Electric Vehicles Analysis



State Analysis

Miscellaneous



State Analysis

The analysis will focus on identifying high-growth states and cities, optimizing ride frequencies, and increasing market penetration in lower-performing regions. By analyzing booking patterns and peak demand times, we'll enhance resource allocation and improve service reliability. Special attention will be given to high-revenue states to drive further growth. This analysis will help tailor marketing strategies and boost customer engagement across targeted regions.



Miscellaneous

The analysis will dive into customer behavior across segments to create personalized offerings for key groups like tourists and delivery services. We will track active user engagement and monitor high-revenue cities for expansion. Additionally, analyzing revenue by age group and time of day will help align services with customer preferences, boosting overall growth and customer retention.





Year All Month All \sim Day V All

Home

Sales Analysis

Miscellaneous

Total Revenue

19M

Total KM Covered

2.55M

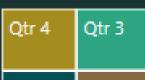
Distinct Customers

15K

Total Customers

100K

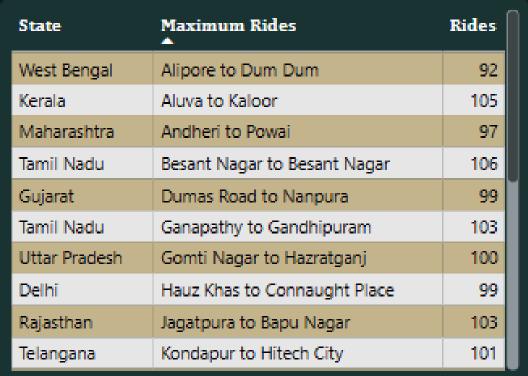


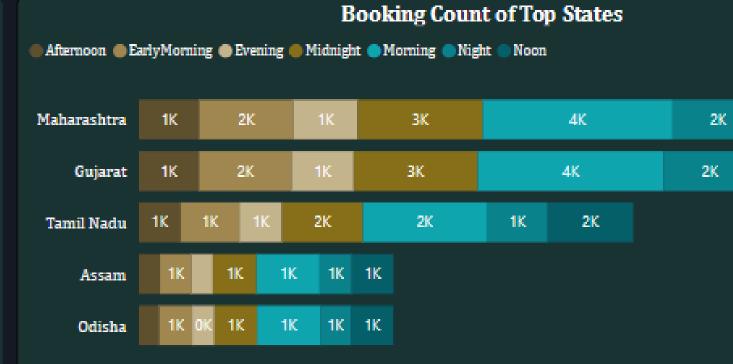


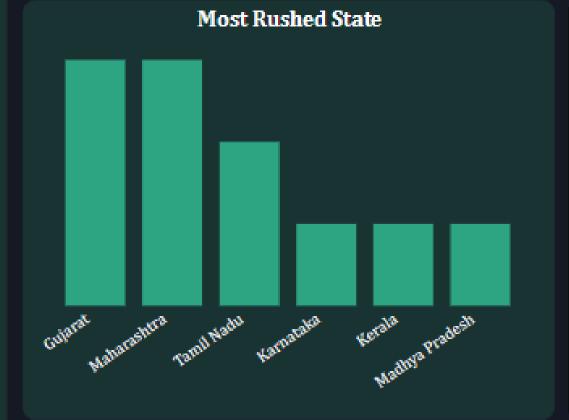
2K

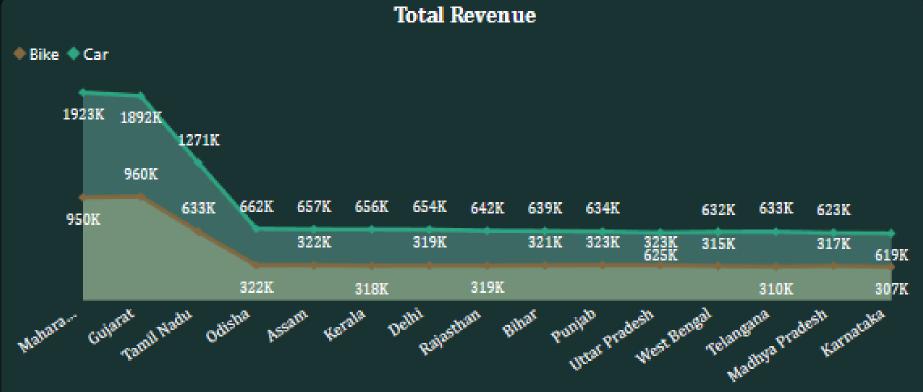
3K

Female Qtr 1 Otr 2











Year

All

Month

All

Day

All

Home

State Analysis

Miscellaneous

Total Revenue

19M

Total KM Covered

2.55M

Distinct Customers

15K

Total Customers

100K

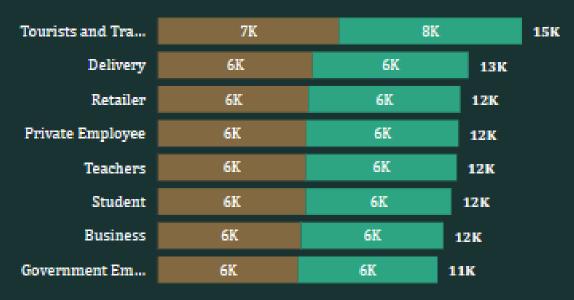
Female

Male

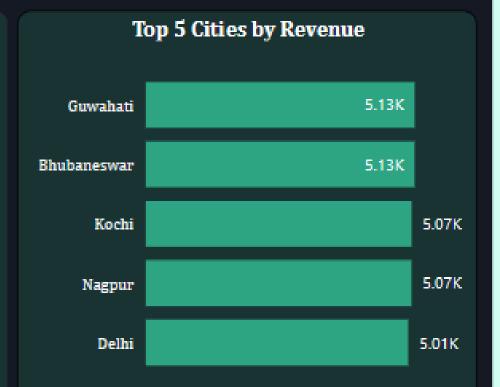
Qtr 4 Qtr 3

Qtr 1 Qtr 2



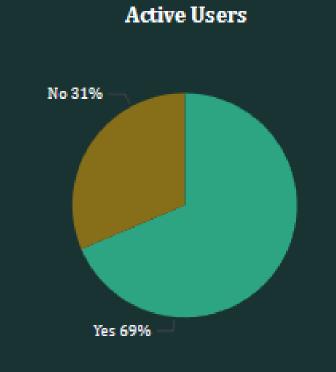


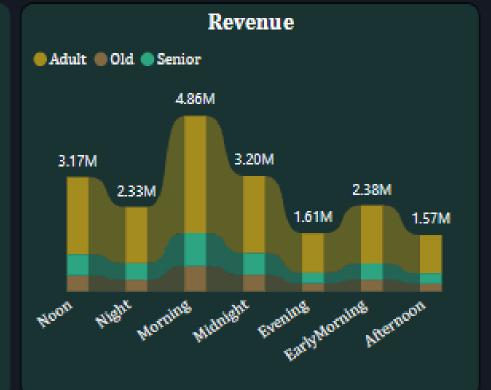
Busiest Cities 4K 2K OK Delhi Chandigath Crimbatore Hyderabad Chandigath Countratore



Customer Count









Import Data to SQL DataBase

- Create Database
- Create Tables for each CSV File With Same Header Names
