

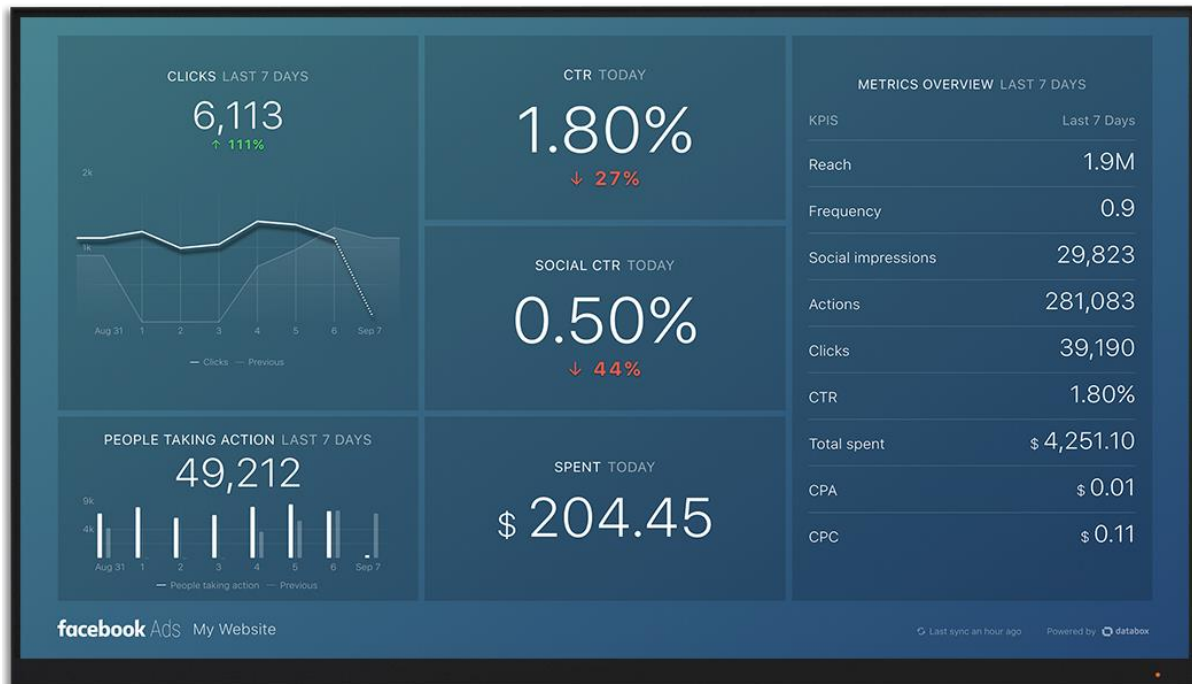
XYZ Ads Airing Report Analysis

(Final Project-3)

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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:

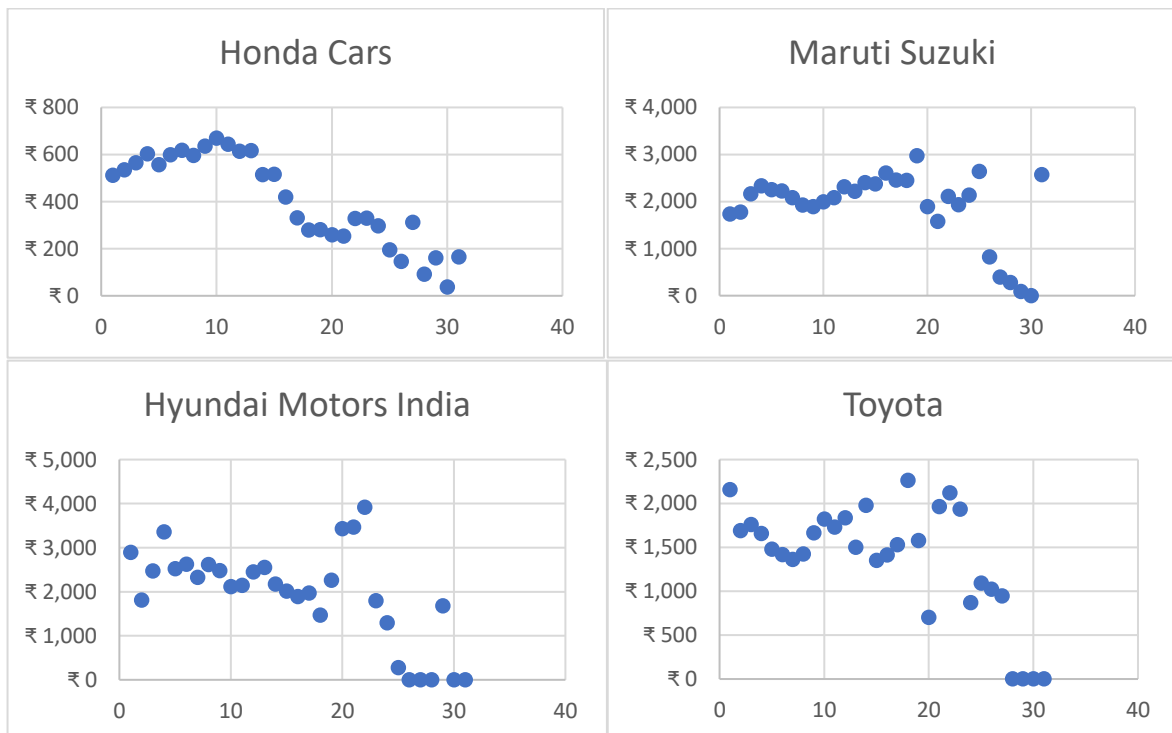
- **Microsoft Excel 365:** It enables users to format, organize and calculate data in a spreadsheet. It organize data in an easy-to-navigate way. We need not to perform any complex mathematical functions. And it turn piles of data into helpful graphics and charts.
- **Microsoft Word 2021:** It is used to make a report (PDF) to be presented to the leadership team.

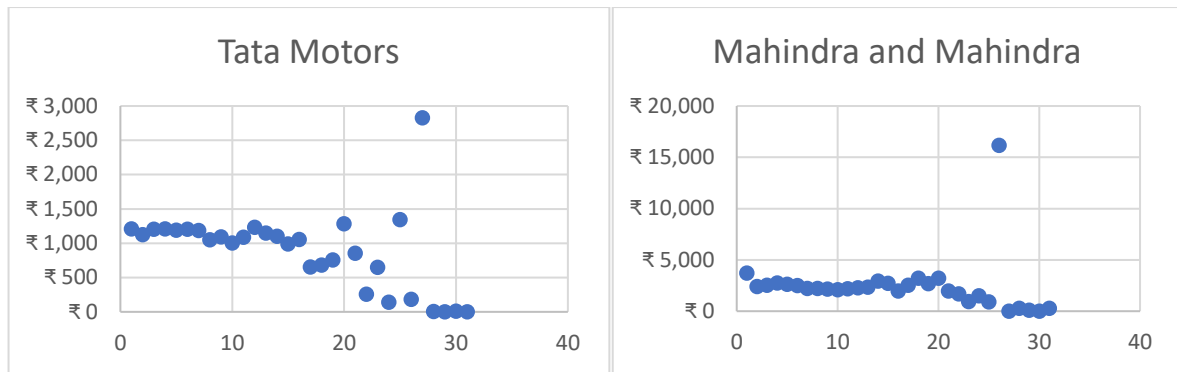
Approach:

- **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.

