PROJECT –REPORT

REVOLUTION: HOUSING PRICES IN METROPOLITAN AREA OF INDIA

TEAM ID: NM2023TMID06459

TEAM MEMBERS:

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❖Project Flow

To accomplish this, we have to complete all the activities listed below,

- ***Define Problem / Problem Understanding***
  - ***o Specify the business problem***
  - ***o Business requirements***
  - ***o Literature Survey***
  - ***o Social or Business Impact***

- ***Data Collection & Extraction from Database***
  - ***o Collect the dataset,***
  - ***o Storing Data in DB***
  - ***o Perform SQL Operations***
  - ***o Connect DB with Tableau***

- ***Data Preparation***
  - ***o Prepare the Data for Visualization***

- ***Data Visualizations***
  - ***o Number of Unique Visualizations***

- ***Dashboard***
  - ***o Responsive and Design of Dashboard***

- ***Story***
  - ***o Number of Scenes of Story***

- ***Performance Testing***
  - ***o Amount of Data Rendered to DB ‘***
  - ***o Utilization of Data Filters***
  - ***o Number of Calculation Fields***
  - ***o Number of Visualizations/ Graphs***

- ***Web Integration***
  - ***o Dashboard and Story embed with UI With Flask***

- ***Project Demonstration & Documentation***
  - ***o Record explanation Video for project end to end solution***
  - ***o Project Documentation-Step by step project development procedure***

1.INDTRODUCTION

1.1: Overview:

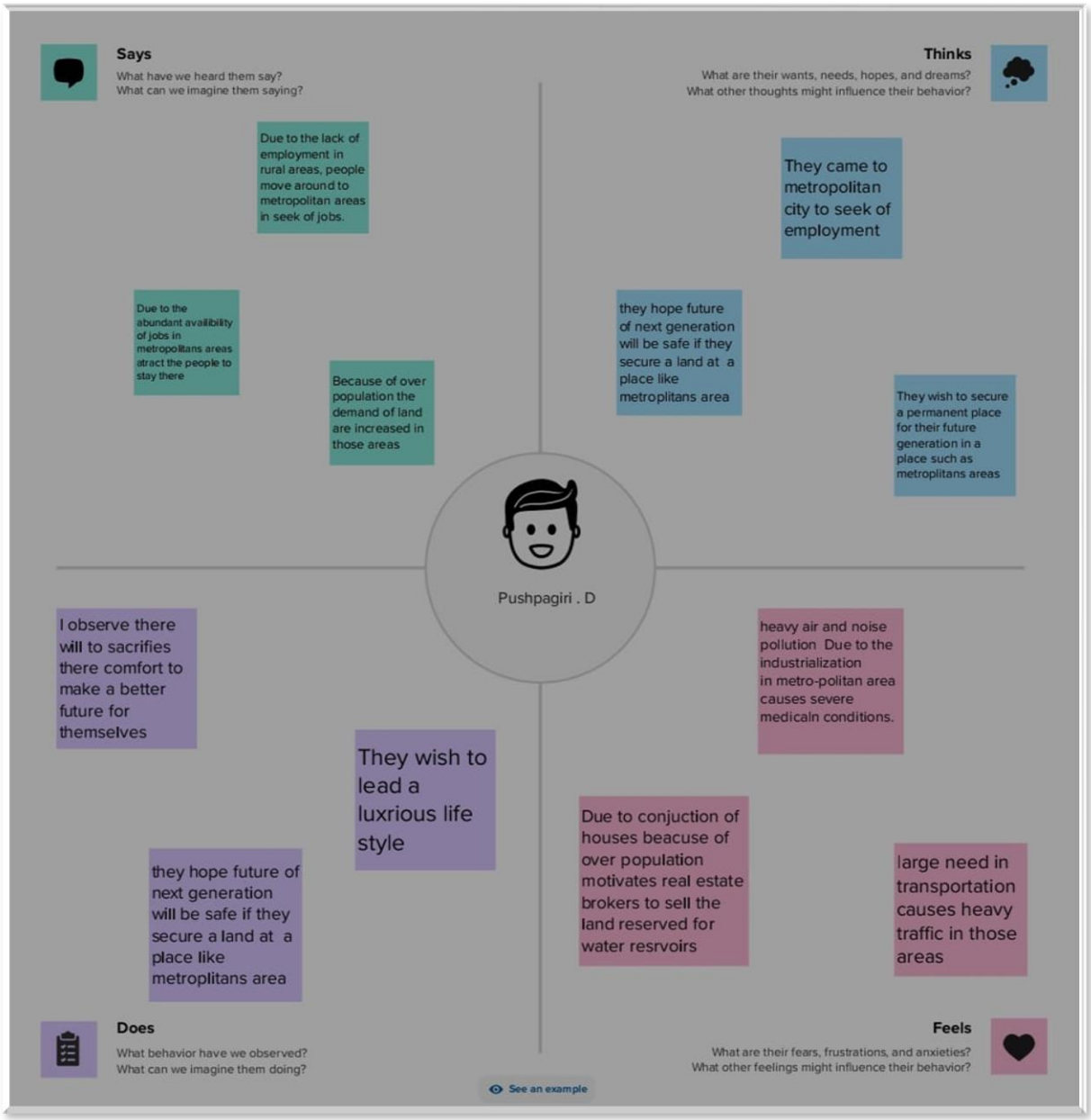
Home values tend to rise over time, but recessions and other disasters can lead to lower prices. Following slumps, home values can increase in some areas of the country because of strong demand and low supply, while other areas struggle to rebound

1.2: Purpose:

