

Project Description:

Advertising is a way of marketing our business in order to increase sales or make our audience aware of our products or services. Until a customer deals with us directly and actually buys our products or services, our advertising may help to form their first impressions of our business. Target audience for businesses could be local, regional, national or international or a mixture. So they use different ways for advertisement. Some of the types of advertisement are: Internet/online directories, Trade and technical press, Radio, Cinema, Outdoor advertising, National papers, magazines and TV. Advertising business is very competitive as a lot of players bid a lot of money in a single segment of business to target the same audience. Here comes the analytical skills of the company to target those audiences from those types of media platforms where they convert them to their customers at a low cost.

The dataset contains different TV Airing Brands, their product, their category of some brands from the Automobile industry. Dataset includes the network through which Ads are airing, types of network like Cable/ Broadcast and the show name also on which Ads got aired. We can also see the data of Dayparts, Time zone and the time & date at which Ads got aired. It also includes other data like Pod Position (the lesser the valuable), duration for which Ads aired on screen, Equivalent sales &, total amount spent on the Ads aired.

Tech-Stack Used:

- Microsoft Excel 2016: It enables users to format, organize and calculate data in a spreadsheet. It organize data in an easy-to-navigate way. We need not to perform any complex mathematical functions. And it turn piles of data into helpful graphics and charts.
- Microsoft Word 2016: It is used to make a report (PDF) to be presented to the leadership team.

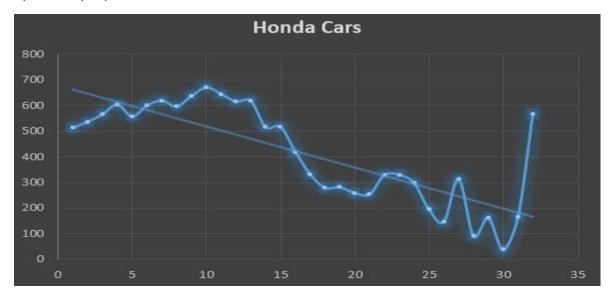
Approach:

- 1) Check for missing values, Null values
- 2)Adding a Quarter column based on broadcast Month column reference by using the following formula.
- =IF(OR(O2="JAN",O2="FEB",O2="MAR"),"Q1",IF(OR(O2="APR",O2="MAY",O2="JUN"),"Q2",IF(OR(O2="JUL",O2="AUG",O2="SEP"),"Q3","Q4")))

Q-1- What is Pod Position? Does the Pod position number affect the amount spent on Ads for a specific period of time by a company? (Explain in Details with examples from the dataset provided)

A group of ads are sequenced together to be played back-to-back within a single ad break. The position of an individual advertisement within a certain commercial pod is called Pod Position.

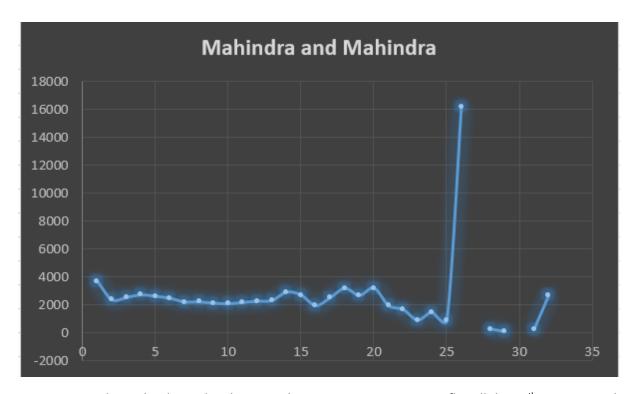
Yes, the Pod position number affects the amount spent on Ads for a specific period of time by the company.



