



LRG GOVT ARTS COLLEGE FOR WOMEN , TIRUPUR

Course name: Data Analytics with Tableau

Academic Year:2023-2024

A Project report entitled as

**“ANALYSING HOUSING PRICES IN METROPOLITAN
AREAS OF INDIA “**

Work Done By

UNIV.REG.NO	Naan Mudhalvan ID	Name	class
2122A0079	849785BD48B820181614798667EB9214	JENIS AROMA A	B.sc.Mathematics
2122A0051	1514A3FBDAAAD7B99344252A1F6A8402	KAVERI M	B.sc.Mathematics
2122A0081	590F75D97536DBA85B64701E7BC65374	KAVIPRIYA R	B.sc.Mathematics
2122A0082	C9424CA3D397426BCAF4BC907D1704AA	KAVISATHYA K	B.sc.Mathematics

TEAM ID: NM2023TMID01855

Under The Guidance of

Mr . S. ANANDHAKUMAR

Guest lecturer

Department Of Mathematics

INDEX

S.NO	TITLE	PAGE NO
1	Introduction	3
2	Problem Definition and Design Thinking	5
3	Result	7
4	Advantages and Disadvantages	16
5	Application	19
6	Conclusion	20
7	Future Scope	21
8	Appendix	23

ANALYSING HOUSING PRICES IN METROPOLITAN AREAS OF INDIA

1.INTRODUCTION

1.1 Overview:

Since the inception of the theory and idea of development, the common features that emerged in different point of time is the developmental gap that emerged in different parts of the world and also among various parts of a country in a particular time period. Thus, house price behaviour may also reflect sum short of developmental status of the houses holds of a country. This also leads to the differences in the dynamics of house price determination. For instance average house prices in the poorer provinces might be lower than the national average similarly for richer states the urban house price on average might be higher than the national average

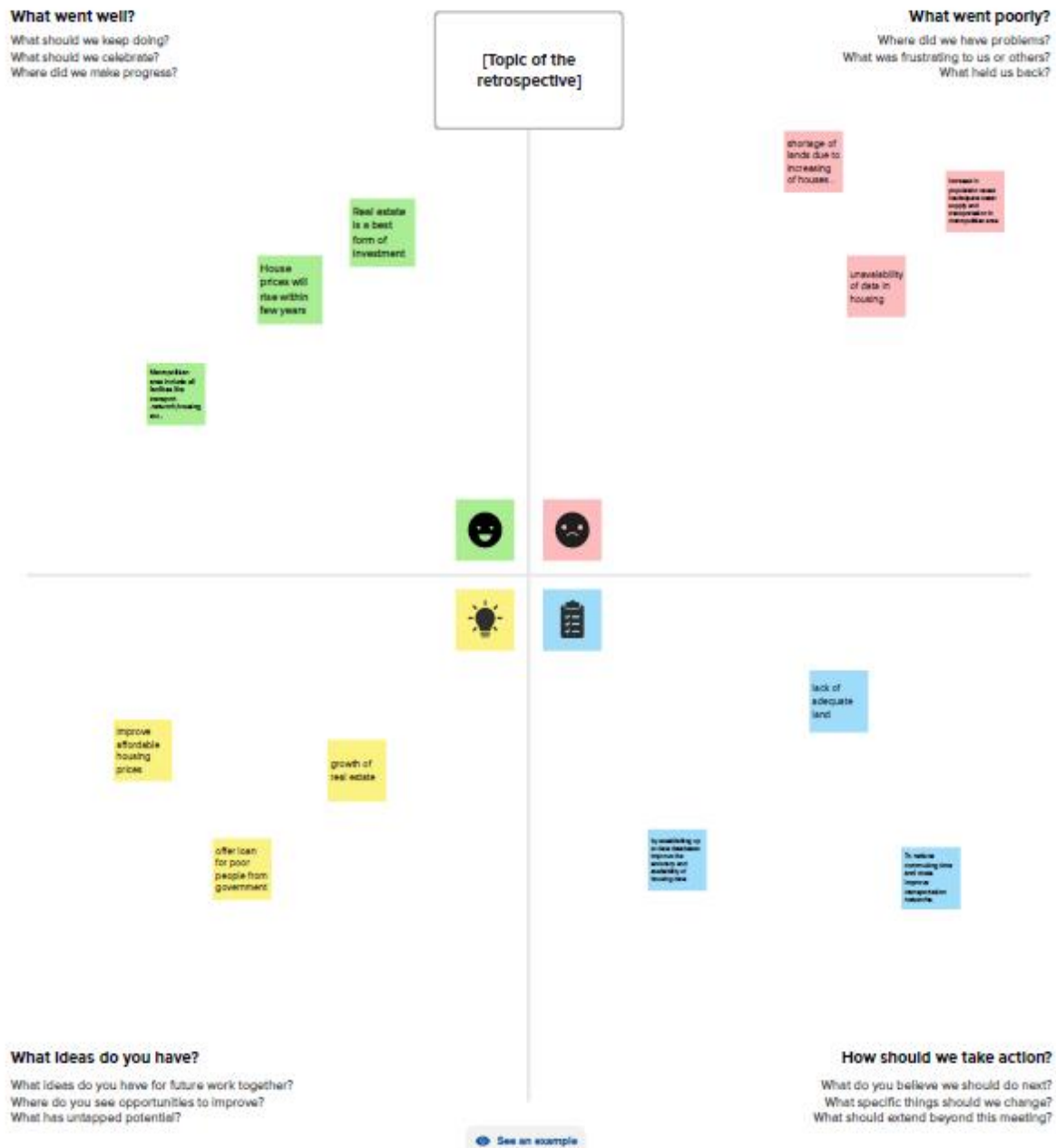


1.2 Purpose:

1. Understanding Market Trends: Analyzing housing prices in metropolitan areas helps to identify market trends and patterns, which can be used to make informed decisions about investments or property purchases. By examining historical data and current market conditions, analysts can predict future price movements and help investors make better decisions
2. Identifying Affordable Housing Options: With the rising demand for housing in urban areas, it is essential to identify affordable housing options. By analyzing housing prices in different metropolitan areas, policymakers and developers can identify areas where housing is more affordable and create policies that promote affordable housing.
3. Evaluating Infrastructure Development: The quality of infrastructure development in an area can significantly impact housing prices. Analysis of housing prices in metropolitan

