



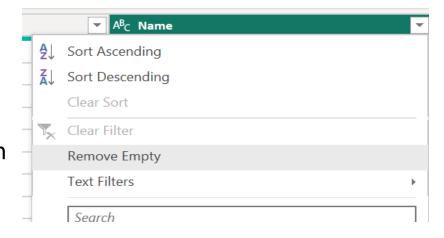
Unlocking Auto Expo Success: Crafting a Dynamic Dashboard for Mechrocosm

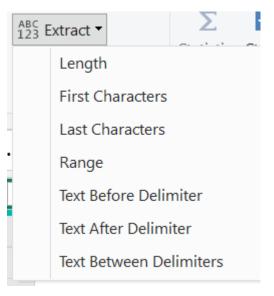
In collaboration with Team Mechrocosm, our dashboard empowers buyers with customizable filters, enabling precise selection across price ranges, mileage, ownership history, usage duration, fuel types, transmission, and performance metrics. Additionally, it provides insights into variant availability and brand distribution, ensuring an immersive and Informed Auto Expo journey.

Our comprehensive dashboard facilitates seamless navigation through Auto Expo offerings, allowing Mechrocosm to strategically engage exhibitors and captivate buyers. With intuitive filters and rich data visualization, we empower decision-makers to optimize their selections and elevate the event experience to unprecedented heights.

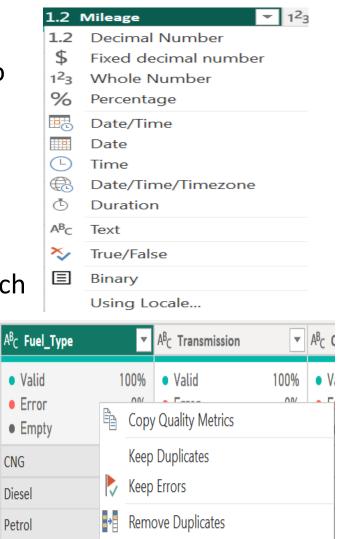
Data Cleaning Process

- Data Import: Imported raw data provided as an excel file into Power BI using Get Data -> Excel Workbook.
- Now we will load data in Power Query.
- Handle Missing Values: We handled missing values, such as removing rows with missing values that is removing that row in which any of the cell data is missing.
- Transform Data: We Used Power Query Editor in Power BI to perform data transformation tasks such as splitting columns, merging columns, creating new columns. Such as:
- 1. Final Price(the price of cars that has newer values if available or have the same older value given before).
- 2. Created a Brand column from Car name using Add Column -> Extract -> Text Before Delimiter
- 3. A new Years Used Column by Add Column -> Custom Column -> 2024 [Year]
- 4. Two new columns named Price Range and Kilometer Driven Range using Custom Columns





- Standardize Data Formats: Standardize data formats across columns to ensure consistency. Such as:
- Mileage Power Engine were given as text values with their units kmpl bhp cc respectively. Use Transform column -> Extract -> Text Before Delimiter. Then change the data type by clicking on left corner of column header.
- 2. Change all columns to their respective data types.
- Correct Errors: Corrected any errors or inconsistencies in the data, such as misspellings or incorrect values using View -> Column Quality -> Remove Errors.
- Now close and apply these transformation and we head to the report view for creating Dashboard.