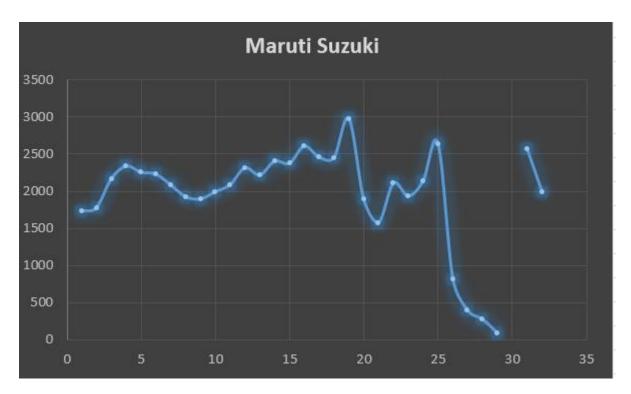
 From Honda cars graph average amount of spending increases as the pod position increases until 10th POD position and eventually decreases. There is again an increase of the average amount near the ending positions around 27th



From the Hyundai motors graph initially average amount spend is up and down till the
position around 16- 17th but after 16-17th avg amount spend was increased along with pod
positions and falls rapidly from 23rd position



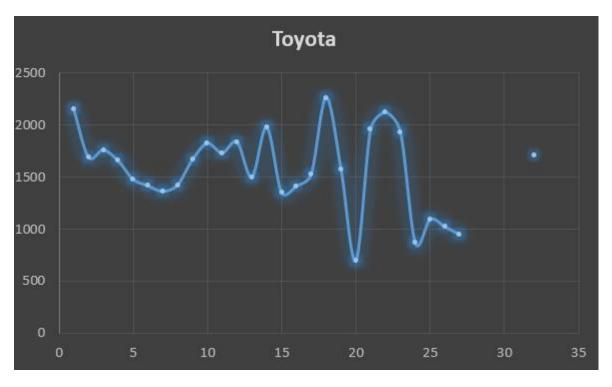
• From the Mahindra and mahinragraph average amount spent is flat till the 15th position and goes up till the 20th and eventually decreases until the end except there is spike up again in the avg amount spent near the position at 26th.



• From Maruti Suzuki's graph average amount of spending increases as the pod position increases until 19th POD position and eventually decreases until 21st. There is again a spike up in the average amount near the ending positions around 25th and 31st.



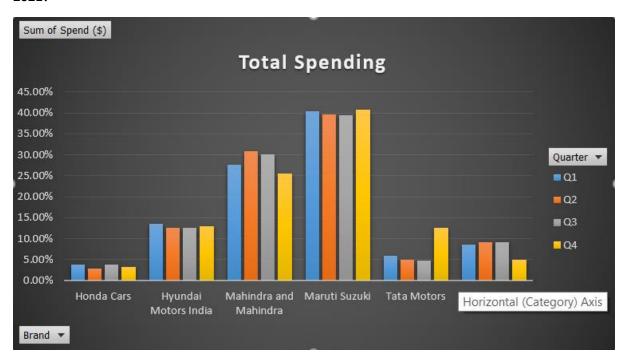
• From the Tata motors graph the average amount spent is flat till the 10th position and goes up and down till the 20th and there is a spike up again in the avg amount spent near the position at 25th and 27th.



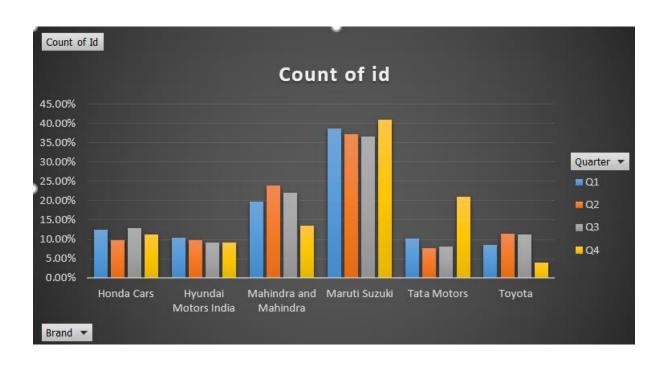
• From the Toyota graph the average amount spent initially high and then decreases till the POD position 7th and increases till 10th position and there is a spike up again in the avg amount spent near the position around 23rd.