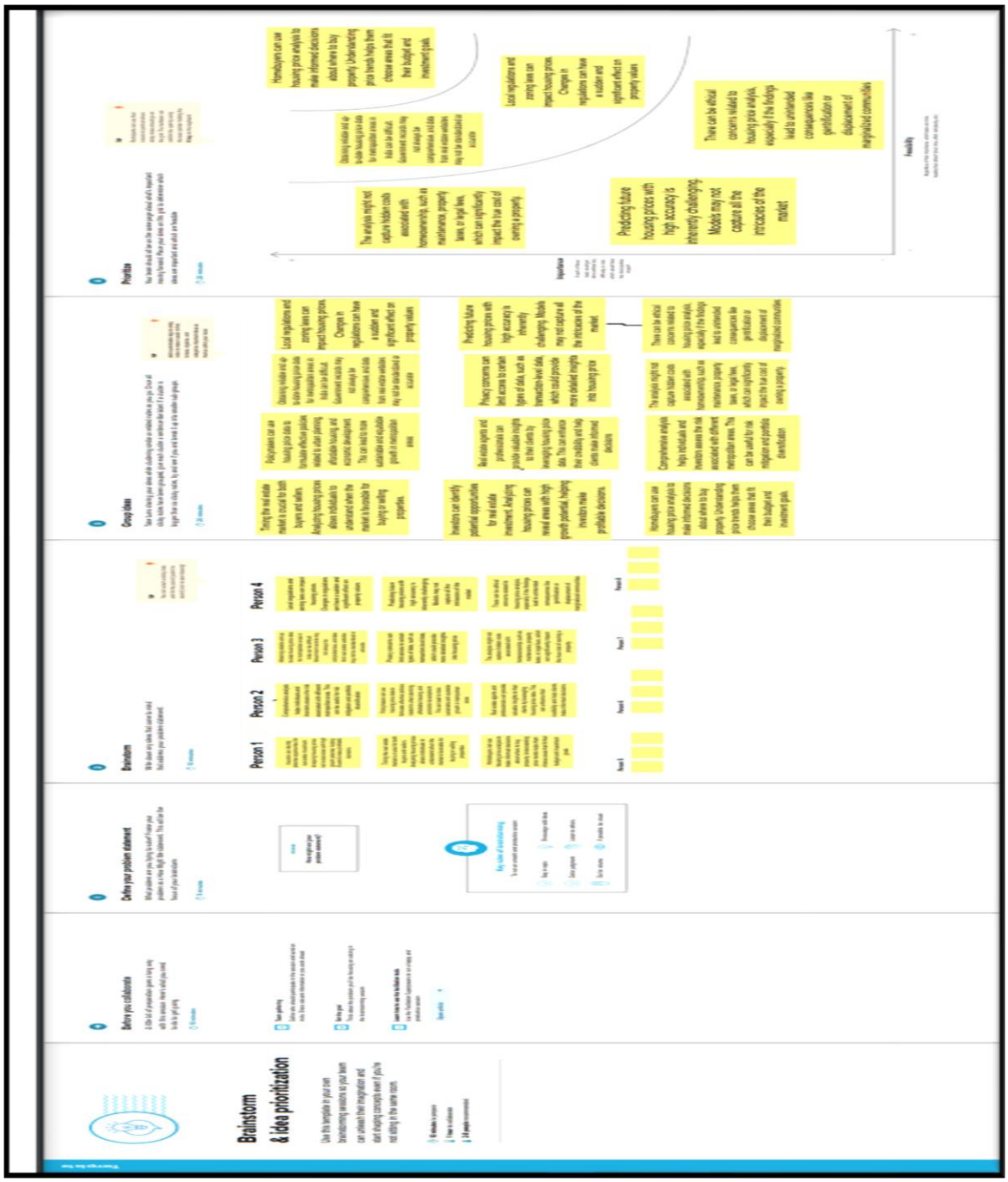
Prediction house prices are expected to help people who plan to buy a house so they can know the price range in the future, then they can plan their finance well. In addition, house price predictions are also beneficial for property investors to know the trend of housing prices in a certain location.

2.Problem Definition & DesignThinking

2.1 Empathy map



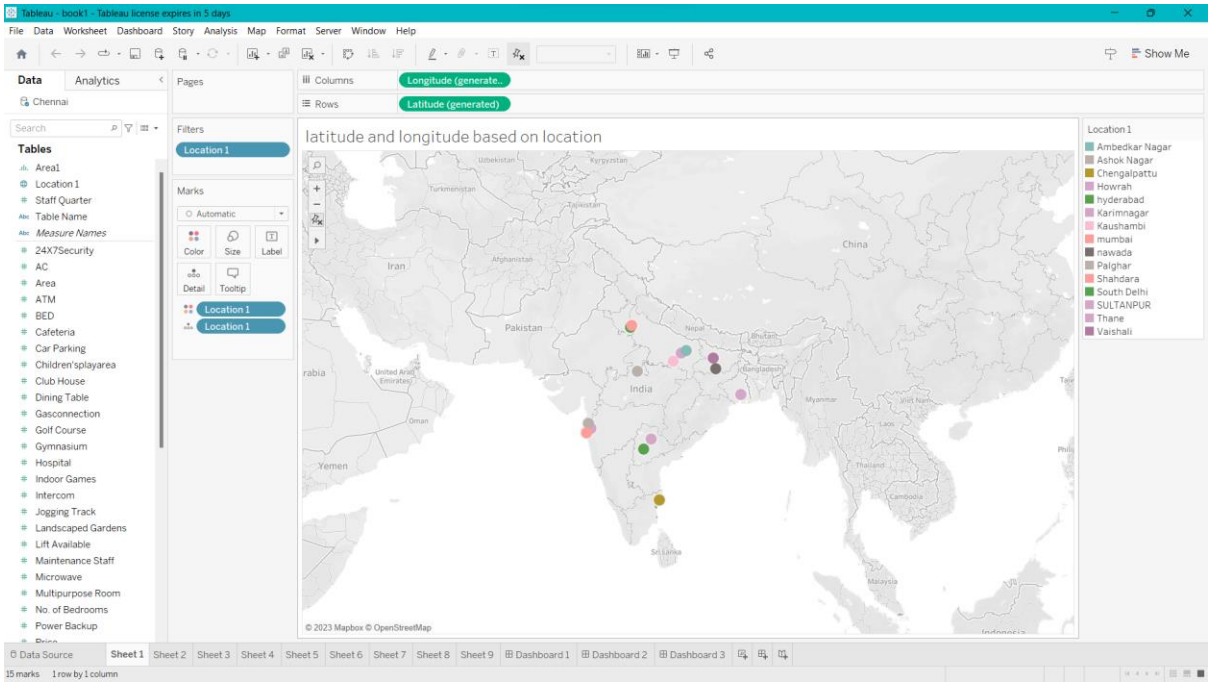
2.2: Ideation & Brainstorming Map



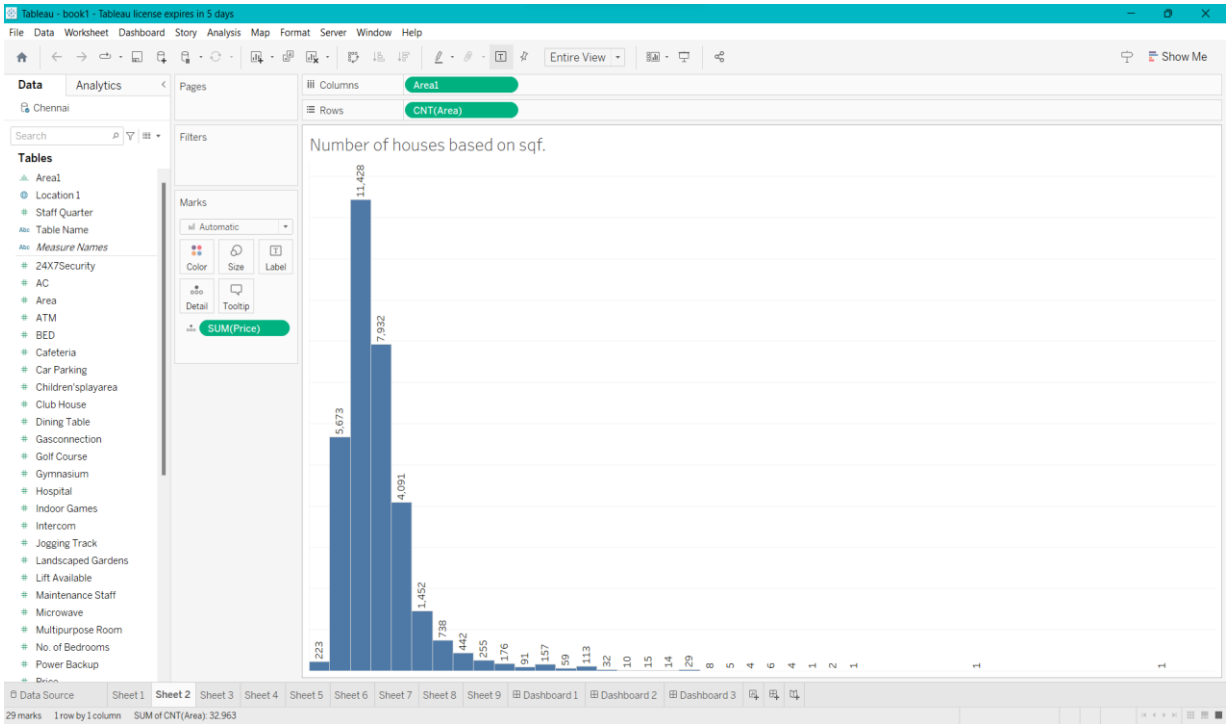
3.Result:

Using tableau software we analysed the dataset of Housing prices in metropolitan areas and have created visualization

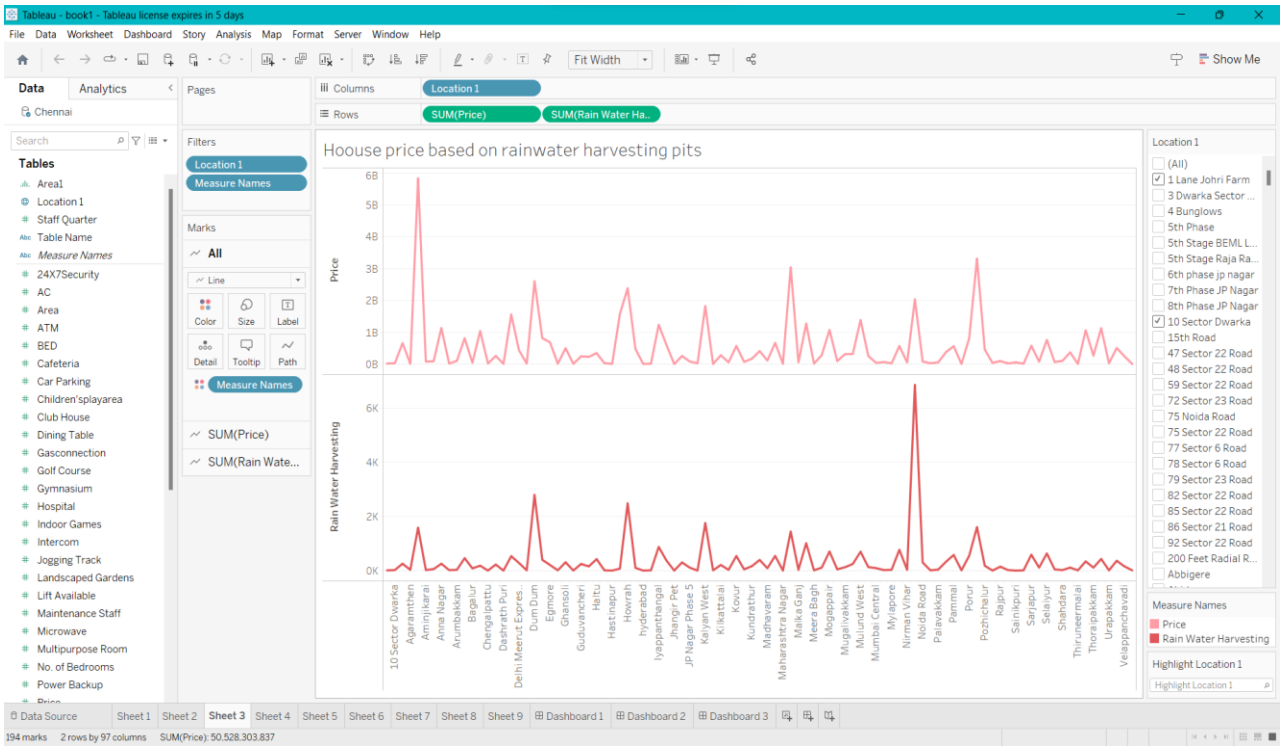
#latitude and longitude based on location



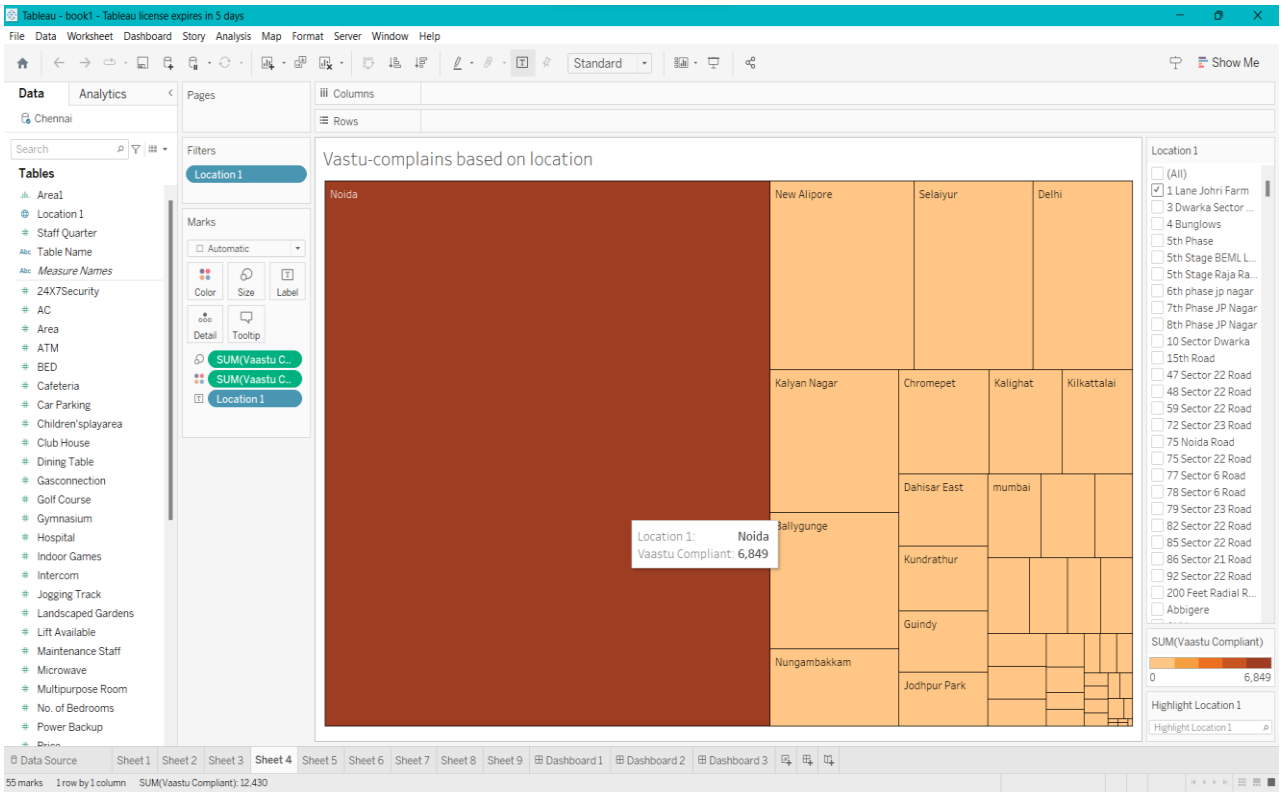
#Number of houses based on sqf.