- Copy Data through CSV to SQL Database





```
create database ElectricVehicle;
```

```
create table Users(
CustomerID varchar(50) primary key,
Name varchar(100),
Gender varchar(50),
Age int,
Job varchar(100),
LoginDate date,
LastUsed date,
Contact bigint
);
```

```
COPY Users
FROM 'C:\EV\customer_data.csv'
DELIMITER ','
CSV HEADER;
```

```
create table Rides(
CustomerID varchar(50),
Date date,
Day varchar(50),
Time time,
City varchar(50),
State varchar(50),
PickupLocation varchar(100),
DestinationLocation varchar(100),
KM decimal,
VehicleCategory Varchar(100),
AmountPaid decimal,
Latitude decimal,
Longitude decimal,
PostalCode int,
foreign key (CustomerID) references Users(CustomerID)
);
```

```
COPY Rides
FROM 'C:\EV\ola_electric_rides_data.csv'
DELIMITER ','
CSV HEADER;
```



Data: Users

select * from Users;

customerid [PK] character varying (50)	name character varying (100)	gender character varying (50)	age integer	job character varying (100)	logindate date	date /	contact bigint
CU1	Arya Nair	Male	26	Teachers	2021-08-13	2021-10-23	7850281541
CU2	Gopal Naidu	Female	21	Delivery	2014-02-06	2014-06-19	8256584331
CU3	Ritu Ghosh	Male	49	Teachers	2019-12-21	2020-06-06	9090505726
CU4	Nisha Malhotra	Male	24	Private Employee	2019-11-06	2020-01-29	8397881035
CU5	Saanvi Khanna	Male	48	Tourists and Travelers	2023-08-13	2024-03-28	9155172962
CU6	Keshav Patel	Female	42	Private Employee	2017-04-08	2017-12-06	6956911046
CU7	Aditi Desai	Male	75	Teachers	2021-03-05	2021-03-24	8511362025
CU8	Bhavya Srinivasan	Male	43	Government Employee	2020-06-28	2020-12-31	6687187319
CU9	Sameer Bhatnagar	Male	36	Student	2020-02-01	2020-02-21	6313357447
CU10	Krishna Dewan	Female	45	Private Employee	2021-04-11	2022-01-10	9493184458
CU11	Ritika Malhotra	Male	83	Retailer	2015-07-03	2016-03-01	6280009749
CU12	Kanika Bhattacharya	Male	19	Teachers	2014-08-02	2015-01-22	9767014625
CU13	Nagesh Khanna	Male	19	Government Employee	2015-07-07	2015-12-28	7341944256



