

# Analysing Housing Prices in Metropolitan Areas of India

## 1.INTRODUCTION

### 1.1 Overview:

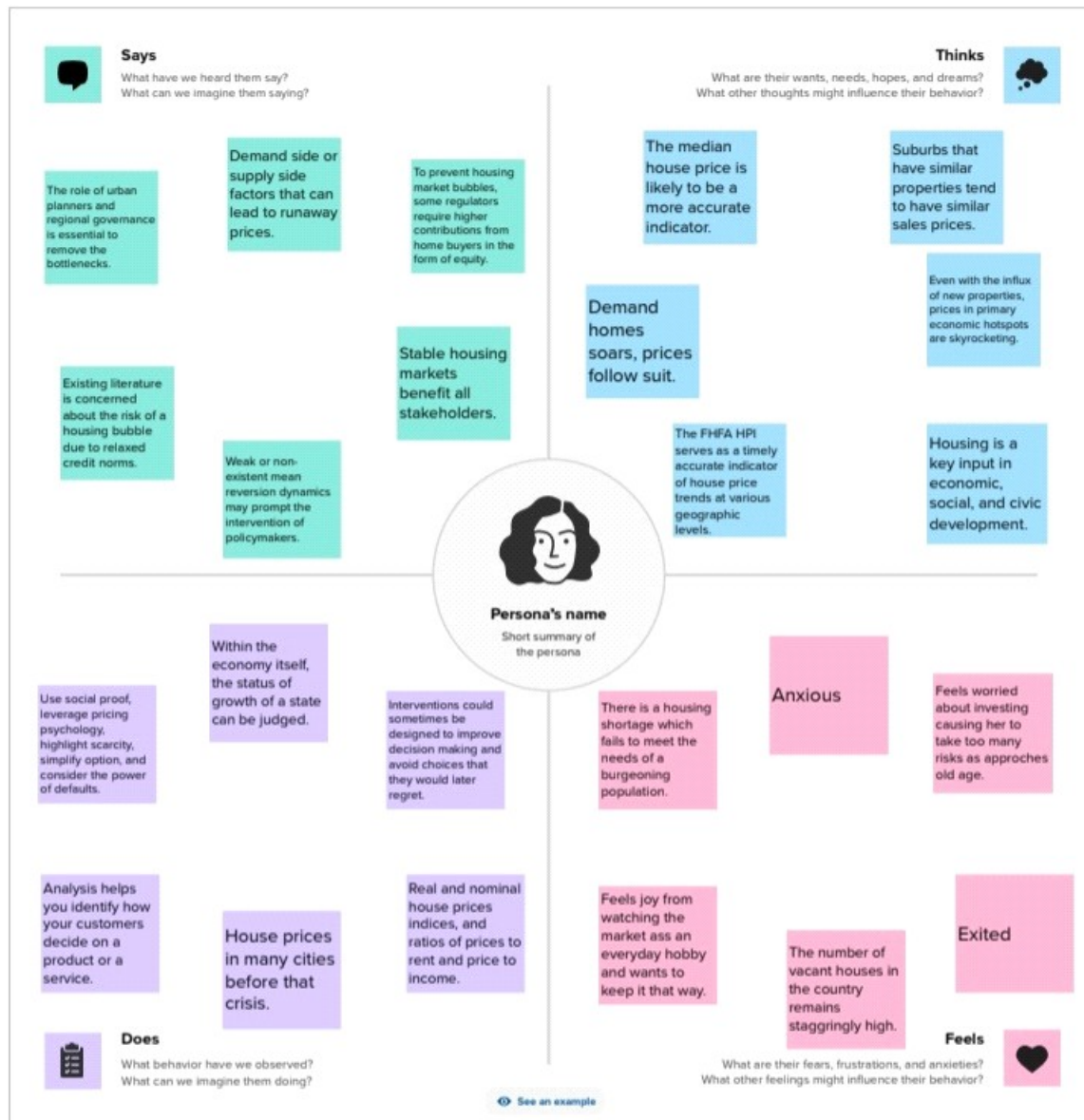
House price prediction in a metropolitan city in India is a valuable solution for potential home buyers, real estate agents, and investors. By leveraging historical sales data, property details, and location-specific information, a predictive model can accurately estimate house prices. The model's scalability, real-time updates, user-friendly interface, and transparency ensure it meets the needs of stakeholders. Integration capability, data privacy, and cost-effectiveness are also important considerations. By addressing these requirements, the prediction model provides reliable insights, empowering stakeholders to make informed decisions in the fast-paced real estate market.

