### INTRODUCTION

### 1.1 Overview

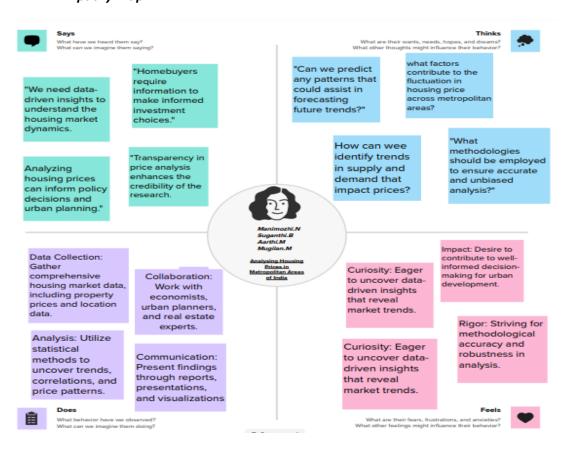
Analysing housing prices in metropolitan areas of India involves studying various factors Like location, property type, market trends, and economic conditions. Researchers often collect and analyse data on property sales, square footage, amenities, and local infrastructure Development to understand price dynamics. Additionally, demographic factors, such as population growth and income levels, can influence housing demand and prices. Advanced Techniques like regression analysis and data visualization can help identify patterns and make Predictions about future price trends in these areas.

### 1.2 Purpose

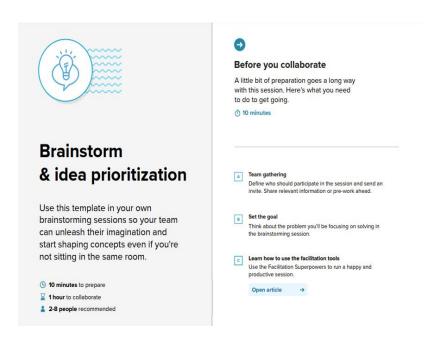
The purpose of analysing housing prices in metropolitan areas of India is to understand Why and how the prices of homes and properties change over time. This analysis helps individuals, investors, and policymakers, make informed decisions about buying, selling, or investing in real estate in these urban regions.

### **Problem Definition & Design Thinking**

### 2.1 Empathy Map



# 2.2 Ideation & Brainstorming Map





## Define your problem statement

What problem are you trying to solve? Frame your problem as a How Might We statement. This will be the focus of your brainstorm.

① 5 minutes

## PROBLEM

How might we Analysing Housing Prices in Metropolitan Areas of India



# **Brainstorm**

Write down any ideas that come to mind that address your problem statement.

10 minutes

You can select a sticky note and hit the pencil [switch to sketch] icon to start drawing!

# Manimozhi.N

Analyze housing prices near major infrastructure projects

Compare housing markets across different metros

Investigate spatial variations in housing prices within metros

# Suganthi.B

Examine how economic factors influence price trends

Study market behavior and speculative trends

Analyze investor influence on the market

### Aarthi.M

Explore how green spaces and pollution impact prices Study the connection between safety and housing prices

Study how rentals affect property values

# Mugilan.M

Examine changes in neglected areas' property values

Identify patterns in price fluctuations

Explore how population and income affect housing demand



# **Group ideas**

Take turns sharing your ideas while clustering similar or related notes as you go. Once all sticky notes have been grouped, give each cluster a sentence-like label. If a cluster is bigger than six sticky notes, try and see if you and break it up into smaller sub-groups.

0 20 minutes

TIP

Add customizable tags to sticky notes to make it easier to find, browse, organize, and categorize important ideas as themes within your mural.

Investigate spatial variations in housing prices within metros

Examine how economic factors influence price trends

Analyze housing prices near major infrastructure projects.

Compare housing markets across different metros

Identify patterns in price fluctuations Explore how population and income affect housing demand