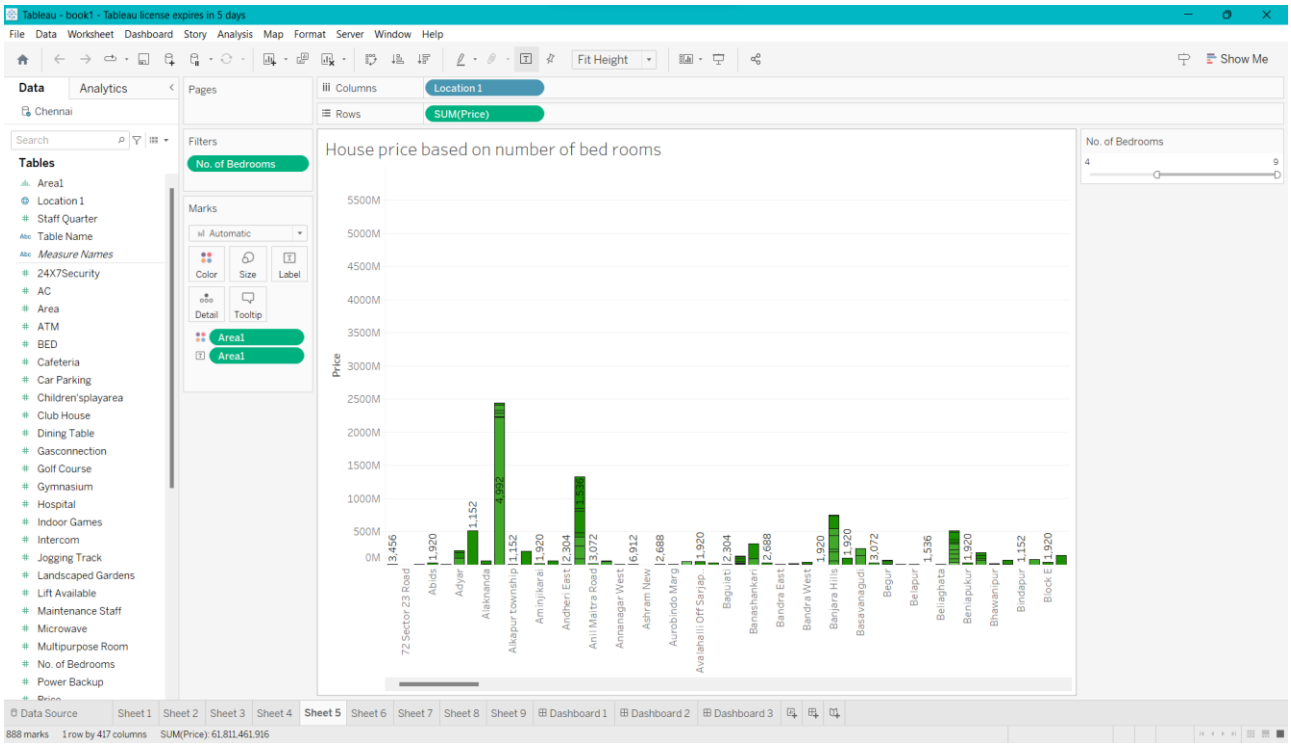
#House price based on rainwater harvesting pits.