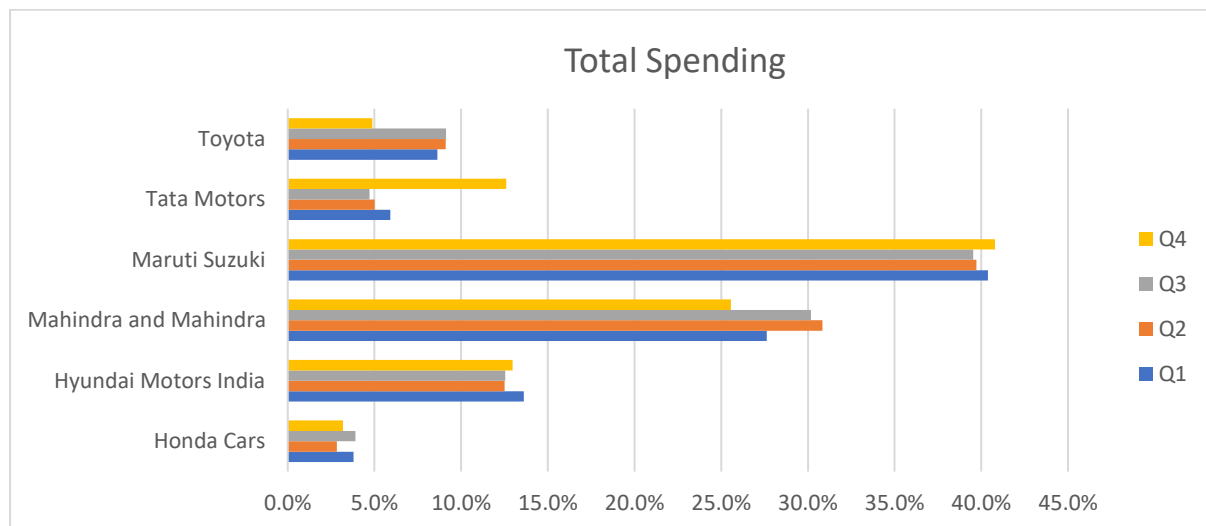




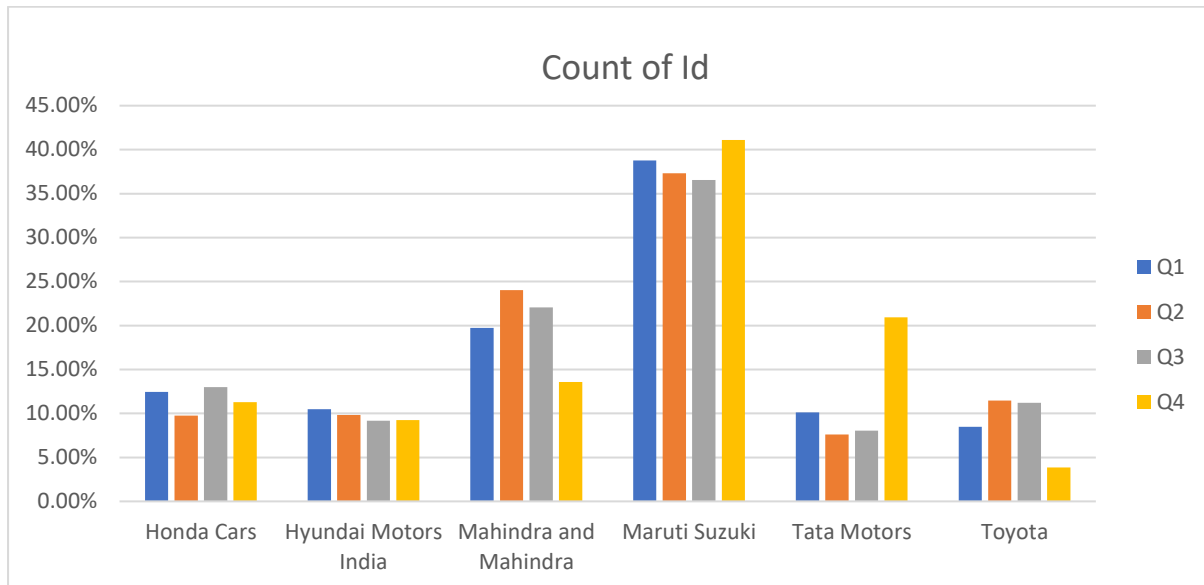
1. Honda cars and Maruti Suzuki follows the same trend. As the number of pod position increases, amount spent on running the Ads also starts increasing and afterwards, it starts declining.
2. Hyundai Motors India and Toyota follows almost the same trend. As the number of pod position increases, amount spent on running the Ads starts declining in beginning. But then after, it starts increasing and again declining at last positions.
3. Tata Motors and Mahindra and Mahindra follows the same trend. As the number of pod position increases, amount spent on running the Ads very slightly starts declining in beginning, and then starts very slightly increasing and again decreasing at the end.

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

- 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.

