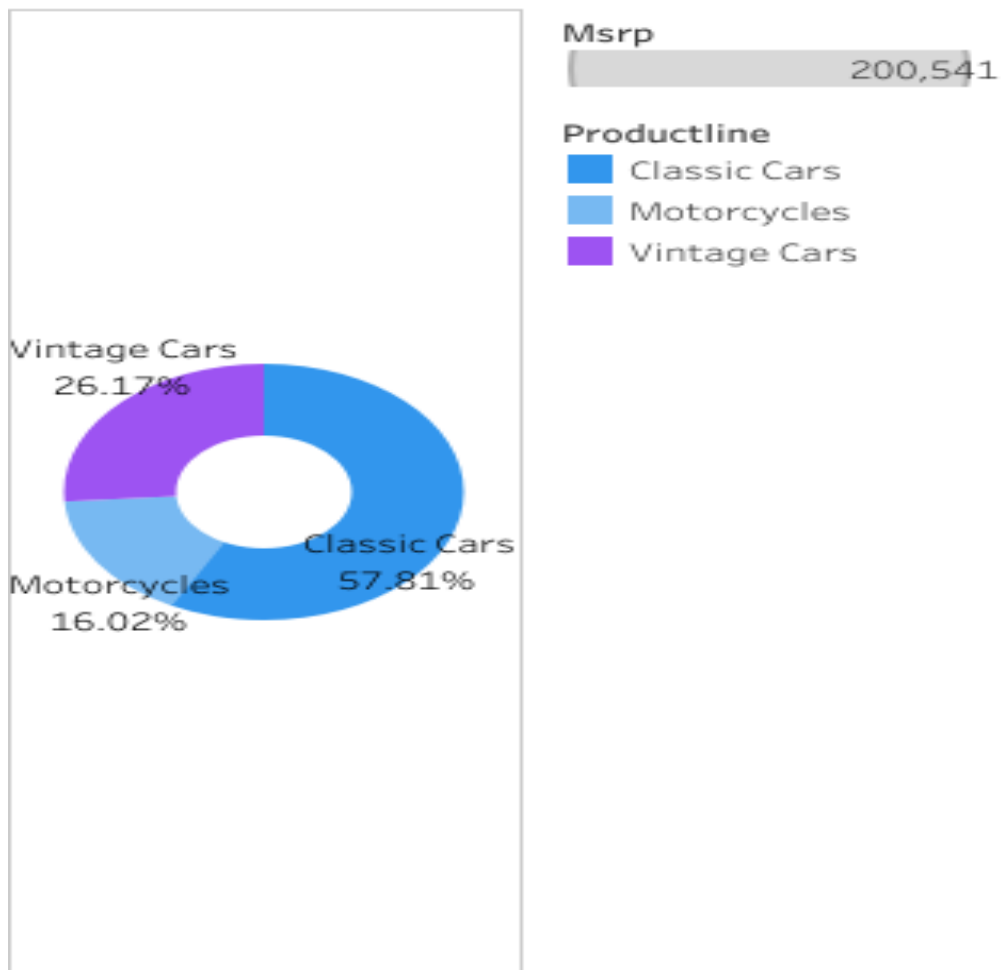
### 3. Doughnut Chart:

Doughnut charts are meant to express a "part-to-whole" relationship, where all pieces together represent 100%. Doughnut charts work best to display data with a small number of categories (2-5).

In my Dashboard i used the Doughnut Chart to express the sum percentage MSRP of the Top 3 product lines

- Classic cars being the highest at 57.81%
- Vintage Cars at 26.17%
- Motorcycles 16.02%