2.PROBLEM DEFINITION AND DESIGN THINKING

2.1 Empathy Map

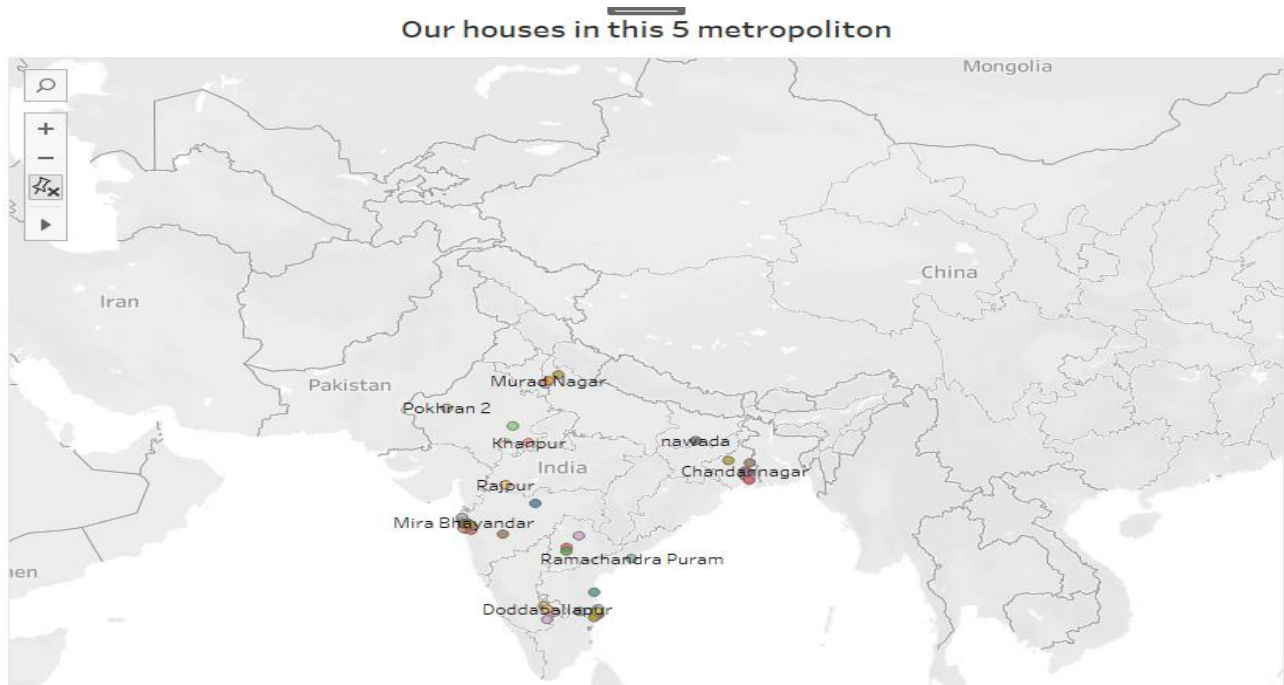


2.2 Ideation & Brainstorming Mapping

[illegible]