Remove Empty

Remove Errors

Show the column quality peek

Show the column distribution peek

Replace Errors

Diesel

Diesel

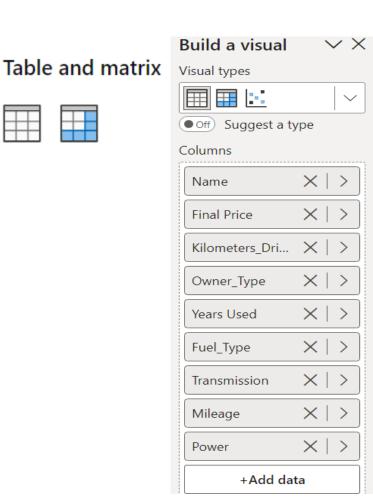
LPG

Diesel

Diesel

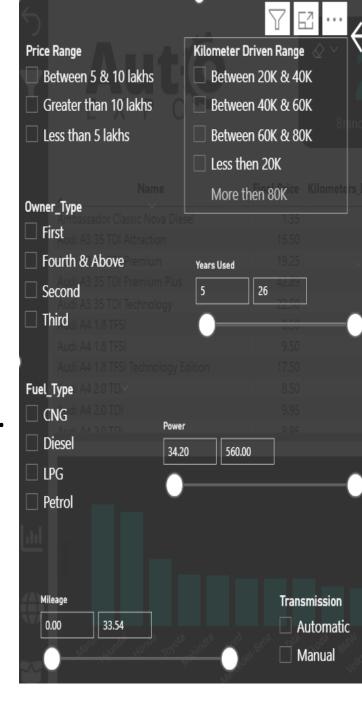
Creating Dashboard

- Head Over the Report view and create 3 pages: Home,
 Car Detail and Map
- Inserted a new Table visual and in the table add all the columns
- Insert one more table showing brands names and variants and no of cars
- Insert 3 kpi(key performance indicator) Brands Participating, Total Cars, Total Car Price.
- Added a bar chart showing brand names and no of variants.
- Now we will see how we created the filter menu.



Creating Filter Panel

- As in the problem statement we need to add filters such that the customers can choose cars based on Price Range, Km Driven, No. of owners, Years Used, Fuel Types, Mileage, Transmission, Power.
- To create it use slicer given in Home page and enter the field data how you want to filter.
 - Format this filter as vertical box or slider as you wish.
- Now we can use multiple filters too example we can filter out cars greater than 10 lakhs and Diesel Type with manual transmission.
- Be aware that the filters should not affect KPIs for that go to Format -> Edit Interactions



- Create navigation bar that includes the filter panel button, a button which removes all filters, page navigation buttons to navigate through pages.
- 1. To insert these insert button in that define its action by using bookmarks and page navigation action type.
- 2. Format these buttons by adding images and effects.
- For the second page that is car details we want that it show every details about that car so we
- 1. We add card for Car Name Price and multi row card for showing fuel type, engine, transmission and owner type
- 2. And add gauge visuals for Kilometres driven, Power, Mileages, Years Used.
- 3. We want to create this page that it can be drilled through by selecting the product in the Home page. To do so we set the page type to Drill Through





✓ Page information

Name

Car Detail

Drillthrough

Page type



Creating Maps

- To create maps first in the home page add maps.
- Add field location and bubble size as Count of cars.
- Set bubble size according to count of cars.

Maps

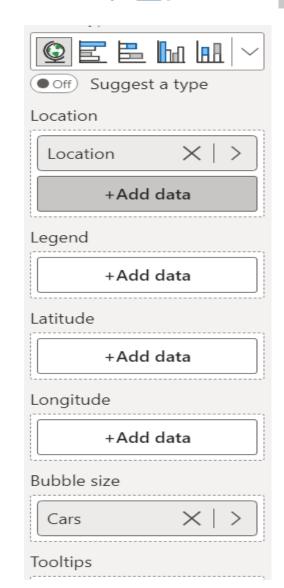
















29
Brands Participating

6034
Total Cars

65,133
Total Price (Lakhs)

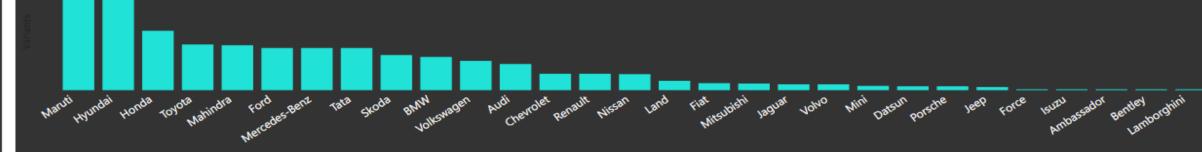
Name	Final Price	Kilometers_Driven	Owner_Type	Years Used	Fuel_Type	Transmission	Mileage
Ambassador Classic Nova Diesel	1.35	80000	Third	21	Diesel	Manual	12.80
Audi A3 35 TDI Attraction	16.50	79271	First	10	Diesel	Automatic	20.38
Audi A3 35 TDI Premium	19.25	20003	First	8	Diesel	Automatic	20.38
Audi A3 35 TDI Premium Plus	42.89	39000	First	8	Diesel	Automatic	20.38
Audi A3 35 TDI Technology	22.50	22000	Second	7	Diesel	Automatic	20.38
Audi A4 1.8 TFSI	8.50	38001	First	14	Petrol	Automatic	12.30
Audi A4 1.8 TFSI	9.50	53000	First	13	Petrol	Automatic	12.30
Audi A4 1.8 TFSI Technology Edition	17.50	80000	First	12	Petrol	Automatic	15.64
Audi A4 2.0 TDI	8.50	46000	First	15	Diesel	Automatic	16.55
Audi A4 2.0 TDI	9.95	34000	First	15	Diesel	Automatic	16.55
Audi A4.2.0.TDI	9.95	46000	Firet	15	Diacal	Automatic	16 55