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

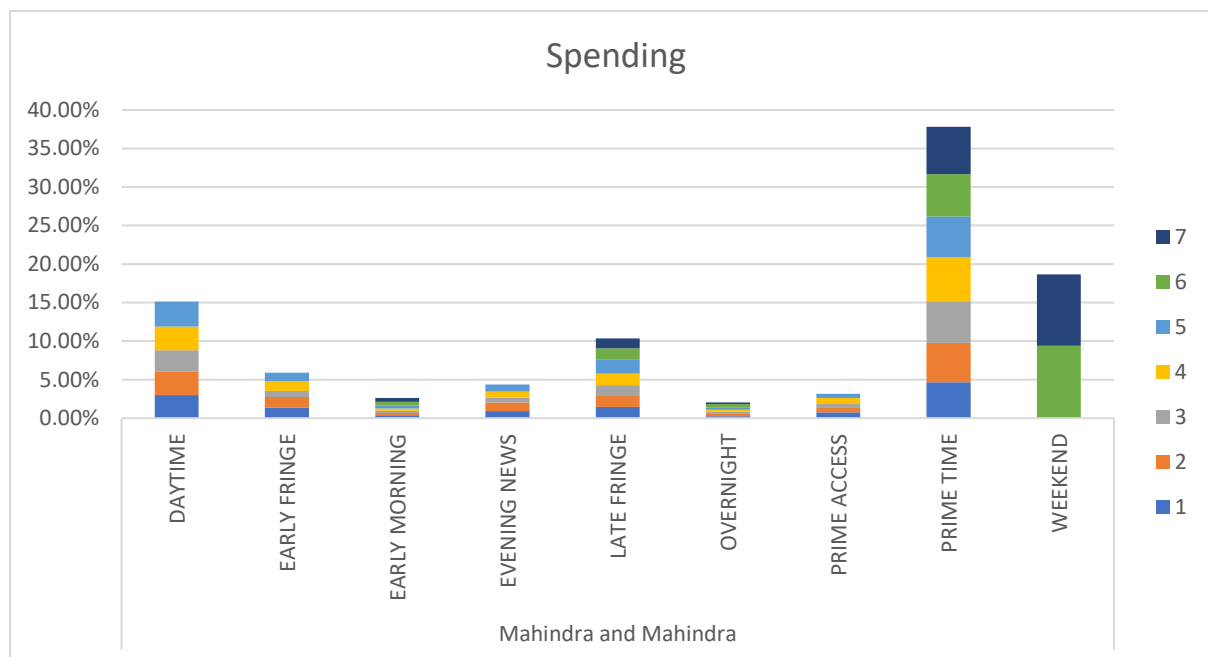
Sum of Spend (\$)	Day Parts										
Brands	DAYTIME	EARLY FRINGE	EARLY MORNING	EVENING NEWS	LATE FRINGE	OVERNIGHT	PRIME ACCESS	PRIME TIME	WEEKEND	Grand Total	
Honda Cars	<div><div></div></div>	31.3%	11.9%	10.8%	4.4%	7.1%	5.8%	2.8%	14.5%	11.4%	100.0%
Hyundai Motors India	<div><div></div></div>	6.8%	4.0%	4.8%	3.0%	7.5%	1.8%	4.3%	48.0%	19.9%	100.0%
Mahindra and Mahindra	<div><div></div></div>	16.1%	4.8%	3.1%	4.0%	10.5%	2.2%	2.6%	38.4%	18.2%	100.0%
Maruti Suzuki	<div><div></div></div>	8.7%	4.1%	5.2%	3.7%	13.3%	4.2%	5.2%	38.2%	17.4%	100.0%
Tata Motors	<div><div></div></div>	17.4%	6.4%	7.5%	6.1%	11.8%	2.7%	6.1%	27.1%	14.9%	100.0%
Toyota	<div><div></div></div>	16.5%	8.7%	7.4%	4.8%	7.9%	1.5%	8.0%	21.4%	23.9%	100.0%
Grand Total		12.59%	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 late fringe and overnight 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.