**Product Line  
and MSRP  
Doughnut chart**



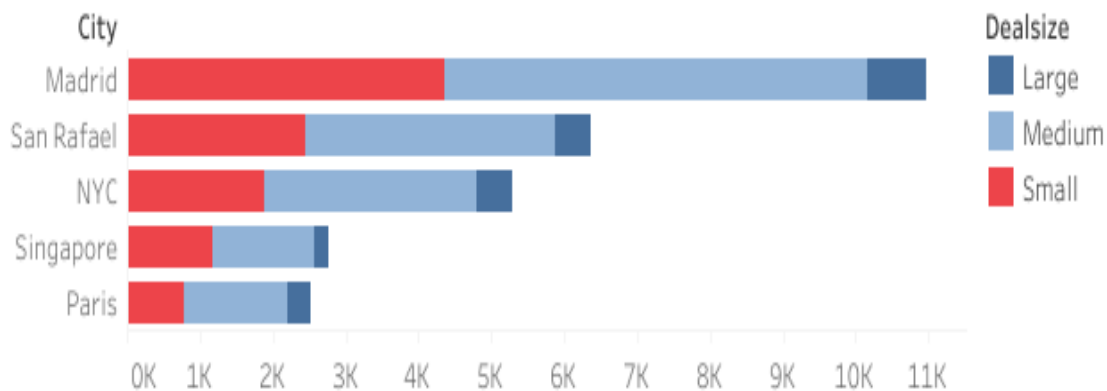
## 4. Column Chart

Column charts are also known as vertical bar charts. column charts are useful for showing data changes over a period of time or for illustrating comparisons among items.

In my Dashboard I used the Column Chart to illustrate the Top 5 cities by the Quantity which the ordered and the dealsize of each city.

- Madrid is shown to have the Largest Dealsize
- San Rafael, showing a result for the second highest
- NYC, shown to have the third highest deal size
- Singapore the second to the last in terms of deal size
- Paris the least highest according to my Column Chart

Top 5 Cities by Quantity Ordered





## Task 2

- Two KPIs for each of the following and any Critical Success Factors (CSFs) to support them based on the data:

- Overall revenue
- Sales mix
- Geographic performance
- Weakest customer performance (bottom three)

### A. Geographic Performance:

1. Number of Customers Retained
2. Must have extended sales of Motorcycles in Spain and France

- **Critical Success Factors;**

Customers who buy these products are more likely to stay, so more marketing are employed to these areas so as to instigate sales growth, so it can merge that of USA

### B. Weakest customer

1. Customer Satisfaction
2. Net Promoter Score

- **Critical Success Factors;**

More efforts in order to improve how processes, systems and people interact with Board and toys co, Atelier Graphique and Royale Belge as they are the 3 weakest customers.

## C. Sales Mix

1. MRR Growth Rate
2. Average Selling Price

- **Critical Success Factors;**

Monthly sales growth measures the increase or decrease of your sales revenue on a monthly basis, in our dataset Trains have the lowest MMR growth rate at January 2016 being the least selling product line.

## **Task 3**

### **A. Overall Revenue**

1. **Specific:** Increase recurring revenue in 2018
2. **Measurable:** Achieve a 25% increase versus one year ago
3. **Attainable:** Improve upon 2017 performance with 15% increase through new customers and reduced churn
4. **Relevant:** Revenue is the engine that drives our profitability
5. **Time-Bound:** Set specific numerical targets for each quarter in 2019.

### **B. Sales Mix**

1. **Specific:** Improve the bench strength of the sales and marketing departments
2. **Measurable:** Reduce turnover to less than 10% and recruit and hire at least three people each quarter

3. **Attainable:** Salary and recruiting budgets are adequate to achieve these targets
4. **Relevant:** Sales and Marketing are key drivers to the company's revenue and profitability
5. **Time-Bound:** A mix of quarterly and annual objectives

### **C. Weakest customer performance (bottom three)**

1. **Specific:** Improve customer service and the user experience
2. **Measurable:** Respond to all tickets within 12 hours, and increase NPS score to 98
3. **Attainable:** Response times and NPS score represent incremental improvement versus one year ago
4. **Relevant:** Our customer's experience will determine our ability to grow
5. **Time-Bound:** As measured by quarterly metrics for response times and NPS scores

## **D. Geographic performance**

1. **Specific:** Extend Sales Concentration to other Countries other than the major ones
2. **Measurable:** Increase delivery rate between country by at least 15%
3. **Attainable:** Response times and NPS score represent incremental improvement versus one year ago
4. **Relevant:** Increase staffing in countries and cities with less Nps
5. **Time-Bound:** As measured by quarterly metrics for response times and NPS scores

## **Task 4**

Calculate the overall NPS for the company. What is this information telling you?