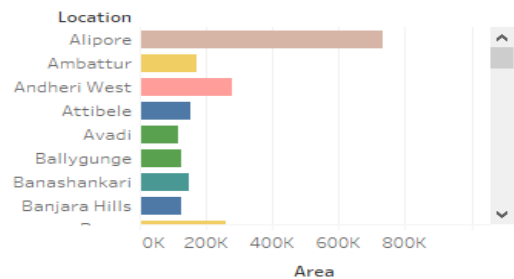
3.RESULT

Dashboard 1

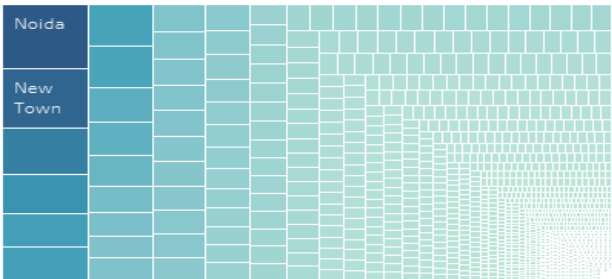


Dashboard 2

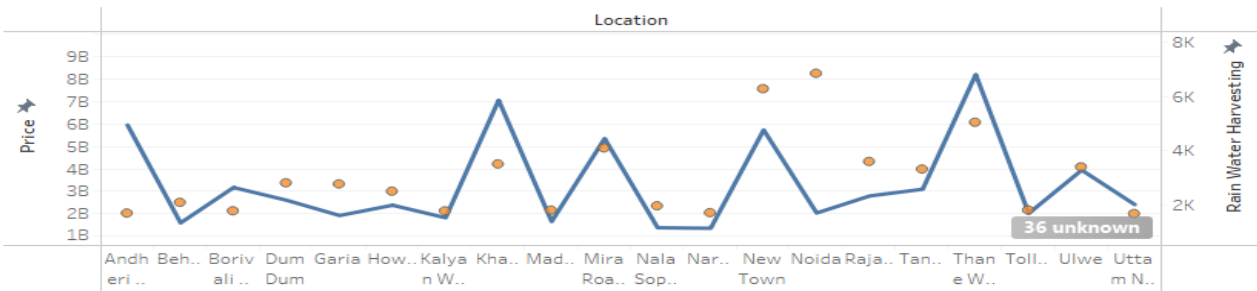
Our prices based on area in sq



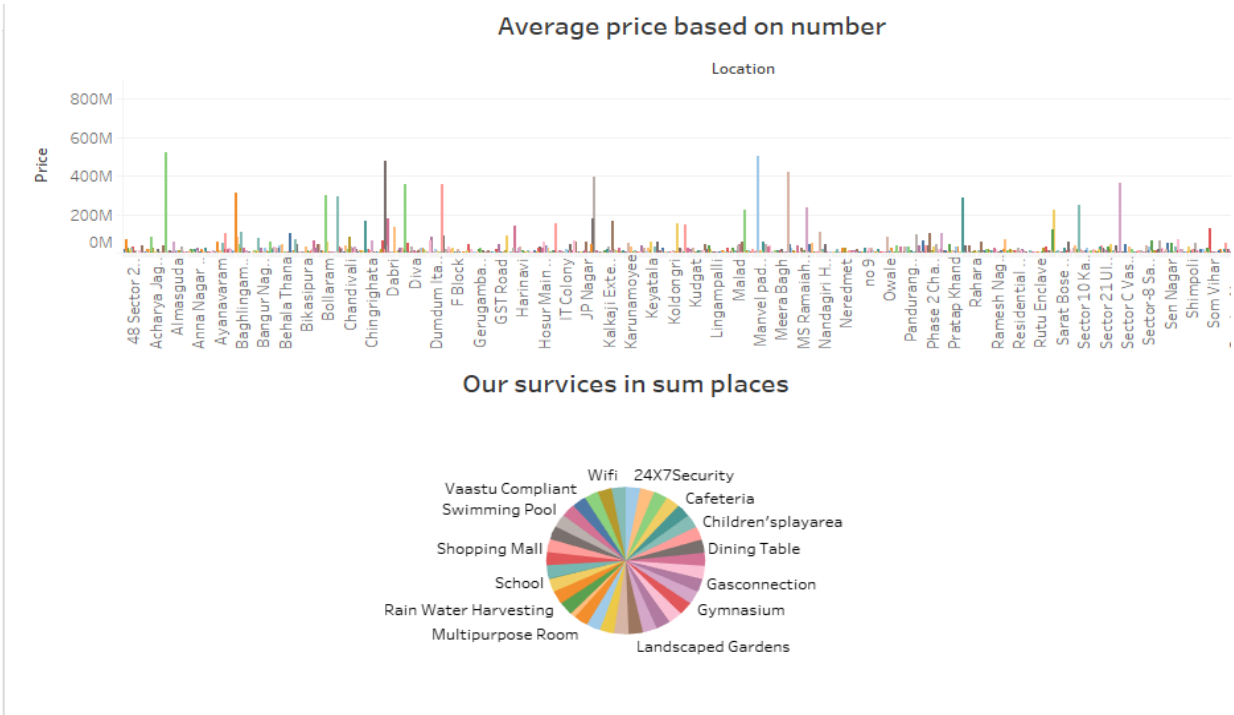
Our houses in the locations



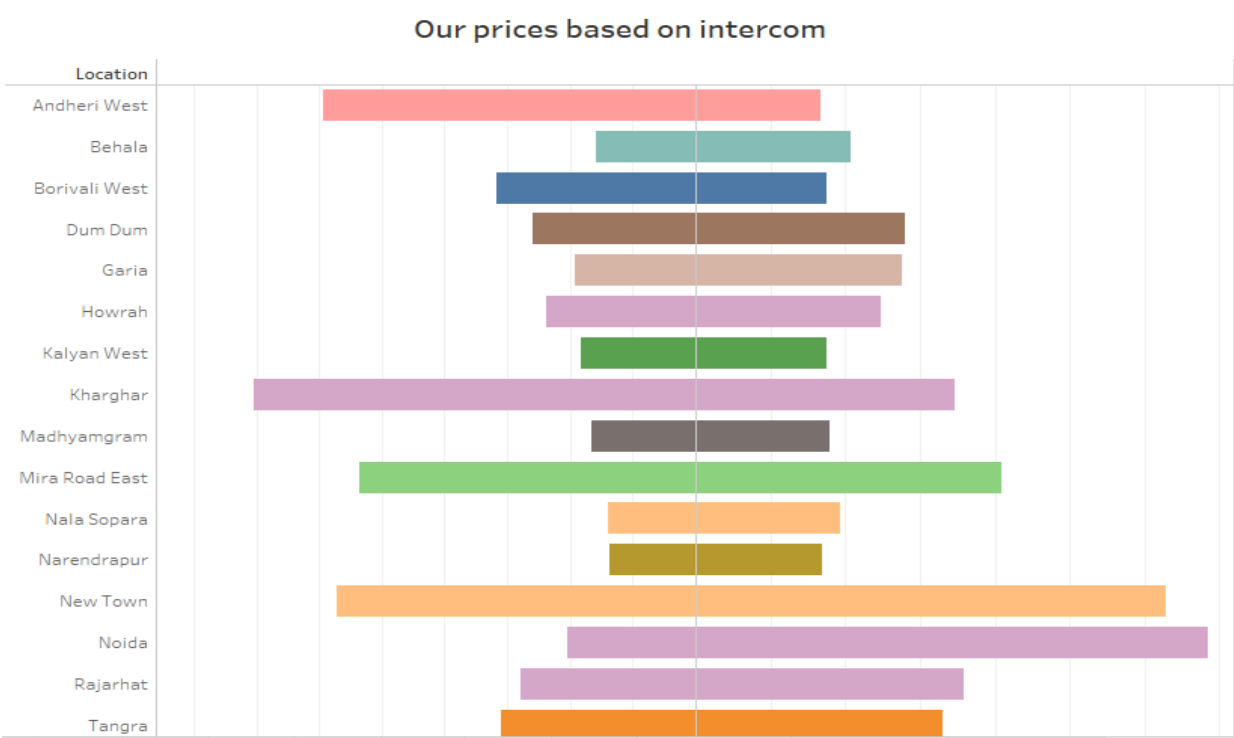
Our prices based on the best places



Dashboard 3

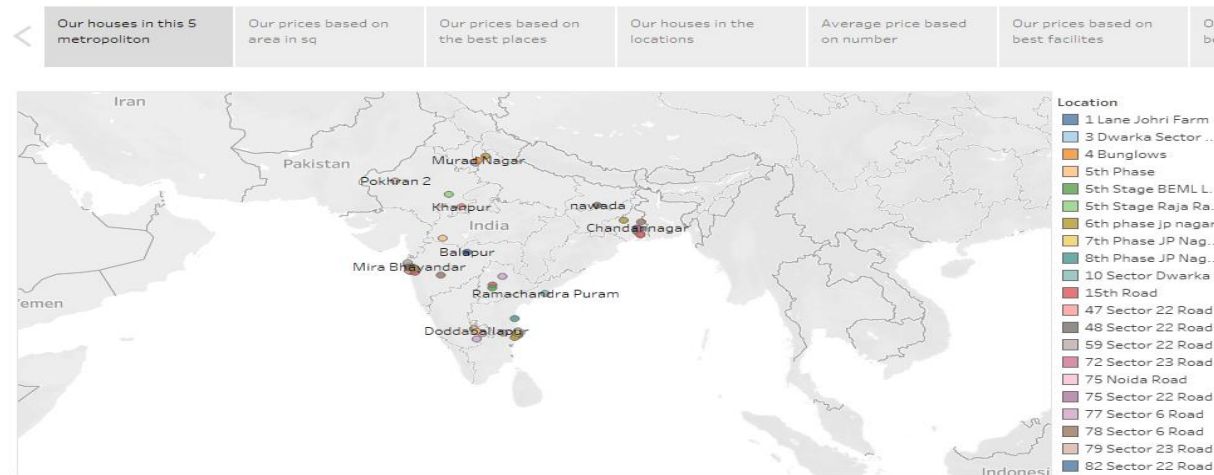


Dashboard 4

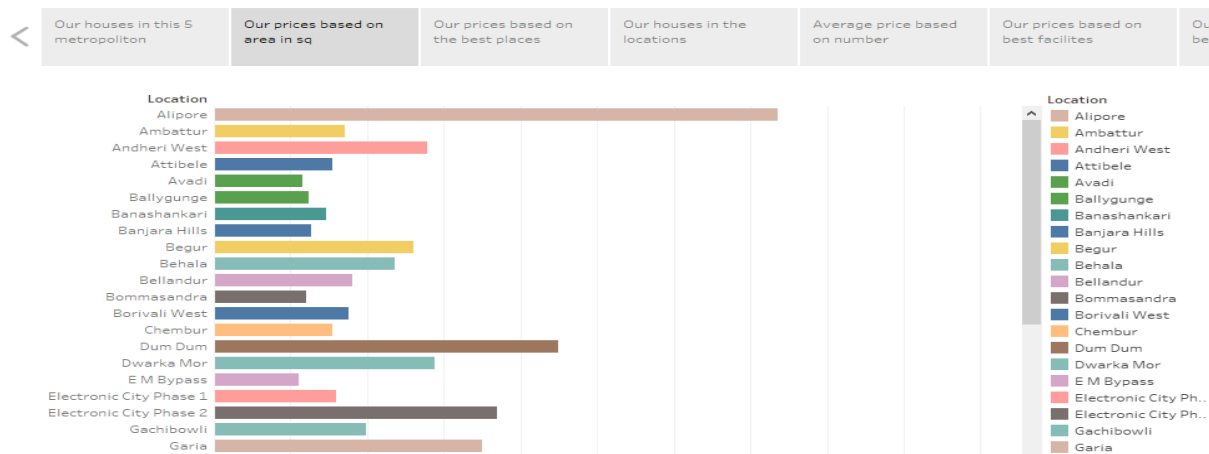


STORY

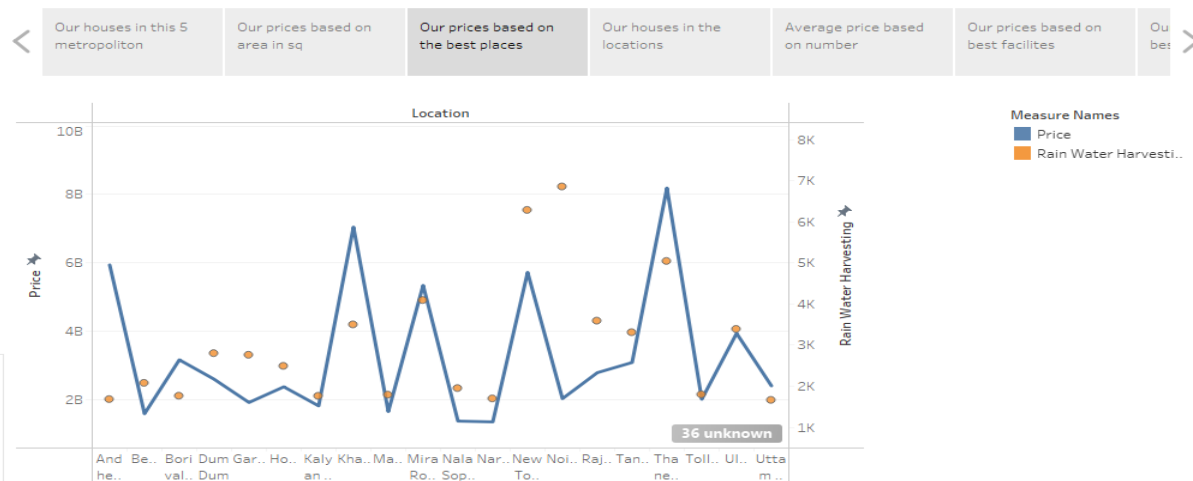
Story 1



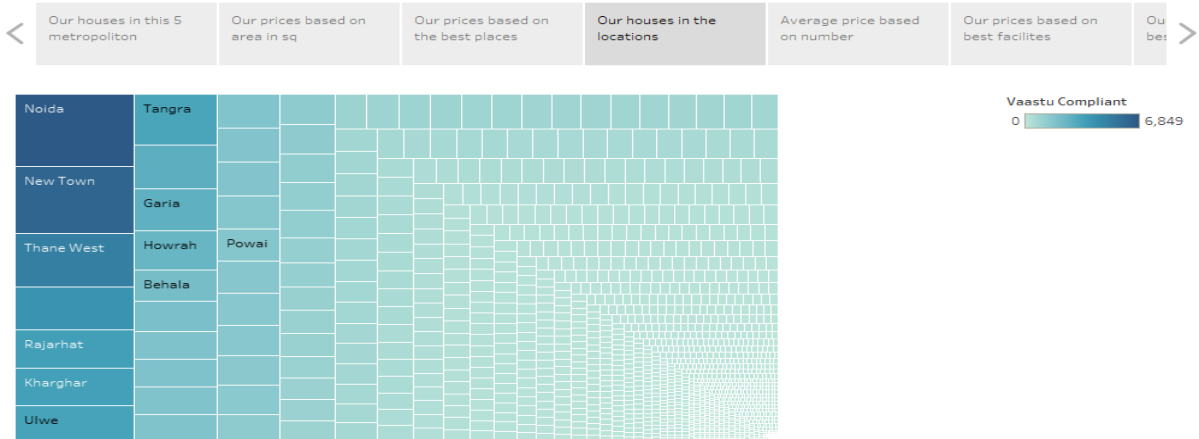
Story 1



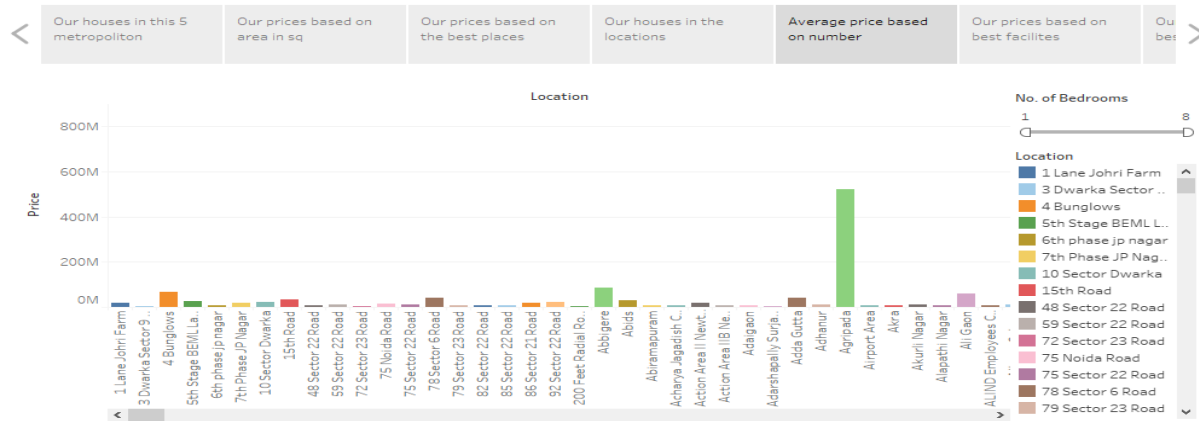
Story 1



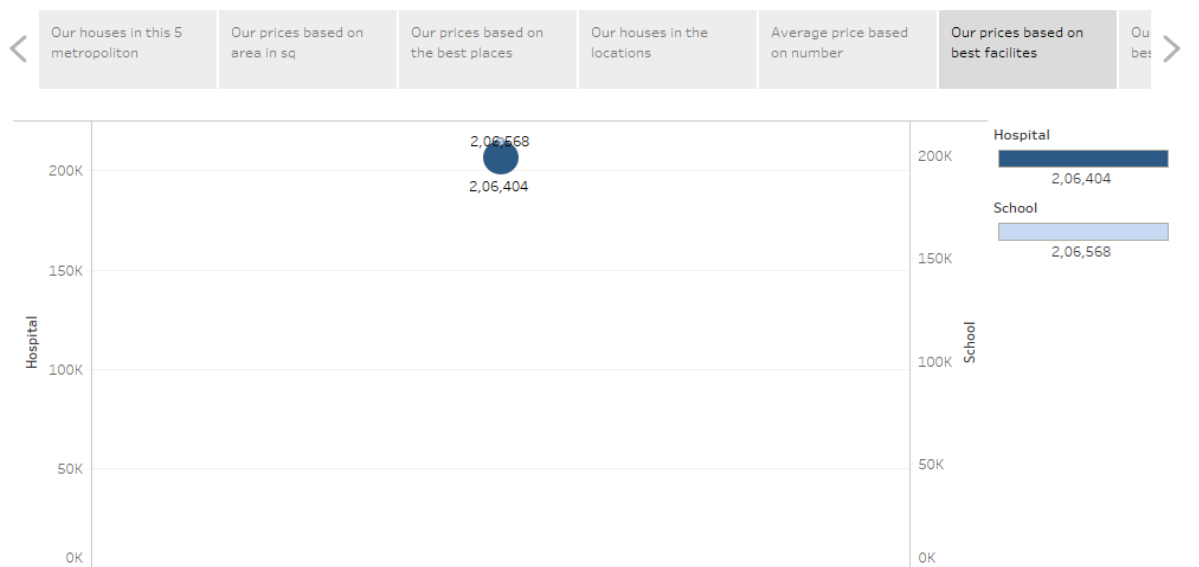
Story 1



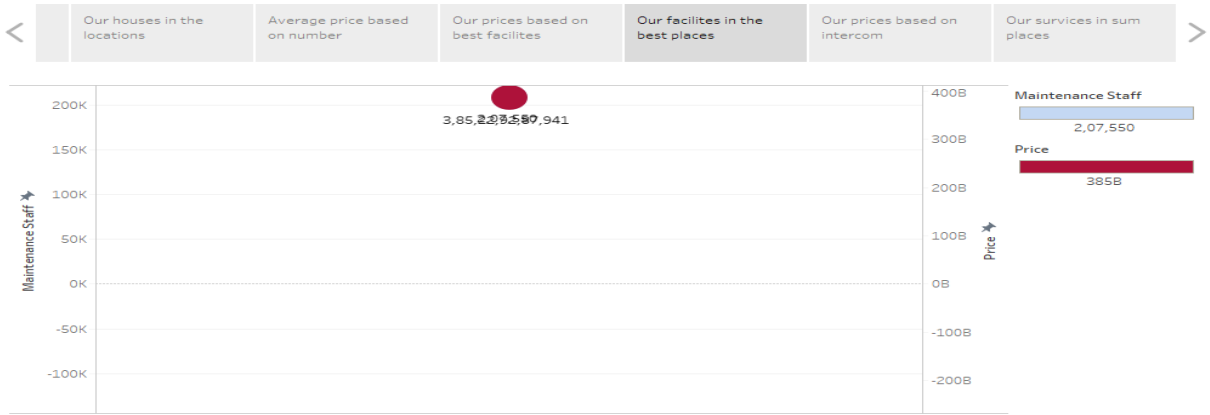
Story 1



Story 1



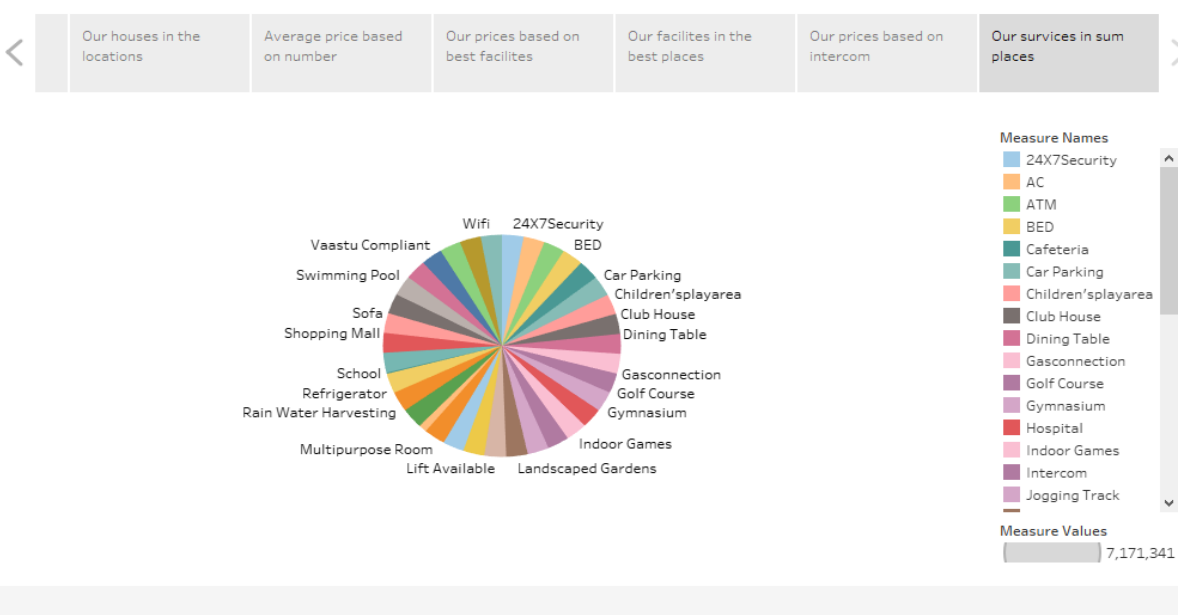
Story 1



Story 1

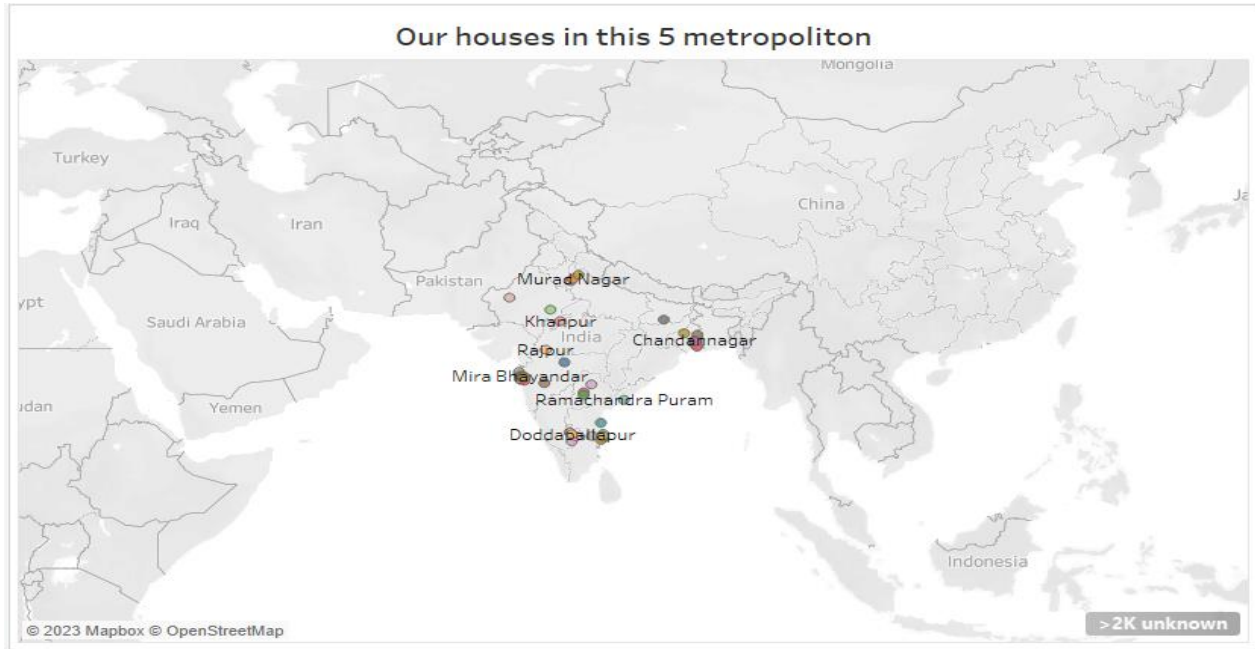


Story 1

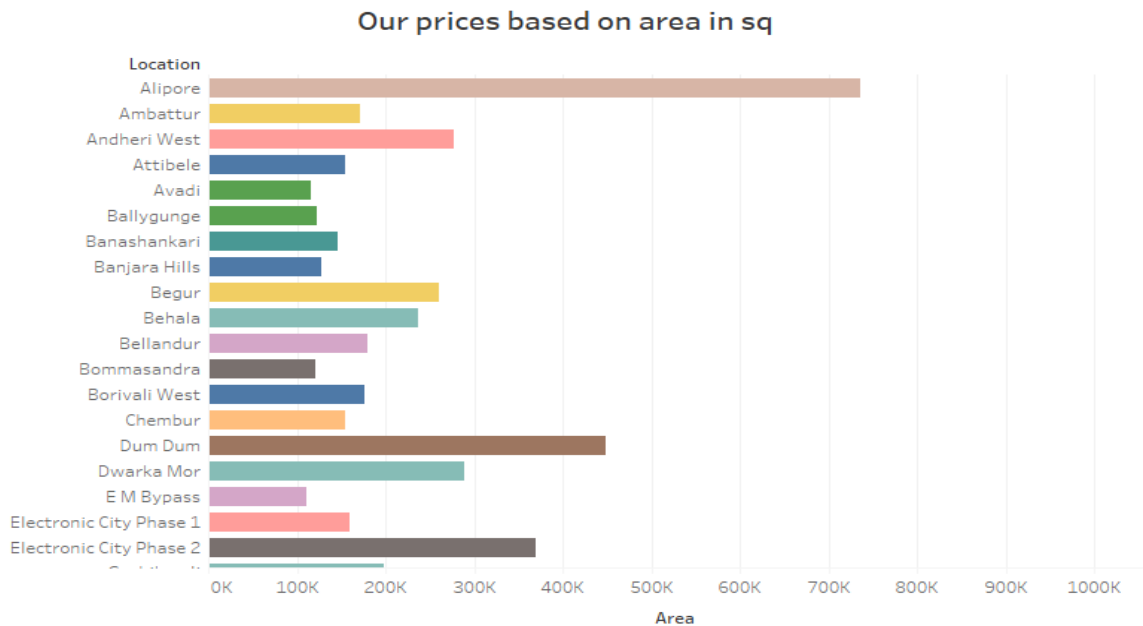


VISUALIZATIONS

1.Our Houses in this 5 Metropoliton