Overall Summary: For the car manufactures, as the pod position increases, price increases earlier and then after it starts decreasing.

Q-2- What is the share of various brands in TV airings and how has it changed from Q1 to Q4 in 2021?



- Maruti Suzuki has the highest share in TV Airings followed by Mahindra and Mahindra.
- Honda Cars has the lowest share in TV Airings.
- For Honda Motors and Hyundai Motors India, the share of amount spending slightly decreases from Q1 to Q4 in 2021.
- The share of amount spending of Mahindra and Mahindra has slightly decreases more.
- For Toyota, it has decreases almost 5% from Q1 to Q4.
- The share of amount spending of Maruti Suzuki has slightly increases from Q1 to Q4.
- The share of Tata Motors has almost increases 3 times of Q1 in Q4.



- The counting id of Maruti Suzuki is the highest and so the share.
- The share of Id count decreases from Q1 to Q4 for Mahindra and Mahindra, Toyota, Honda Cars and Hyundai Motors India.
- The share of Id count increases from Q1 to Q4 for Tata Motors the most, followed by the Maruti Suzuki.

Q-3- Conduct a competitive analysis for the brands and define advertisement strategy of different brands and how it differs across the brands.

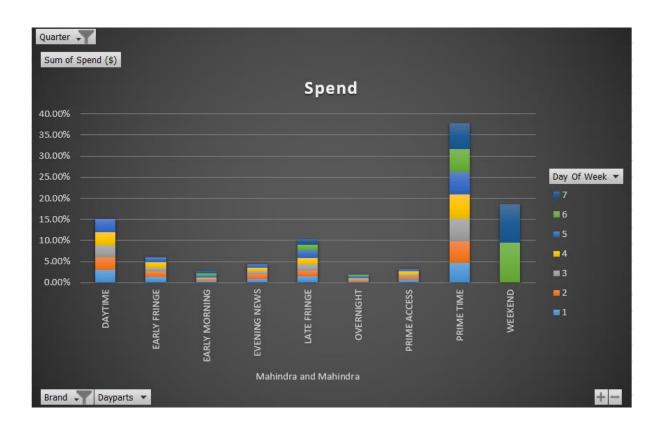
Sum of Spend (\$)	(Column Labels	¥									
Row Labels	₹ [DAYTIME	E	ARLY FRII EA	RLY MORNING	EVENING NEWS	LATE FRINGE	OVERNIGHT	PRIME ACCESS	PRIME TIME	WEEKEND	Grand Total
Honda Cars		31.3	0%	11.94%	10.76%	4.36%	7.09%	5.84%	2.80%	14.51%	11.39%	100.00%
Hyundai Motors India		6.8	4%	3.96%	4.82%	2.97%	7.55%	1.76%	4.27%	47.97%	19.88%	100.00%
Mahindra and Mahindra		16.1	5%	4.83%	3.05%	4.03%	10.52%	2.16%	2.59%	38.44%	18.23%	100.00%
Maruti Suzuki		8.7	1%	4.07%	5.18%	3.72%	13.26%	4.23%	5.19%	38.24%	17.40%	100.00%
Tata Motors		17.4	2%	6.39%	7.50%	6.15%	11.77%	2.69%	6.12%	27.06%	14.89%	100.00%
Toyota		16.4	8%	8.65%	7.36%	4.80%	7.87%	1.52%	7.97%	21.43%	23.91%	100.00%
Grand Total		12.5	9%	5.08%	5.05%	3.99%	10.98%	3.05%	4.54%	36.62%	18.11%	100.00%

- Honda Cars spends the most in the daytime, early Fringe and early morning advertisement.
- Maruti Suzuki spends the most in daytime and late fringe advertisement.
- Toyota spends the most in prime access advertisement.
- Every car brands spends the most in prime time advertisement except the Honda Cars.
- Toyota spends the most in weekend advertisement.
- Honda Cars spends the least for the advertisement. But they have the least products used for branding.
- Maruti Suzuki spends the most for the advertisement. But they have the most products used for branding.