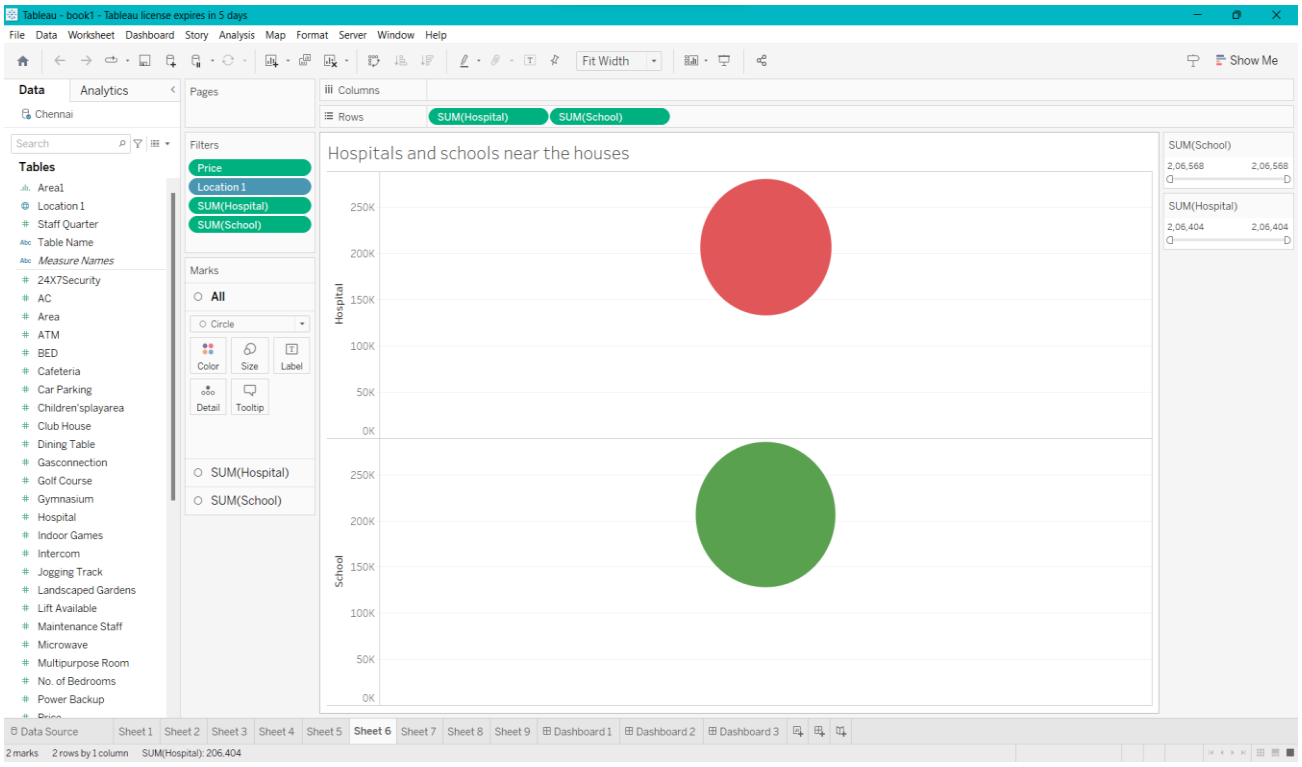
#Vastu-complaints based on locations



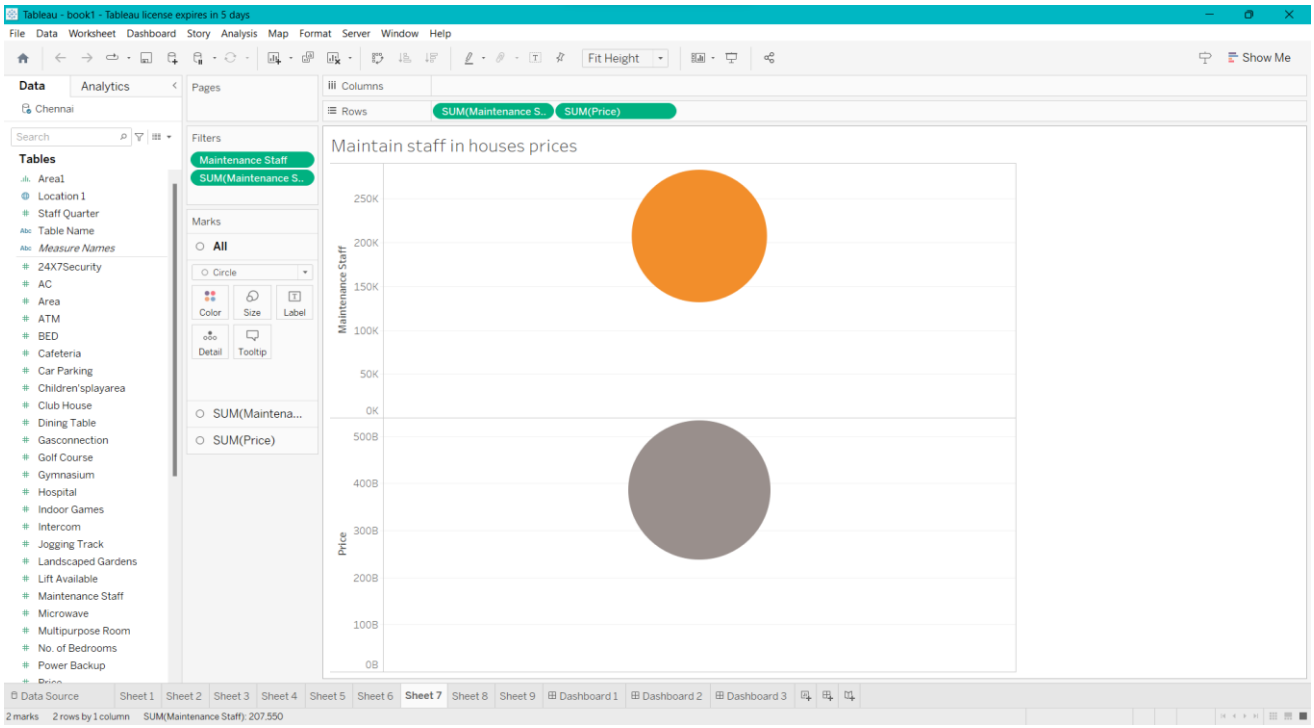
House price based on number of bed rooms