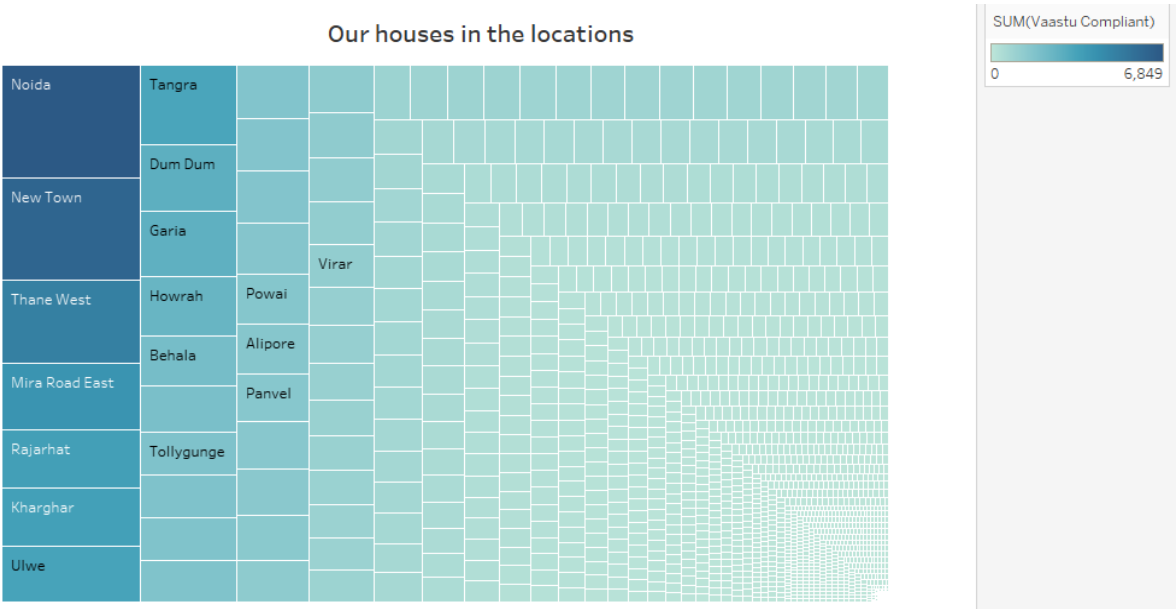
2.Our Prices based on area in sq



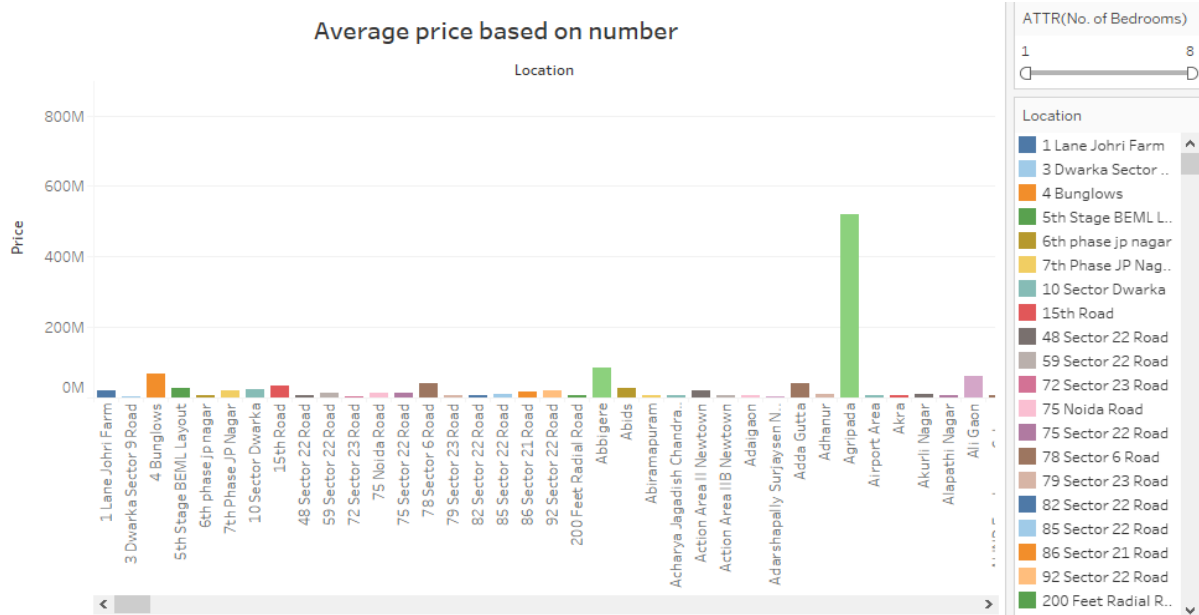
3.Our prices based on best prices



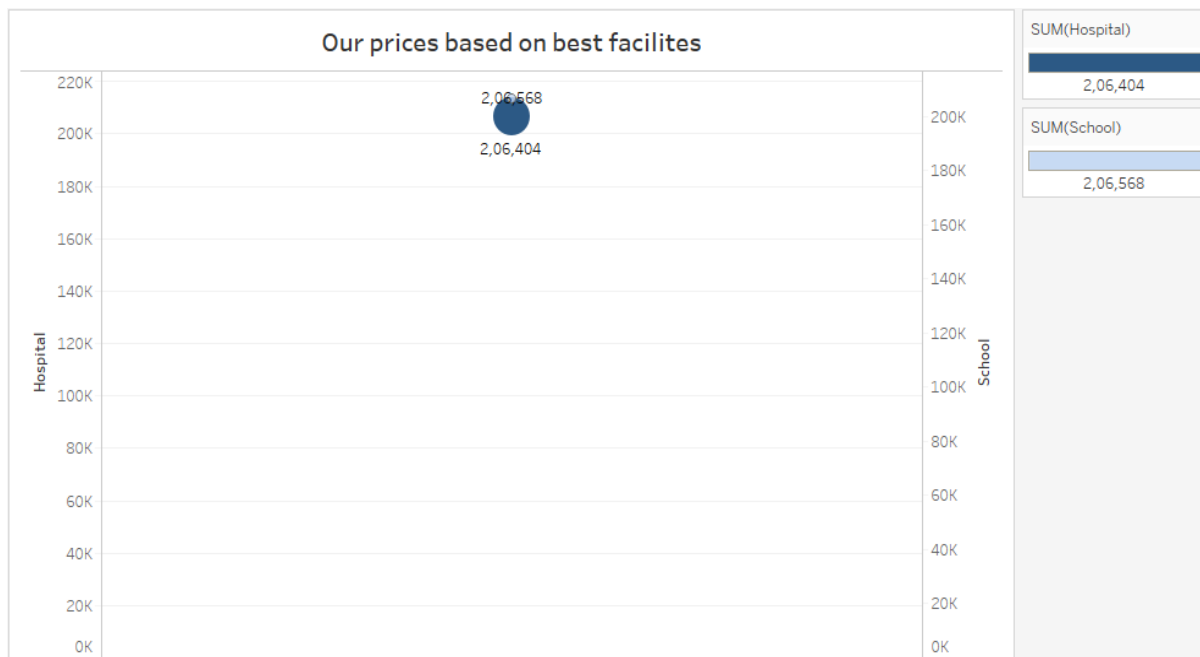
4.Our Houses in the locations



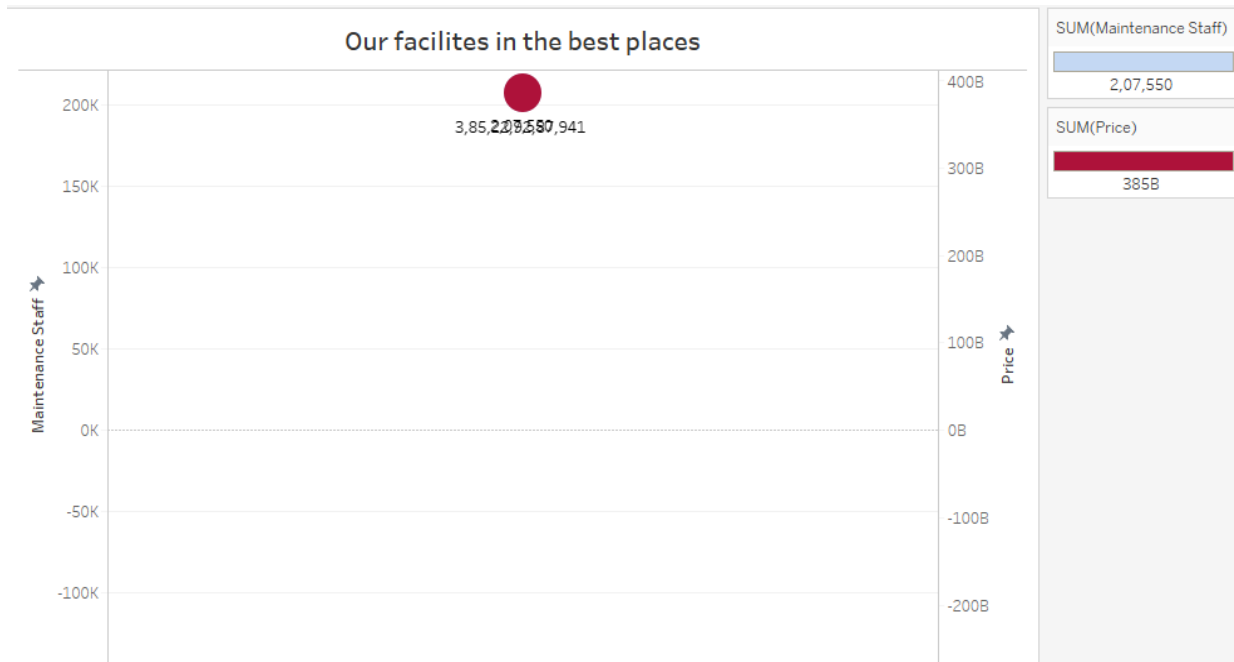
5.Average Price based on numbers



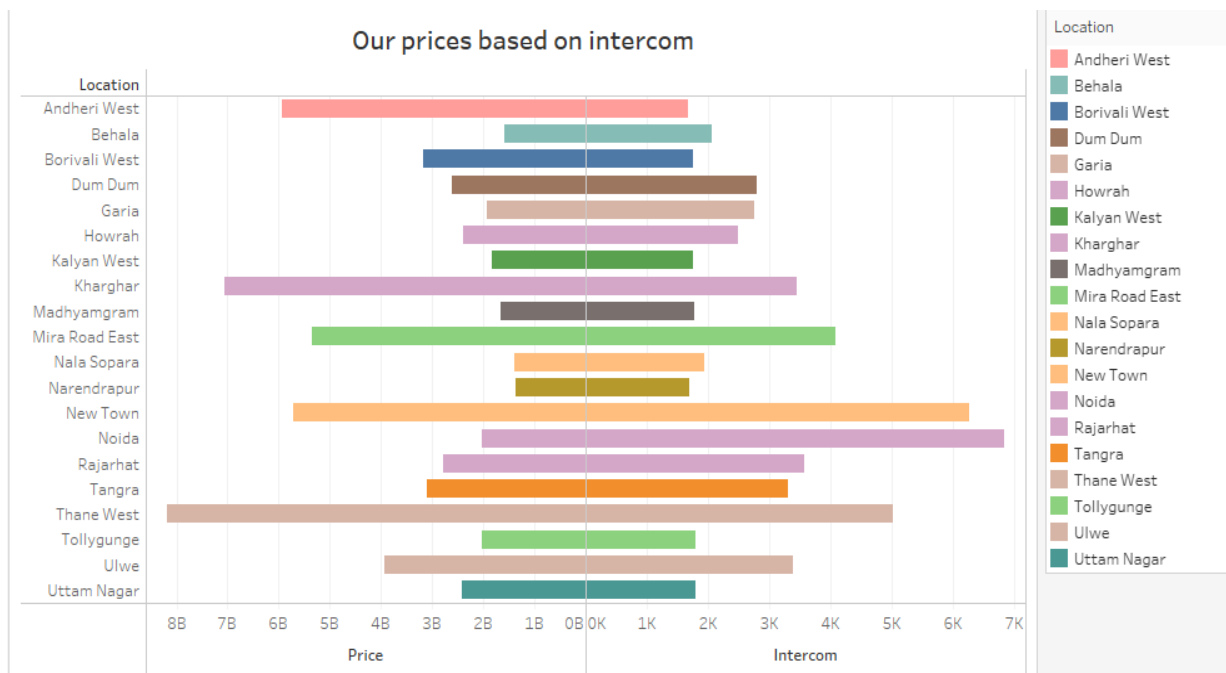
6.Our Prices based on best Facilities



7.Our Facilities in the best Places



8.Our Prices based on Intercom



9.Our Survices in some Places



4.ADVANTAGES & DISADVANTAGES

4.1 Advantages

1. Market Opportunities: Metropolitan areas in India offer a large and diverse housing market, providing numerous opportunities for investors, developers, and buyers.

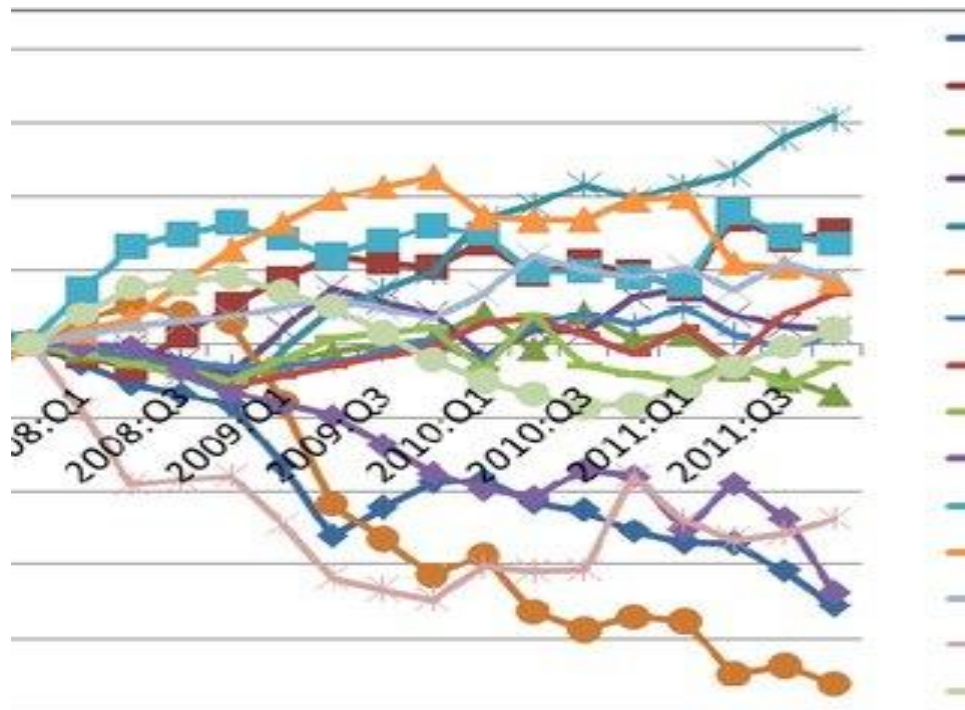
2. Economic Growth: Housing in metropolitan areas is closely tied to economic growth, as these areas serve as centers for business, employment, and commerce

3. Infrastructure: Metropolitan areas generally have better-developed infrastructure, including transportation networks, utilities, and amenities,