Data: Rides

select * from Rides;

customerid character varying (50)	date date	day character varying (50)	time time without time zone	city character varying	state character varying (50)	pickuplocation character varying (100)	destinationlocation character varying (100)	km numeric	vehiclecategory character varying	
CU10277	2014-02-04	Tuesday	15:44:21	Indore	Madhya Pradesh	Palasia	Rau	6.66	Bike	33.3
CU9355	2013-03-09	Saturday	11:21:59	Mumbai	Maharashtra	Dadar	Dadar	37.75	Bike	188.75
CU1374	2013-06-03	Monday	06:40:04	Ahmedabad	Gujarat	Satellite	Ellis Bridge	42.88	Car	
CU3239	2015-10-12	Monday	23:32:25	Jaipur	Rajasthan	Tonk Road	Jagatpura	18.22	Car	428.8
CU1764	2017-02-26	Sunday	01:49:45	Delhi	•					182.2
CU681	2013-07-01	Monday	17:11:35	Nagpur	Delhi	Karol Bagh	Hauz Khas	23.83	Car	238.3
CU4337	2014-06-09	Monday	01:39:54	Chennai	Maharashtra	Dharampeth	Manish Nagar	18.62	Car	186.2
CU7068	2019-02-15	Friday	18:02:42	Bengaluru	Tamil Nadu	Adyar	Besant Nagar	47.15	Bike	235.75
CU11876	2013-01-20	Sunday	13:48:48	Chandigarh	Karnataka	MG Road	Jayanagar	14.95	Bike	
CU6089	2015-05-01	Friday	17:22:19	Surat	Punjab	Sector 22	Manimajra	27.95	Bike	74.75
CU2345	2022-03-09	Wednesday	09:08:14	Ahmedabad	Gujarat	Dumas Road	Parle Point	36.94	Car	139.75
CU8165	2021-01-24	Sunday	09:25:03	Kochi	Gujarat	Satellite	Vastrapur	24.17	Bike	369.4
CU5097	2018-08-20	Monday	01:42:22	Patna	Kerala	Kaloor	Kakkanad	36.97	Bike	120.85
CU908	2020-07-10	Friday	11:25:06	Guwahati	Bihar	Fraser Road	Fraser Road	3.69	Car	184.85
CU11936	2018-02-24	Saturday	15:05:59	Lucknow	Assam	Dispur	Zoo Road	40.15	Car	36.9
CU4298	2022-11-12	Saturday	18:32:17	Lucknow	Uttar Pradesh	Charbagh	Hazratganj	24.34	Bike	401.5

Get Data

Search ΑII File Database Microsoft Fabric **Power Platform** Azure Online Services Other

Database SQL Server database Access database SQL Server Analysis Services database Oracle database IBM Db2 database IBM Informix database (Beta) IBM Netezza MySQL database PostgreSQL database Sybase database Teradata database SAP HANA database SAP Business Warehouse Application Server SAP Business Warehouse Message Server Amazon Redshift Impala

Load Data in PowerBI





DAX Queries New Tables

CityDummy

```
CityDummy =
SUMMARIZE(
'public rides',
'public rides'[state],
'public rides'[city],
'public rides'[pickuplocation],
'public rides'[destinationlocation],
"RideBetween",
' public rides'[pickuplocation] & " to " & 'public rides'[destinationlocation],
"CountOfRideBetween", COUNTROWS('public rides')
)
```

MaxRideBetweenPerCity

```
MaxRideBetweenPerCity =
SUMMARIZE(
FILTER(
CityDummy,
CityDummy[CountOfRideBetween]=
CALCULATE(
MAX(CityDummy[CountOfRideBetween]
ALLEXCEPT(CityDummy,
CityDummy[city])
CityDummy[state],
CityDummy[city],
CityDummy[RideBetween],
CityDummy[CountOfRideBetween]
```



DAX Queries

New Columns and Measures

TimeCategory

```
TimeCategory = SWITCH(TRUE(),
'public rides'[RideHour] >= 4 && 'public rides'[RideHour] <= 6, "EarlyMorning",
'public rides'[RideHour] > 6 && 'public rides'[RideHour] <= 12, "Morning",
'public rides'[RideHour] > 12 && 'public rides'[RideHour] <= 16, "Noon",
'public rides'[RideHour] > 16 && 'public rides'[RideHour] <= 18, "Afternoon",
'public rides'[RideHour] > 18 && 'public rides'[RideHour] <= 20, "Evening",
'public rides'[RideHour] > 20 && 'public rides'[RideHour] <= 23, "Night",
'public rides'[RideHour] >= 0 && 'public rides'[RideHour] < 4, "Midnight",
"Unknown")
```