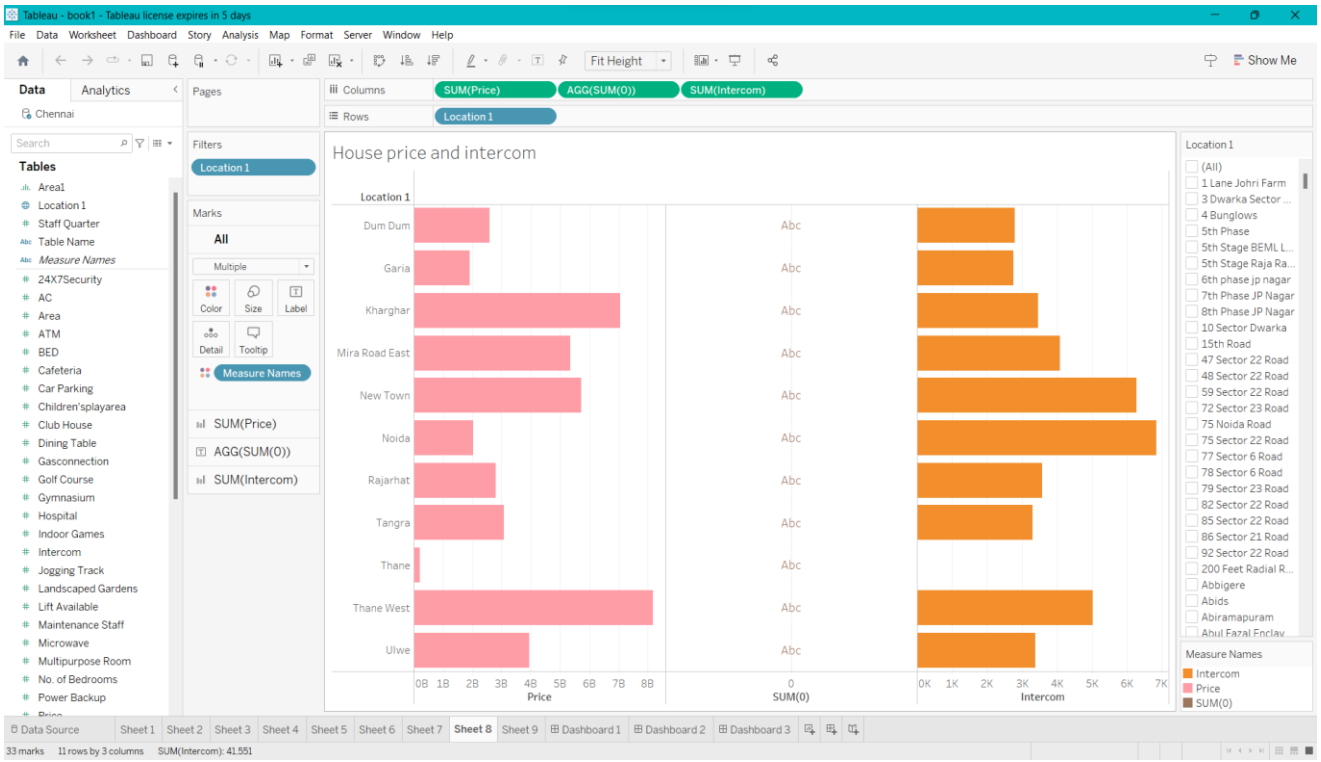
#Hospitals and schools near the houses



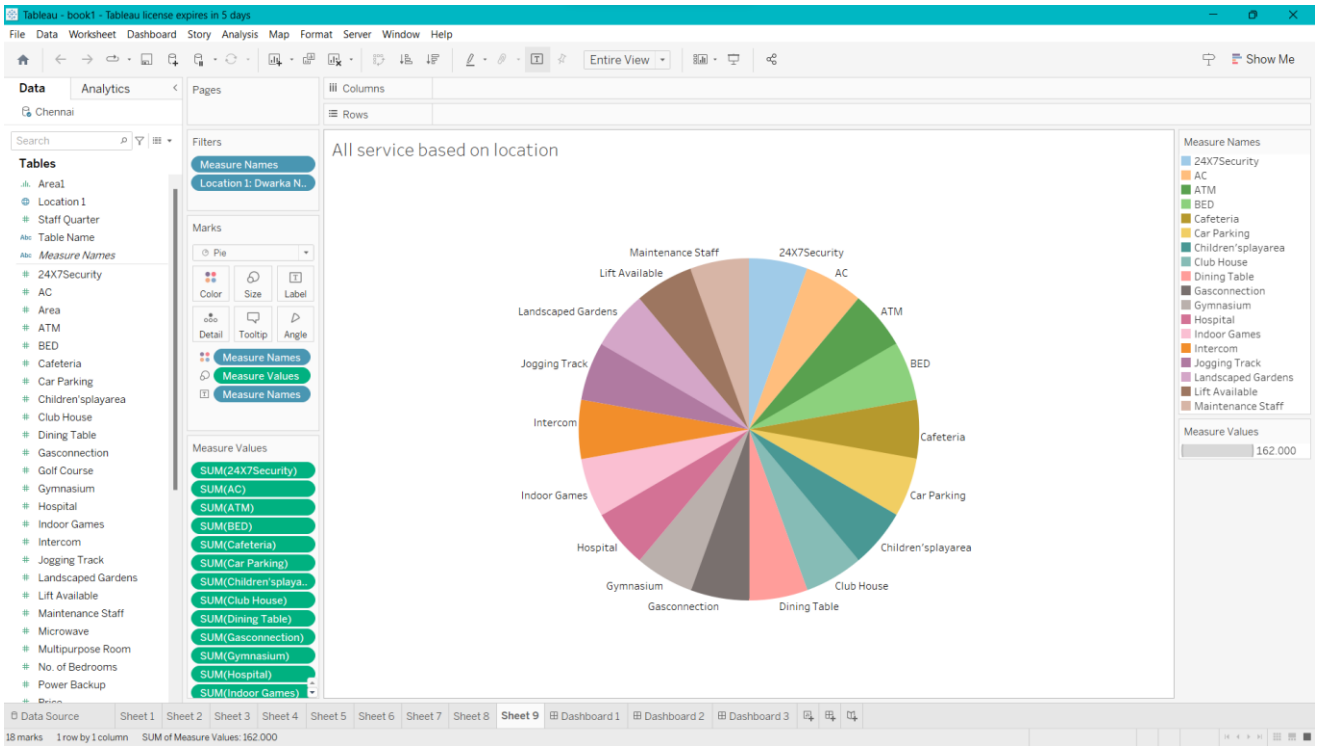
#Maintained staff in house prices



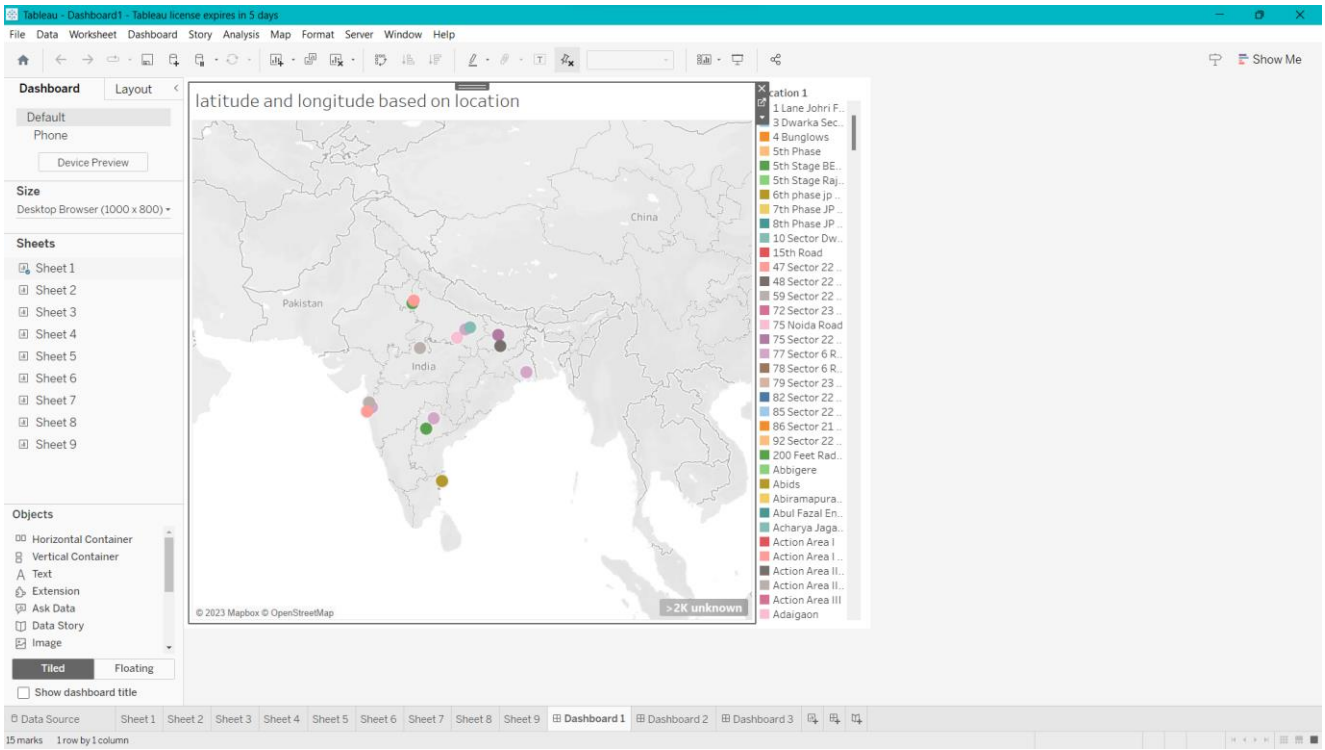
#House price and intercom

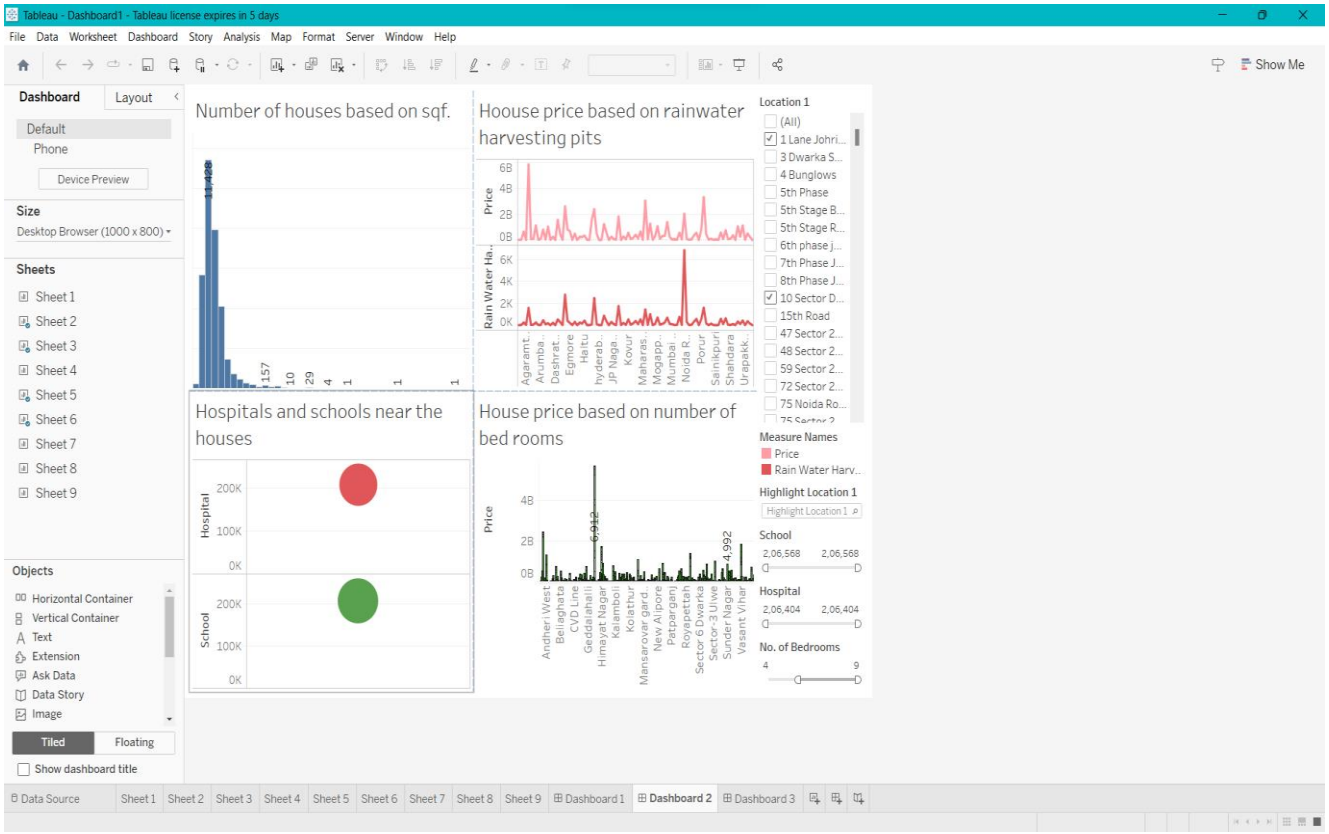


#All service nased on the locations



DASHBOARD:

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Device Preview
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Desktop Browser (1000 x 800)
Sheets
Sheet 1
Sheet 2
Sheet 3
Sheet 4
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Objects
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Vertical Container
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Data Story