- The overall Nps is 15,500
- It shows that the United States of America has the highest number of Nps, having 5385 followed by Spain and France.

## **Task 5**

**What is the revenue churn from Q2 to Q3 in 2017?**

- The Revenue Churn from Q2 to Q3 in 2017 is 8.09%

- The change from Q2 to Q3 by 8.09% isn't so much of a good stand so the Company should look into it and device ways to make the churn lesser for coming Quarters

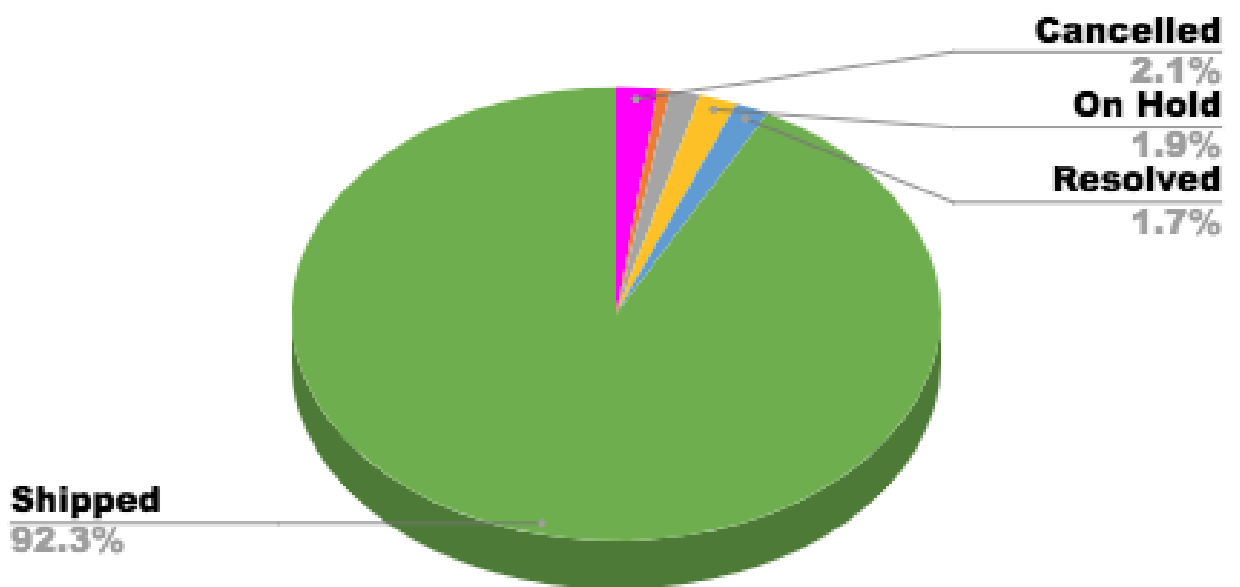
C6		$\text{fx}$	$=(\text{B2}-\text{B3})/\text{B2}$
	A	B	C
1	<b>Quarter</b>	<b>SUM of SALES</b>	<b>Revenue Churn from Q2 to Q3 in 2017</b>
2	Qtr 1	833730.68	
3	Qtr 2	766260.73	
4	Qtr 3	1109396.27	
5	Qtr 4	2014774.92	
6	<b>Grand Total</b>	<b>4724162.6</b>	<b>8.09%</b>

## Task 6

What is the company's cancellation rate (abandon rate for their orders)?

- The Company cancellation rate is **2.1%**

### Status Percentages



## Task 7

**How much revenue was lost due to cancellation**

- The Amount of revenue lost due to cancellation = **21871130.89**

C6

fx

=B6\*2.18

	A	B	C
1	Quarter	SUM of SALES	Revenue Lost Due to Cancellation
2	Qtr 1	2350817.73	
3	Qtr 2	2048120.3	
4	Qtr 3	1758910.81	
5	Qtr 4	3874780.01	
6	Grand Total	10032628.85	21871130.89

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