<u>AgeCategory</u>

```
AgeCategory = SWITCH(TRUE(),
'public users'[age] >= 18 && 'public users'[age] <= 40, "Adult",
'public users'[age] > 40 && 'public users'[age] <= 70, "Senior",
'public users'[age] > 70, "Old",
"Unknown")
```

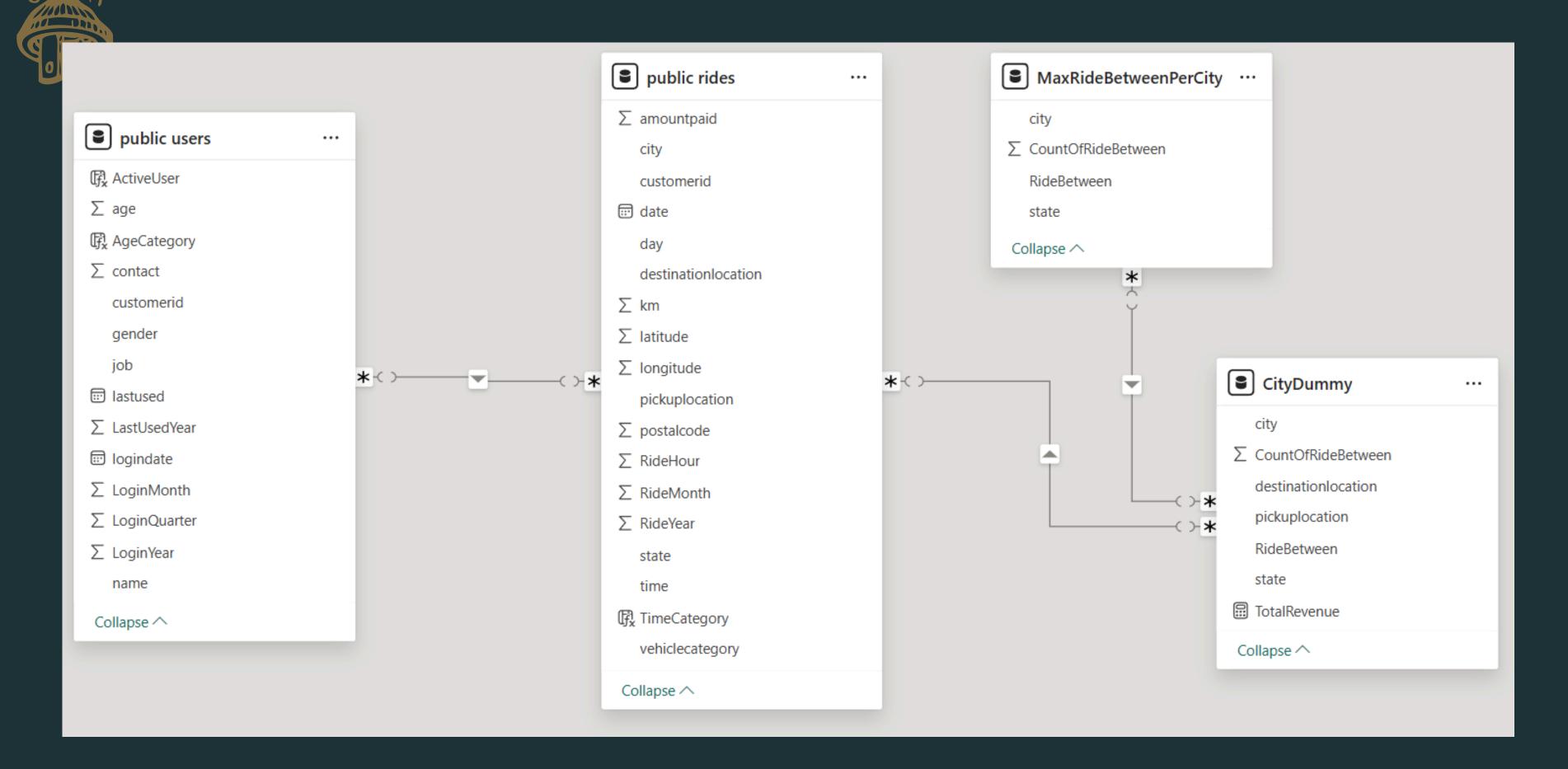
ActiveUser

ActiveUser = IF('public users'[LastUsedYear] > 2020, "No", "Yes")

TotalRevenue

TotalRevenue = SUM('public rides'[amountpaid])

Model View





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