Brand	No. of Variants	Count of Name
Ambassador	1	1
Audi	67	236
Bentley	1	1
BMW	85	265
Chevrolet	42	120
Datsun	10	17
Fiat	18	26
Force	2	3
Ford	108	298
Honda	152	615
Total	1818	6034



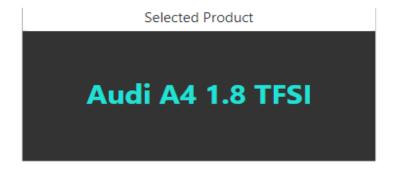


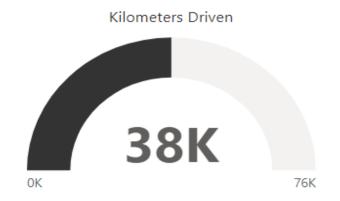


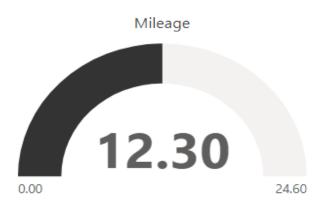


Number of Variants Per Brand





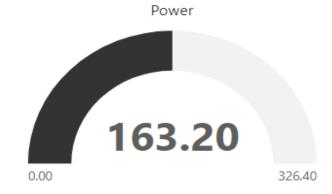










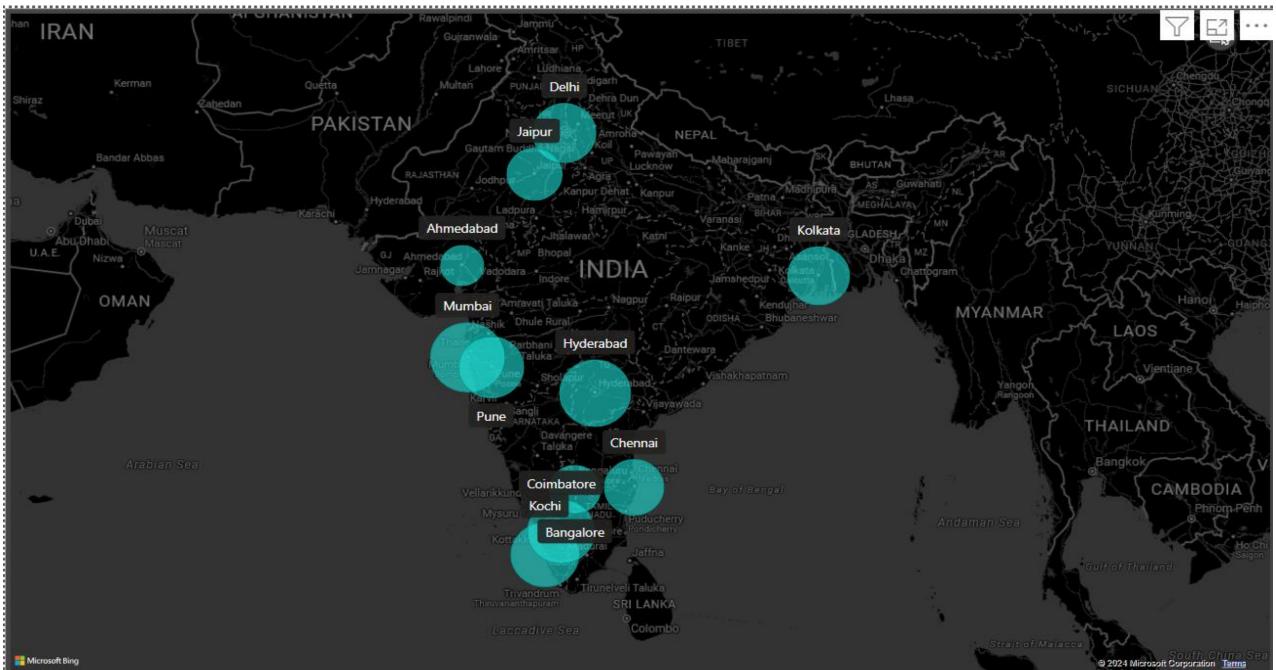












THANKS TO TEAM MECHROCOSM

- TEAM CASE CONNOISSEURS
- 1. VISHAL MISHRA (20211001)
- 2. SANDEEP YADAV (20213024)
- 3. PRAKHAR SANKLE (20214256)