### 1.2 Purpose:

The HPI is one of many economic indicators that investors use to keep a pulse on broader economic trends and potential shifts in the stock market. The rise and fall of house prices can have big implications for the economy.

## 2.PROBLEM DEFINITION & DESIGN THINKING

### 2.1 Empathy Map:



## 2.2 Ideation @ Brainstorming Map:



Brainstorm  
& idea prioritization

Use this template in your own brainstorming sessions as you learn to understand their imagination and start shaping concepts even if you're not building in the same way.

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Seize your college

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## 1. Introduction

Define your problem statement.

The price is as good as free for  
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cost is your time.

Abstract

**Business**

We have a few more  
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## Group des

Seorang yang telah datang akan datang ke rumahmu.

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**Keywords:**

Unser Ziel ist es, eine neue, ganzheitliche  
Konzeption der psychischen  
Gesundheit zu entwickeln.

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### Conclusions

Severely brain-damaged people  
for the last few years of their

**Synthesizing**  
Explain why the real GDP-to-PPI ratio is not a reliable index of inflation.

### Key findings

**Tube spin (pre- $\gamma$ )**  
 Collect culture with medium at  
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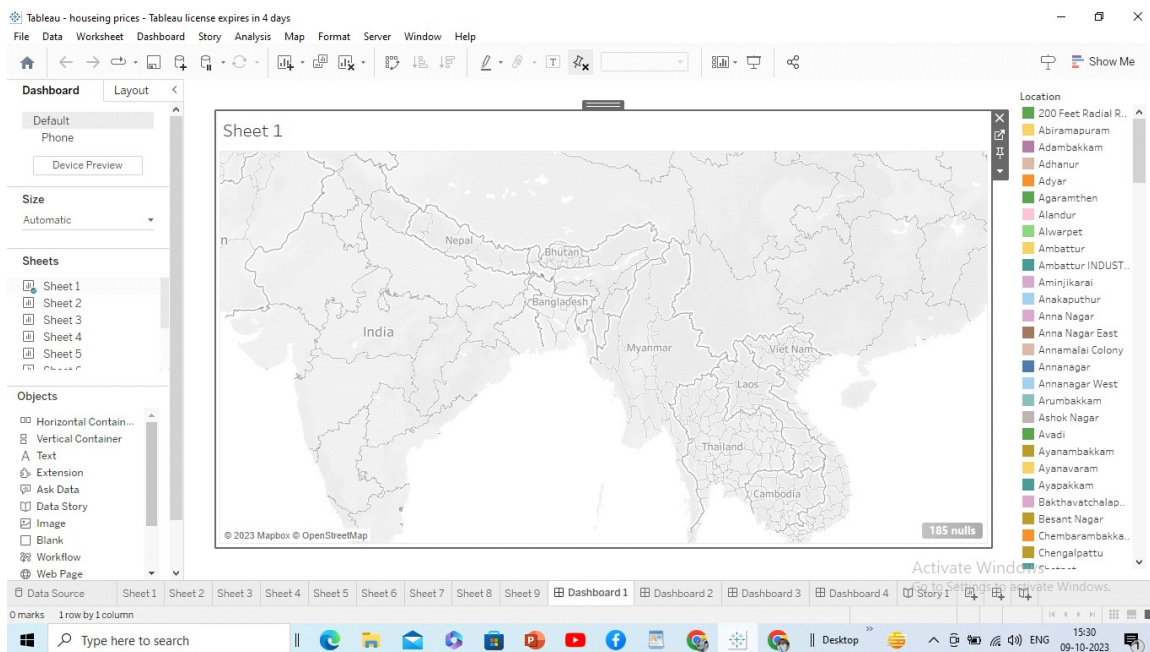
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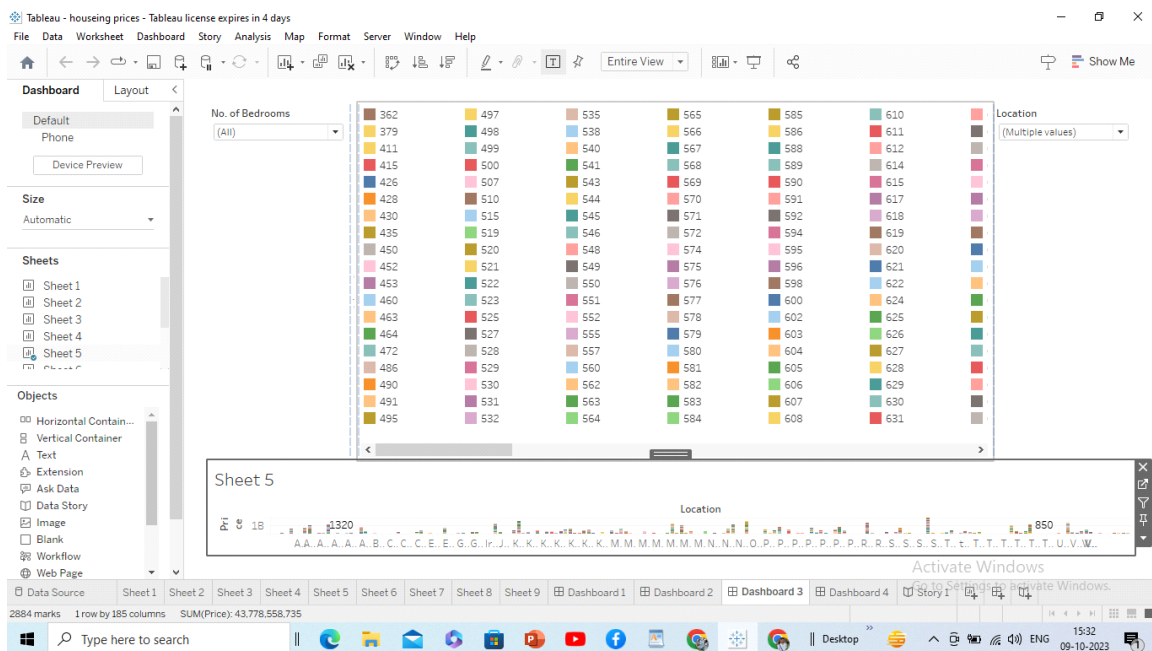
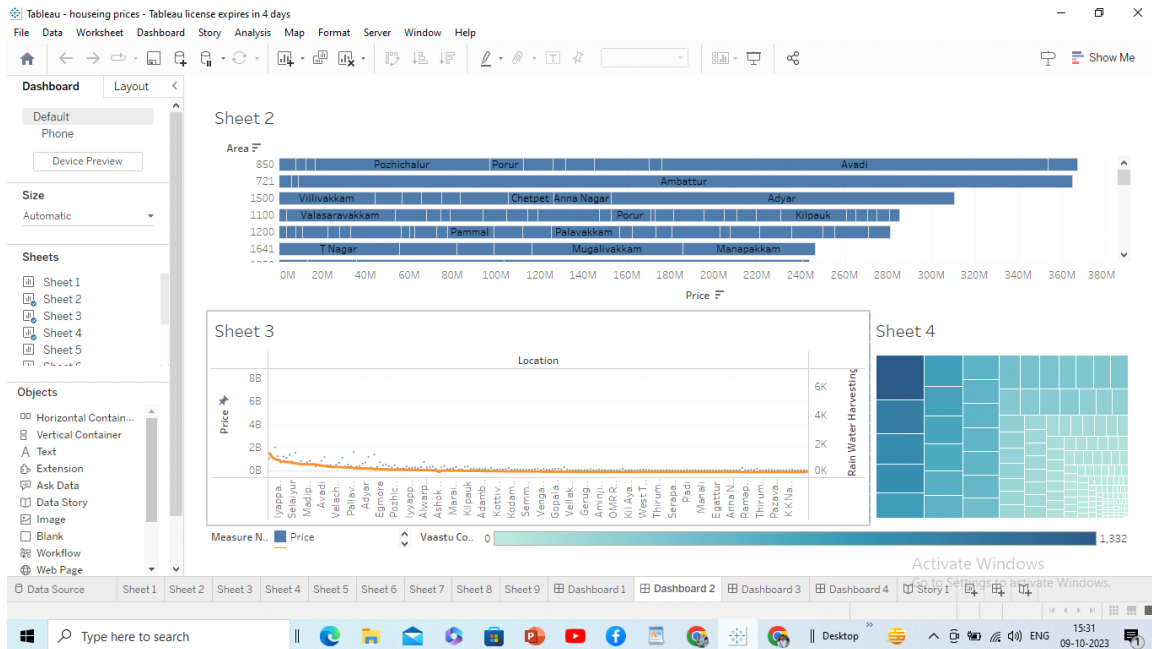
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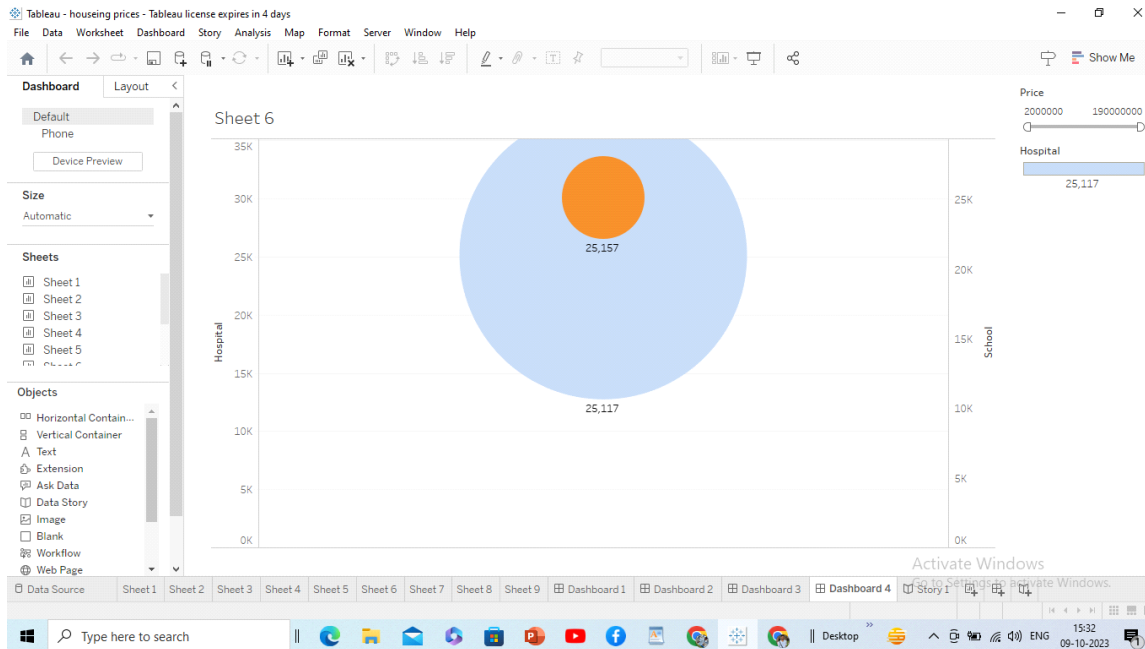