which can enhance the value and desirability of housing.

4. Access to Services: Metropolitan areas offer a wide range of services such as healthcare, education, and entertainment, making them attractive locations for housing.

5. Cultural and Social Opportunities: Cities in metropolitan areas have a vibrant culture and offer social opportunities like festivals, shopping centers, and diverse dining experiences.



4.2 Disadvantages

1. High Cost: Metropolitan areas often have higher housing costs due to increased demand and limited supply, making it challenging for some individuals or families to afford suitable housing

2. Space Constraints: Space is usually limited in metropolitan areas, resulting in smaller homes or higher density living. This can lead to a lack of open spaces and recreational areas.

3. Traffic Congestion: Metropolitan areas typically experience heavy traffic congestion, which can affect accessibility to and from housing locations

4. Pollution and Environmental Concerns: Increased urbanization in metropolitan areas can lead to higher pollution levels and environmental challenges, impacting the quality of life for residents.

5. Socio-economic Disparities: Metropolitan areas may have significant socio-economic disparities, with pockets of extreme wealth and poverty. This can lead to uneven access to quality housing and perpetuate inequality.

5.APPLICATIONS

1. Data Collection:

a. Government Sources:

- * National Sample Survey (NSS)
- * Census of India
- * National Sample
- * Ministry of Housing and Urban Affairs (MoHUA)

b. Private Sources:

- * Property websites (e.g., MagicBricks, PropTiger, Housing.com)
- * Real estate portals (e.g., Zillow, Redfin, Realtor.com)

2. Data Preprocessing:

a. Cleaning and filtering the data

b. Handling missing values

c. Transforming variables into suitable formats