# **Prioritize**

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

### 0 20 minutes

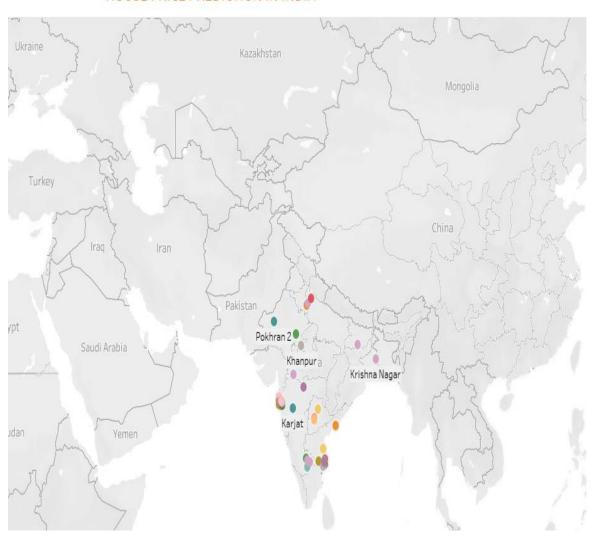
#### TIE

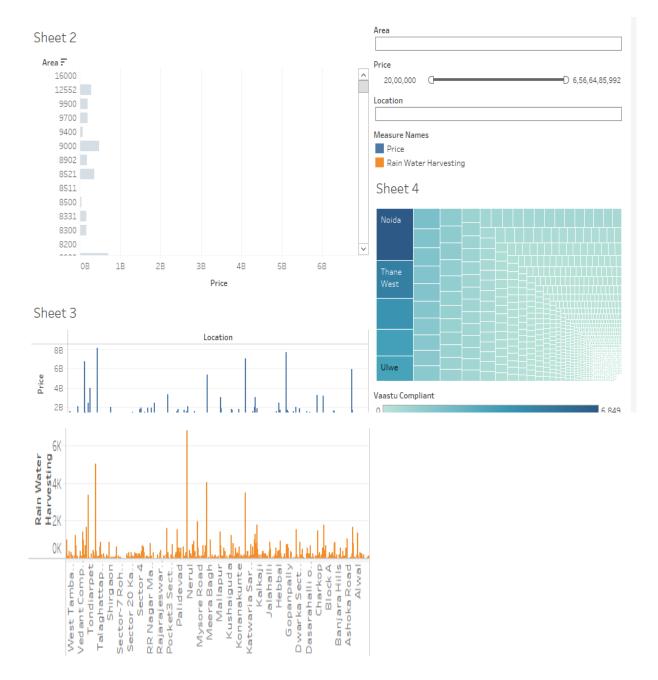
Participants can use their cursors to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the **H key** on the keyboard.

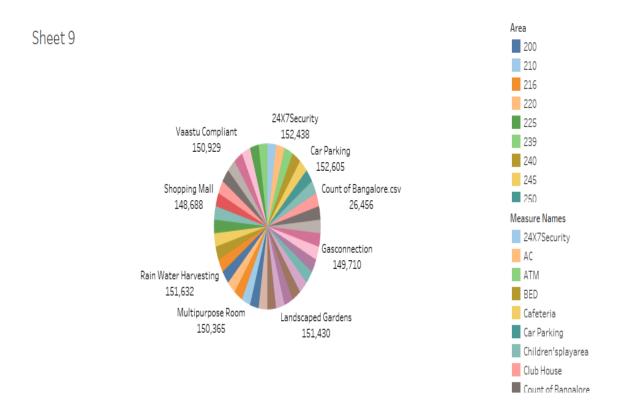
Analyze Compare housing prices Investigate housing near major spatial markets across infrastructure variations in different projects housing prices metros. within metros Examine how economic Identify factors patterns in influence price price trends fluctuations Explore how population and income affect housing demand.