### 3.RESULT

The result of the Im, Pesaran and Shin panel unit root test is presented in Table 1. The consistently high probabilities of the relative house prices indicate that the series is consistently non-stationary and therefore diverges indefinitely in the long-run. The lack of convergence of the relative house prices simply implies that separate metropolitan cities in India function as separate housing markets in their respective localities. In other words, the Law of One Price does not hold in Indian housing market case.







## 4.ADVANTAGES & DISADVANTAGES

### ADVANTAGE:

- \* House price prediction can help the developer determine the selling price of a house and can help the customer to arrange the right time to purchase a house.

- \* There are three factors that influence the price of a house which include physical conditions, concept and location.

### DISADVANTAGE:

- \* Drawbacks: It doesn't predict future prices of the houses mentioned by the customer.

- \* Due to this, the risk in investment in an apartment or an area increases considerably.

- \* To minimize this error, customers tend to hire an agent which again increases the cost of the process.

## 5.APPLICATIONS

\*The values of X and Y variables are training datasets for the model representation of linear regression.

\*The aim is to predict the efficient house pricing for real estate customers with respect to their budgets and priorities.

\*To create a linear model that quantitatively relates house prices with variables such as number of rooms, area, number of bathrooms, etc. To know the accuracy of the model, i.e. how well these variables can predict house prices.

## 6.CONCLUSION

This paper analyzes whether the Law of One Price holds in the housing market of fifteen metropolitan areas in India, namely Delhi, Mumbai, Bengaluru, Kolkata, Chennai, Jaipur, Lucknow, Hyderabad, Pune, Surat, Ahmedabad, Patna, Faridabad, Kochi and Bhopal. We test the existence of LOOP using the Im, Pesaran and Shin (2003) panel unit root test based on quarterly data on residential property prices covering the period of 2007Q1 to 2011Q4 of the Indian housing market. Based on the criterion of price convergence, house prices in the 15 metropolitan cities do not converge to the LOOP. This implies that the housing markets in the different areas operate as segmented independent local markets. Therefore, house prices in one location in India cannot impose a competitive constraint on house prices in other location, and as such a home owner can freely set the price of his house.

## 7.FUTURE SCOPE

\* It encompasses various segments, including residential, commercial, retail, hospitality, and industrial properties.

\* The rapid urbanization, growing middle class, and increased investment in infrastructure have driven the demand for real estate across these segments.

\* In 2021, the size of the Indian property market was USD 200 billion. Projected growth by 2030 for the sector is USD 1 trillion.

\* What is more, by 2025, the real estate sector is expected to contribute 13% of the country's total GDP.

\* Real estate careers encompass a wide range of possibilities and are always highly in demand.