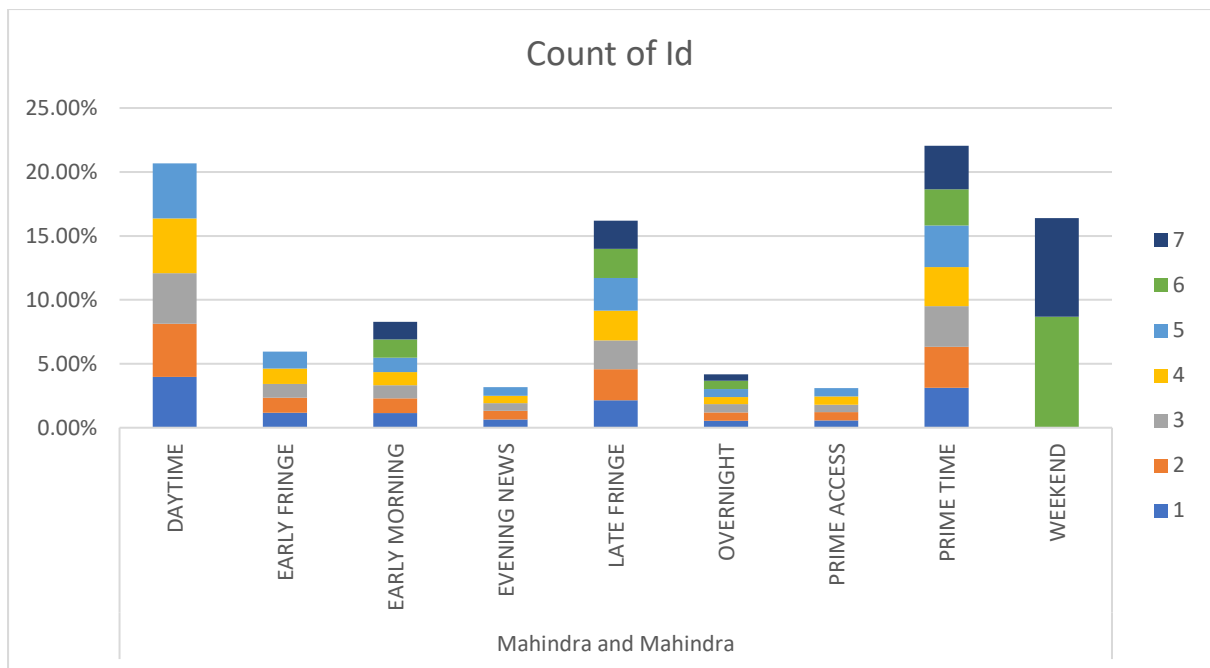
Sum of Spend (\$)	Day Parts										
Brands	DAYTIME	EARLY FRINGE	EARLY MORNING	EVENING NEWS	LATE FRINGE	OVERNIGHT	PRIME ACCESS	PRIME TIME	WEEKEND	Grand Total	
Honda Cars	<div><div></div></div>	1.1%	0.4%	0.4%	0.2%	0.2%	0.2%	0.1%	0.5%	0.4%	3.5%
Hyundai Motors India	<div><div></div></div>	0.9%	0.5%	0.6%	0.4%	1.0%	0.2%	0.6%	6.2%	2.6%	13.0%
Mahindra and Mahindra	<div><div></div></div>	4.6%	1.4%	0.9%	1.2%	3.0%	0.6%	0.7%	11.0%	5.2%	28.5%
Maruti Suzuki	<div><div></div></div>	3.5%	1.6%	2.1%	1.5%	5.3%	1.7%	2.1%	15.3%	7.0%	40.1%
Tata Motors	<div><div></div></div>	1.2%	0.4%	0.5%	0.4%	0.8%	0.2%	0.4%	1.8%	1.0%	6.8%
Toyota	<div><div></div></div>	1.3%	0.7%	0.6%	0.4%	0.6%	0.1%	0.6%	1.7%	1.9%	8.1%
Grand Total		12.59%	5.08%	5.05%	3.99%	10.98%	3.05%	4.54%	36.62%	18.11%	100.00%

- The brands spend the least in the overnight advertisement and spends the most in the prime time 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.
- **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.**



- Used Pivot Table to create this chart.
- In the Rows, we have taken Brand and Dayparts, and in the Columns, we have taken Days Of Week. Percentage of Sum of Spend is measured in the Values section.
- Quarter is taken in the Filter section.
- 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.

Target Audience: 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.

