Telangana Growth Analysis

## ASK

### -OBJECTIVES

1. Explore Stamp Registration, Transportation and Ts-Ipass Datasets.
2. Analyze trends and patterns within each department
3. Identify growth opportunities and areas needing attention
4. Find correlation among these departments and report the overall growth of the state through insights and relevant visuals such as shape maps.

### -PRIMARY RESEARCH

#### STAMP REGISTRATION

1. How does the revenue generated from document registration vary across districts in Telangana? List down the top 5 districts that showed the highest document registration revenue growth between FY 2019 and 2022.
2. How does the revenue generated from document registration compare to the revenue generated from e-stamps challans across districts? List down the top 5 districts where e-stamps revenue contributes significantly more to the revenue than the documents in FY 2022?
3. Is there any alteration of e-Stamp challan count and document registration count pattern since the implementation of e-Stamp challan? If so, what suggestions would you propose to the government?
4. Categorize districts into three segments based on their stamp registration revenue generation during the fiscal year 2021 to 2022.

#### TRANSPORTATION

1. Investigate whether there is any correlation between vehicle sales and specific months or seasons in different districts. Are the any months or seasons that consistently show higher or lower sales rate, and if yes, what could be the driving factors? (Consider Fuel-Type category only)
2. How does the distribution of vehicles vary by vehicle class(Motorcycle, Motorcar, Autorickshaw, Agriculture) across different districts? Are there any districts with a predominant preference for a specific vehicle class? Consider FY 2022 for analysis.
3. List down the top 3 and bottom 3 districts that have shown the highest and lowest vehicle sales growth during FY 2022 compared to FY 2021? (Consider and compare categories: Petrol, Diesel and Electric)

#### TS-IPASS (TELANGANA STATE INDUSTRIAL PROJECT APPROVAL AND SELF CERTIFICATION SYSTEM)

1. List down the top 5 sectors that have witnessed the most significant investments in FY 2022
2. List down the top 3 districts that have attracted the most significant sector investments during FY 2019 to 2022? What factor could have led to the substantial investments in these particular districts?
3. Is there any relationship between district investments, vehicles sales and stamps revenue within the same district between FY 2021 and 2022
4. Are there any particular sectors that have shown substantial investment in multiple districts between FY 2021 and 2022
5. Can we identify any seasonal patterns or cyclicality in the investment trends for specific sectors? Do certain sectors experience higher investments during particular months?

### -SECONDARY RESEARCH

1. What are the top 5 districts to but commercial properties in Telangana? Justify your answer
2. What significant policies or initiatives were put into effect to enhance economic growth, investments and employment in Telangana by the current government? Can we quantify the impact of these policies using available data?
3. Provide top 5 insights and 5 recommendations to Telangana government for sustained growth in the next 5 years based on your analysis.

## PREPARE

There are 5 Excel CSV file given:

### dim\_date.csv

* 1. month – month column shows first day of every month from FY 2019 to 2022
  2. Mmm – Mmm column shows Month name in 3 string characters
  3. Quarter – There are 4 Quarters
  4. Fiscal year – display year

### dim\_districts.csv

* 1. dist\_code – Shows district code
  2. district – Shows district name respectively to their code

### fact\_stamps.csv

* 1. dist\_code - This column represents the district code.
  2. Month - This column represents the starting date of each month.
  3. documents\_registered\_cnt - This column represents the total count of documents registered.
  4. documents\_registered\_rev - This column represents the total revenue generated from the registered documents.
  5. estamps\_challans\_cnt - This column represents the count of e-stamps challans.
  6. estamps\_challans\_rev - This column represents the revenue generated from e-stamps challans.

### fact\_transport.csv

* 1. dist\_code – This column represents district code.
  2. Month – This column represents the starting date of each month.
  3. Fuel\_type\_petrol – Number of vehicle sold with petrol
  4. Fuel\_type\_diesel – Number of vehicles sold with diesel.
  5. Fuel\_type\_electric – Number of vehicles sold with electric.
  6. Fuel\_type\_other – Number of vehicles sold with other fuel types.
  7. vehicleClass\_Motorcycles: This category includes all two-wheeled vehicles, such as motorcycles, scooters etc.
  8. vehicleClass\_Motorcars: This category includes all four-wheeled vehicles, such as cars, vans etc.
  9. vehicleClass\_Auto rickshaws: This category includes three-wheeled vehicles, such as auto rickshaws.
  10. vehicleClass\_Agriculture: This category includes all vehicles used for agricultural purposes, such as tractors and harvesters.
  11. vehicleClass\_Others: This category includes all vehicles belonging to other classes.
  12. seatCapacity\_1\_to\_3: Number of vehicles sold with a seating capacity ranging from 1 to 3.
  13. seatCapacity\_4\_to\_6: Number of vehicles sold with a seating capacity ranging from 4 to 6.
  14. seatCapacity\_above\_6: Number of vehicles sold with a seating capacity above 6.
  15. Brand\_new\_vehicles: Number of brand new vehicles sold.
  16. Pre-owned\_vehicles: Number of pre-owned vehicles sold.
  17. category\_Non-Transport: Number of vehicles in the non-transport category sold. The Non-Transport category typically includes vehicles that are not primarily used for public transportation of passengers or goods. Instead, these vehicles are generally intended for personal use, recreational activities, agriculture, construction, and other non-commercial purposes.
  18. category\_Transport: Number of vehicles in the transport category sold. The Transport category comprises vehicles primarily designed and used for the transportation of goods, passengers, or both. These vehicles are generally associated with commercial and public transportation purposes.

### fact\_TS\_iPASS

* 1. dist\_code: This column represents the district code.
  2. month: This column represents the starting date of each month.
  3. sector: This column represents the industry category. Examples of sectors include 'Automobiles', 'Beverages', 'Engineering', 'Food Processing', etc.
  4. investment in cr: The column represents the investment made in the specific sector, measured in crores (a unit of currency), for the corresponding district and month.
  5. number\_of\_employes: This column represents the number of employees associated with that sector for given district and respective month.