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Show dashboard title
Number of houses based on sqf.
Hoouse price based on rainwater harvesting pits
Hospitals and schools near the houses
House price based on number of bed rooms
Location 1
Measure Names
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Rain Water Harv..
Highlight Location 1
School
Hospital
No. of Bedrooms
Data Source
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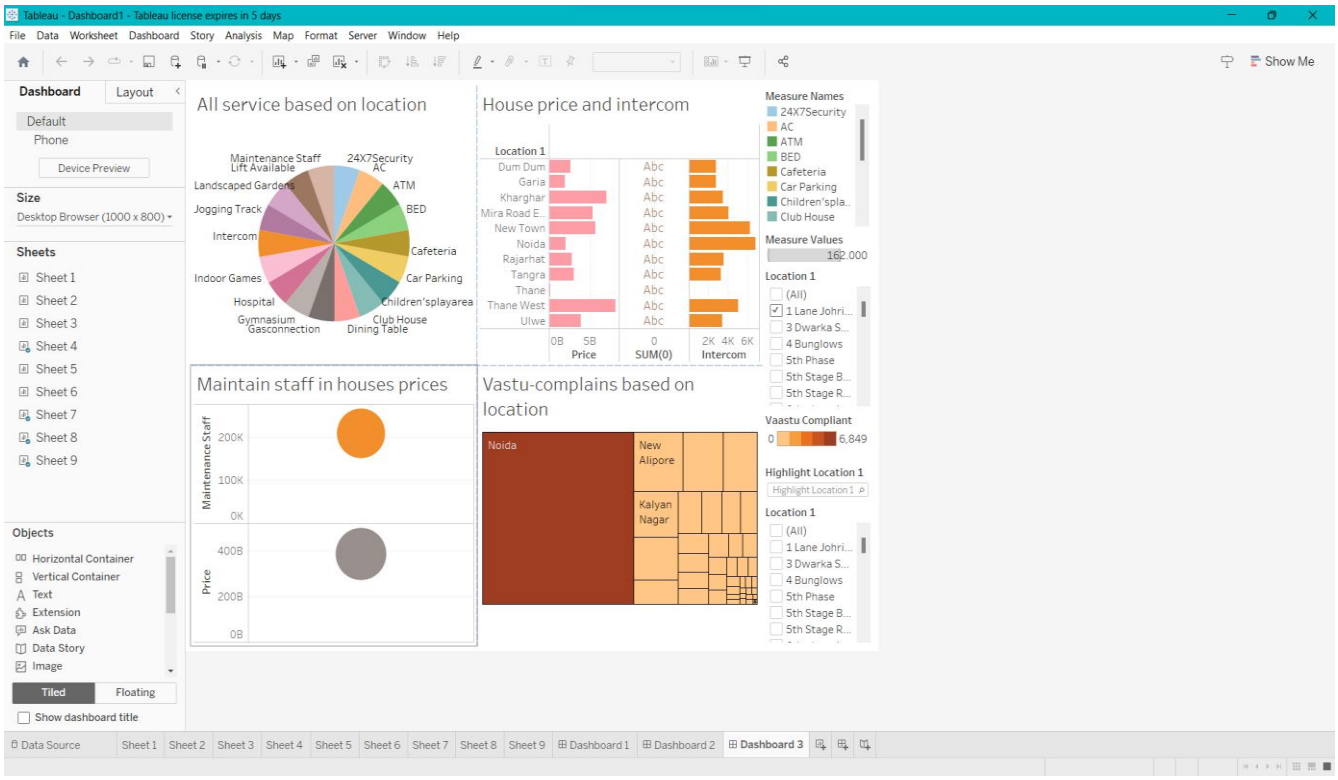
Dashboard 2
Dashboard 3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All service based on location
House price and intercom
Maintain staff in houses prices
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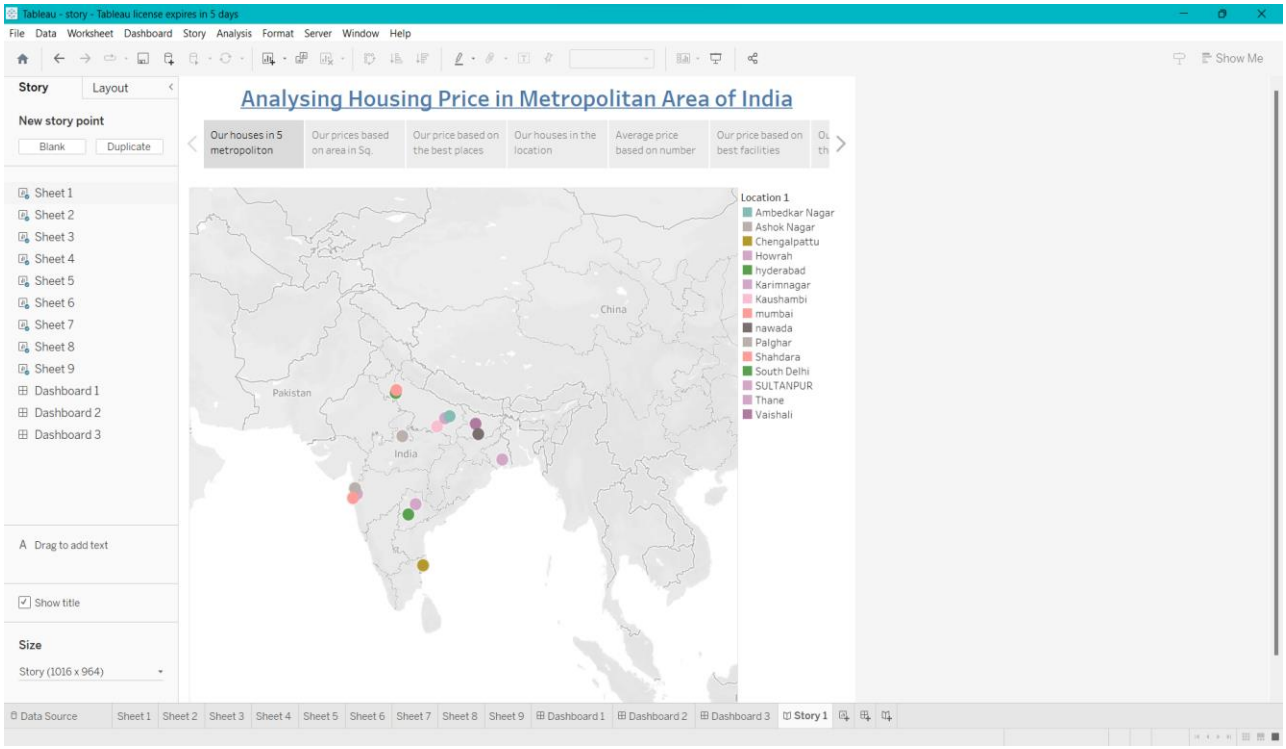
Dashboard 3