• Additional Insights:

Sum of Spend (\$)		Pod Position																															
Brands and Products		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	Grand Total
Honda Cars		2.3%	3.8%	3.4%	3.4%	3.4%	3.7%	4.2%	4.3%	4.9%	5.4%	5.1%	5.0%	5.5%	4.4%	6.0%	5.3%	5.0%	4.4%	4.0%	5.4%	5.7%	9.2%	10.1%	8.8%	10.8%	0.9%	14.0%	24.0%	7.9%	77.0%	5.5%	3.5%
Honda City		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Honda Cityz		1.7%	2.7%	2.5%	2.4%	2.4%	2.6%	2.9%	3.2%	3.6%	4.0%	3.7%	3.7%	4.5%	3.5%	4.5%	4.1%	4.0%	3.5%	3.0%	2.6%	4.4%	5.2%	3.9%	6.5%	4.7%	0.4%	13.0%	10.0%	7.9%	0.0%	5.5%	2.5%
Honda Jazz		0.6%	1.1%	0.9%	1.0%	1.0%	1.1%	1.2%	1.1%	1.3%	1.4%	1.4%	1.3%	1.1%	0.9%	1.5%	1.2%	1.0%	0.9%	1.0%	2.8%	1.3%	4.0%	6.1%	2.2%	6.1%	0.5%	1.0%	14.0%	0.0%	77.3%	0.0%	1.0%
Hyundai Motors India		13.0%	12.1%	13.3%	15.5%	11.8%	12.3%	11.4%	13.4%	12.6%	11.2%	12.3%	13.8%	16.3%	13.7%	12.8%	12.6%	14.1%	9.0%	13.7%	21.6%	28.0%	20.4%	12.2%	6.6%	3.6%	0.0%	0.0%	0.0%	0.0%	82.7%	0.0%	13.0%
Hyundai i20		13.0%	12.1%	13.3%	15.5%	11.8%	12.3%	11.4%	13.4%	12.6%	11.2%	12.3%	13.8%	16.3%	13.7%	12.8%	12.6%	14.1%	9.0%	13.7%	21.6%	28.0%	20.4%	12.2%	6.6%	3.6%	0.0%	0.0%	0.0%	0.0%	82.7%	0.0%	13.0%
Mahindra and Mahindra		30.0%	27.3%	27.3%	27.9%	30.3%	29.5%	29.8%	29.6%	27.8%	26.4%	24.6%	22.3%	23.0%	27.0%	25.4%	17.8%	23.0%	30.5%	22.1%	20.9%	19.6%	12.2%	14.3%	40.4%	16.6%	89.3%	0.0%	38.8%	5.0%	0.0%	9.1%	28.5%
Mahindra New Thar		29.6%	27.0%	27.0%	27.7%	30.0%	29.2%	29.5%	29.2%	27.5%	26.1%	24.4%	22.1%	22.9%	25.5%	25.3%	17.7%	22.8%	30.5%	21.9%	20.9%	19.4%	12.2%	14.3%	40.4%	16.6%	89.3%	0.0%	38.8%	5.0%	0.0%	9.1%	28.2%
Mahindra Scorpio		0.1%	0.1%	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%	0.2%	0.1%	0.1%	0.1%	0.0%	1.5%	0.1%	0.0%	0.2%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Mahindra XUV 700		0.2%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Maruti Suzuki		40.5%	40.2%	40.1%	38.4%	39.4%	39.9%	39.9%	40.6%	43.6%	44.8%	45.8%	44.1%	43.0%	46.6%	54.5%	48.4%	42.0%	59.3%	38.6%	31.8%	45.6%	44.3%	41.1%	34.8%	8.3%	7.6%	36.2%	4.4%	0.0%	85.4%	40.1%	
Maruti Suzuki Baleno		23.9%	24.6%	24.1%	22.6%	23.1%	23.6%	23.8%	23.0%	23.4%	25.4%	27.1%	27.9%	25.9%	24.4%	28.2%	31.0%	27.0%	27.7%	23.7%	17.8%	18.6%	16.8%	4.0%	31.3%	12.7%	5.7%	0.0%	36.2%	4.4%	0.0%	85.4%	23.9%
Maruti Suzuki Celerio		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Maruti Suzuki Ciaz		14.7%	13.5%	14.4%	13.9%	14.3%	14.1%	14.3%	13.7%	14.9%	15.6%	15.0%	16.0%	17.0%	15.3%	19.9%	19.4%	12.3%	25.7%	15.6%	12.5%	28.8%	40.3%	0.2%	0.0%	0.0%	7.6%	0.0%	0.0%	0.0%	0.0%	14.3%	