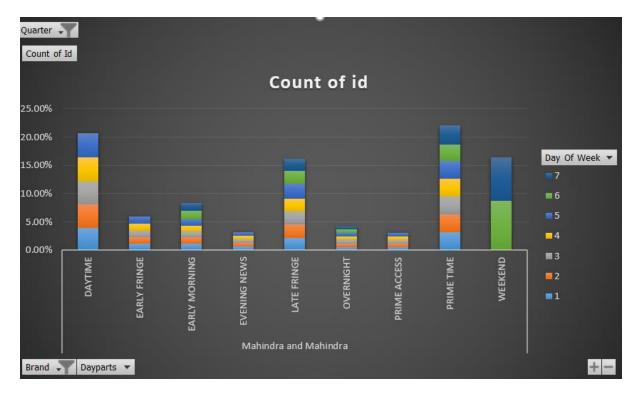
Row Labels	Sum c	of Spend (\$)	Sum of Id
⊟ Honda Cars		3.47%	11.69%
broadcast		1.07%	1.46%
cable		2.40%	10.23%
■ Hyundai Motors India		12.98%	9.68%
broadcast		6.23%	0.66%
cable		6.76%	9.01%
■ Mahindra and Mahindra		28.53%	19.89%
broadcast		13.01%	1.90%
cable		15.52%	17.98%
■ Maruti Suzuki		40.12%	38.36%
broadcast		17.18%	3.20%
cable		22.94%	35.16%
⊟ Tata Motors		6.81%	11.53%
broadcast		2.10%	0.88%
cable		4.70%	10.66%
⊟ Toyota		8.09%	8.86%
broadcast		2.11%	0.46%
cable		5.98%	8.40%
Grand Total		100.00%	100.00%

- As we can see from the chart there is a clear-cut picture of all the brands spending more on cable TV as it is cheaper and target specific advertisement types.
- We can assume that brands strategize and plan their advertisements based on the target audience and region type while minimizing the cost.

Q-4- Mahindra and Mahindra wants to run a digital ad campaign to complement its existing TV ads in Q1 of 2022. Based on the data from 2021, suggest a media plan to the CMO of Mahindra and Mahindra. Which audience should they target? *Assume XYZ Ads has the ad viewership data and TV viewership for the people in India.



- Mahindra and Mahindra spends the most in the 6th &7th on Weekend advertisement in Q1.
- The company spends almost consistently in the whole week in Prime Time but with a slight increase each time.
- Mahindra and Mahindra spends the least in the Overnight and Early Morning advertisement in Q1.



- Here, the percentage of Count of Id is measured in the Values section.
- The company spends around 38% of their money in Prime Time advertisement but the Ads shown is around 22%.
- The company spends around 15% of their money in Day Time advertisement but the Ads shown is around 21%.
- The most Ads shown in the 6th Day in Q1.

Suggestion: Mahindra and Mahindra should target the Day Time audience, the Late Fringe audience, the Early Morning audience as it will reduce the cost of spending of money in the Ads and target the most audience at the least cost.

Insights:

- The brand's money spent for the advertisement is the least for the last quarter pod position and the highest for the first quarter pod position.
- The money spent by Mahindra and Mahindra is the most for the pod position ads.
- The money spent by Honda Cars is the least for the pod position ads.
- The money spent by the Maruti Suzuki is the most consistent for all the Quarters of the year.
- People watch the most in the prime time and on weekend.
- The Ads are shown the least in the prime access and evening news parts of the day.

Results:

- The company spends a lot of money for the advertising. I learned how a data analyst can help the company to learn where to spend the money to get the maximum profit.
- I learned about the pod position. I got to know how the ordering of ads are related to the money spent by the company.
- I implemented the understanding of competitive analysis and how it can be done to get the valuable insights.
- I learned the analytical skills of how a company can convert the audience to their customers at a low cost.

Excel Sheet Link:

https://drive.google.com/drive/folders/1PtCGvlRHCQCcW8Mo_slXdOz08Bm aMnJd?usp=sharing