3. Feature Engineering:

a. Creating new features from existing ones (e.g., log transformation, normalization)

6. CONCLUSION

This paper analyses whether the Law of one price holds in the housing market of 15 metropolitan areas in India . Based on the criterion of price convergence , house prices in the 15 metropolitan cities do not converge to the loop . 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 freely set the price of his house



7.FUTURE SCOPE

1. Economic growth: The economic growth of a region has a significant impact on property prices. Areas with strong economic growth tend to see higher property values. Look for regions that have a diverse economy, low unemployment rates, and a growing GDP.

2. Infrastructure development: Proximity to good transportation infrastructure,

such as airports, railways, and highways, can increase property values. Also, look for areas with planned infrastructure developments like new flyovers, roads, and public transport systems

3. Demographic trends: Understanding the demographic makeup of a region is crucial when analyzing property prices. Factors like population growth, age distribution, and household size can influence property demand and supply. For example, areas

8. APPENDIX

Github link:

<https://github.com/Jenisaroma/NM2023T MID01855/edit/main/README.md>

Dashboard 1:

https://public.tableau.com/app/profile/jenis.aroma.a/viz/Book1_16973697951400/Dashboard1

Dashboard 2:

https://public.tableau.com/app/profile/jenis.aroma.a/viz/Book2_16970065924000/Dashboard2

Dashboard 3:

https://public.tableau.com/app/profile/jenis.aroma.a/viz/Book3_16973689451940/Dashboard3

Dashboard 4:

https://public.tableau.com/app/profile/jenis.aroma.a/viz/Book4_16973696431600/Dashboard4

Story 1:

[//public.tableau.com/app/profile/jenis.aroma.a/viz/Book5_16973698599890/Story1](https://public.tableau.com/app/profile/jenis.aroma.a/viz/Book5_16973698599890/Story1)