# Dashboard & Story

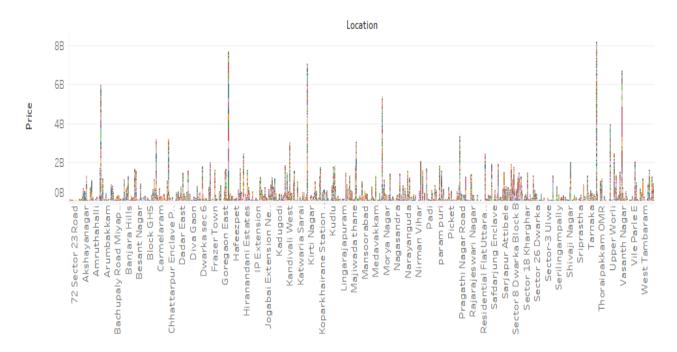
# HOUSE PRICE PREDICTION IN INDIA



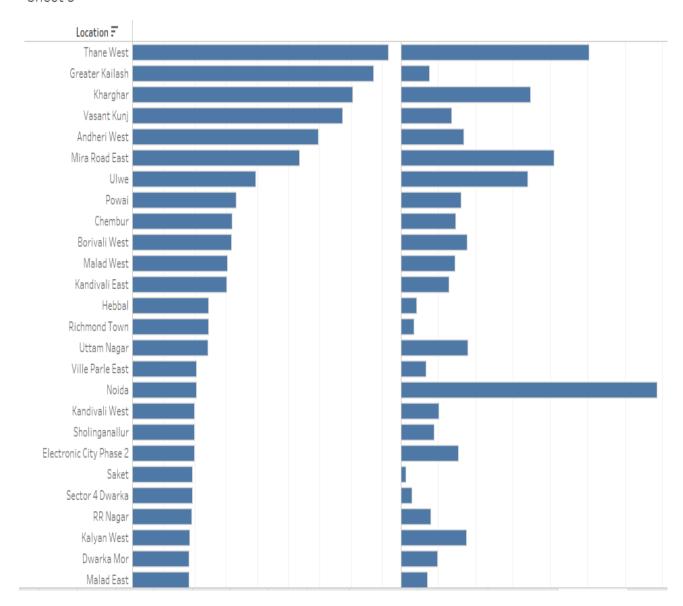




# Sheet 5



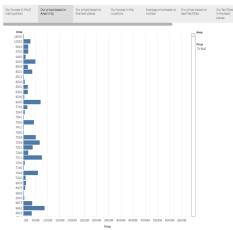
# Sheet 8



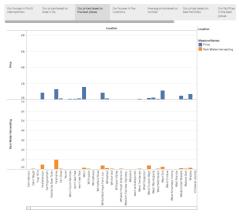
### House Price Prediction



### House Price Prediction



#### House Price Prediction

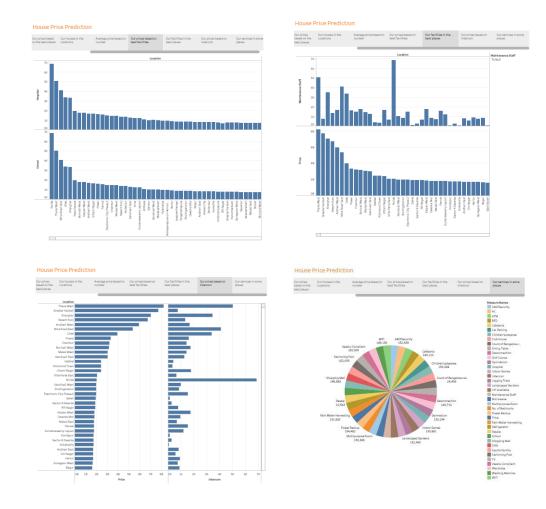


### House Price Prediction



### House Price Prediction





# **Advantages & Disadvandages**

# Advantage:

- 1.Informed Decision-Making: It helps individuals and investors make informed decisions when buying, selling, or renting properties, ensuring they get value for their investments.
- 2.Investment Opportunities: Identifying trends and potential hotspots can lead to profitable real estate investment.
- 3.Policy Formulation: Policymakers can use this data to develope housing policies that address affordability and sustainable urban development.

# Disadvantages:

1.Data Quality: Inaccurate or incomplete data can lead to flawed analyses and unreliable predictions.

- 2.Data Availability: Access to comprehensive and up-to-data housing data can be limited, especially in emerging markets or certain localities.
- 3.Market Volatility: Real estate markets can be highly volatile, making it challenging to make precise long-term predictions.

## **Applications**

- 1. Helping Homebuyers: Assisting people in choosing the right homes at fair prices.
- 2. Aiding Investors: Identifying good investment opportunities in real estate.
- 3. Urban Planning: Guiding city planners to develop infrastructure when it's needed.
- 4. Government Policies: Formulating policies for affordable housing and sustainable cities.
- 5. Economic Insights: Proving insights into the health of the economy in these cities.
- 6. Reducing Risks: Managing risks in property transactions for professionals and banks.
- 7. Educational Research: Supporting researchers and educators in studying real estate trends.

### Conclusion

In conclusion, analysing housing prices in big Indian cities is like having a roadmap for making wise decisions about buying homes, investing money, and planning how cities should grow. It's a valuable tool for individuals, investors, government planners, and researchers to understand and navigate the complex world of real estate in metropolitan areas.

## **Future Scope**

- 1.Better predictions: More accurate forecasts about future housing trends.
- 2.Smarter Investment: Easier identification of profitable real estate opportunities.
- 3.Improved Policies: More effective government policies for affordable housing and urban development.
  - 4. Quick Decision-Making: Faster and more informed decisions for individuals and investors.
  - 5. Data Accessibility: Increased access to housing data, making it easier for everyone to benefit.