Maruti Suzuki Ertiga		0.2%	0.3%	0.3%	0.2%	0.3%	0.3%	0.4%	0.4%	0.5%	0.7%	0.5%	0.7%	0.3%	0.1%	0.2%	0.4%	0.3%	0.7%	0.0%	0.5%	0.0%	0.0%	0.0%	6.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Maruti Suzuki Ignis		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Maruti Suzuki Swift		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Maruti Suzuki WagonR		1.6%	1.7%	1.3%	1.6%	1.7%	1.6%	1.5%	1.9%	1.8%	1.8%	1.6%	2.3%	1.8%	1.4%	2.9%	3.2%	1.7%	1.2%	1.0%	4.7%	0.7%	0.0%	0.0%	3.5%	22.2%	2.6%	0.0%	0.0%	0.0%	0.0%	1.6%	
Tata Motors		6.1%	7.2%	7.1%	6.5%	7.1%	7.3%	7.6%	7.1%	7.2%	6.8%	6.9%	7.3%	6.2%	6.2%	4.7%	5.6%	4.4%	5.0%	3.7%	11.0%	6.9%	2.3%	4.4%	2.0%	28.4%	0.5%	72.4%	0.9%	0.0%	22.9%	6.8%	
Tata Nexon		4.6%	5.5%	5.2%	4.5%	5.2%	5.2%	5.2%	4.9%	4.9%	4.3%	4.7%	5.2%	3.8%	4.2%	3.2%	3.8%	2.3%	2.7%	2.7%	5.5%	3.6%	0.2%	4.0%	0.2%	128.0%	0.3%	69.8%	0.9%	0.0%	0.0%	4.9%	
Tata Safari		1.4%	1.6%	1.7%	1.8%	1.8%	1.9%	2.2%	2.0%	2.1%	2.3%	1.7%	2.0%	2.2%	1.7%	1.1%	1.6%	2.0%	2.3%	0.9%	0.6%	3.3%	2.1%	0.4%	1.8%	0.4%	0.2%	3.0%	0.0%	0.0%	22.9%	1.7%	
Tata Tiago		0.1%	0.1%	0.2%	0.2%	0.1%	0.3%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.2%	0.3%	0.4%	0.1%	0.1%	0.0%	0.1%	4.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	
Toyota		8.2%	9.4%	8.9%	8.2%	8.1%	7.6%	7.2%	6.6%	6.9%	6.5%	6.3%	5.8%	4.9%	5.8%	4.6%	4.2%	5.1%	9.2%	6.2%	2.5%	7.9%	10.2%	14.8%	1.1%	5.8%	0.9%	6.1%	0.0%	0.0%	0.0%	8.1%	
Toyota Etios		3.2%	3.5%	3.3%	3.3%	3.1%	2.7%	2.4%	2.3%	2.5%	3.0%	2.4%	2.6%	2.2%	3.0%	2.6%	2.9%	2.8%	2.7%	1.7%	2.0%	5.0%	3.9%	1.1%	5.8%	0.9%	6.1%	0.0%	0.0%	0.0%	0.0%	3.1%	
Toyota Fortuner		0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	
Toyota Innova		5.0%	5.8%	5.3%	4.9%	4.9%	4.8%	4.7%	4.3%	4.4%	3.5%	3.3%	3.4%	2.3%	3.6%	1.6%	1.6%	2.3%	6.3%	3.5%	0.9%	6.0%	5.2%	10.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.0%	
Grand Total		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

- In the above pivot table we can see, almost no money spends for Honda City, Maruti Suzuki Celerio, Maruti Suzuki Ignis, Maruti Suzuki Ignis and Toyota Fortuner.
- The money spends the most on the advertisement of Mahindra New Thar (28%) and Maruti Suzuki Baleno (24%).

- The share of money spends by Mahindra and Mahindra for the 26th Pod Position is 89%.
- The share of money spends by Maruti Suzuki for the 31st Pod Position is 85%.

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:

[XYZ Ads Airing Report Analysis](#)