STORY: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Drag to add text
Show title
Size
Story (1016 x 964)
Analysing Housing Price in Metropolitan Area of India
Our houses in 5 metropoliton
Our prices based on area in Sq.
Our price based on the best places
Our houses in the location
Average price based on number
Our price based on best facilities
Location 1
Ambedkar Nagar
Ashok Nagar
Chengalpattu
Howrah
hyderabad
Karimnagar
Kaushambi
mumbai
nawada
Palghar
Shahdara
South Delhi
SULTANPUR
Thane
Vaishali
China
Pakistan
India
Data Source
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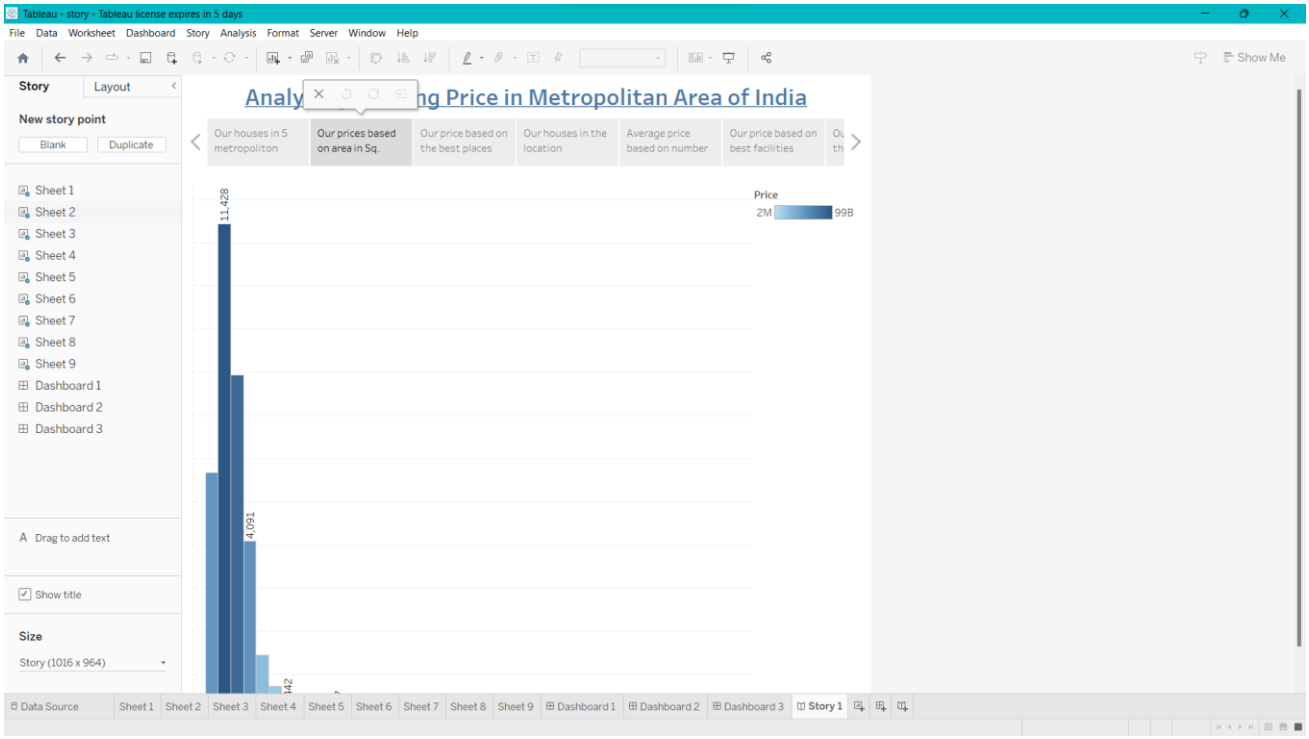
Dashboard 1
Dashboard 2
Dashboard 3
Story 1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Our houses in 5 metropoliton
Our prices based on area in Sq.
Our price based on the best places
Our houses in the location
Average price based on number
Our price based on best facilities
Price
2M
998
11,428
4,091
142
Data Source
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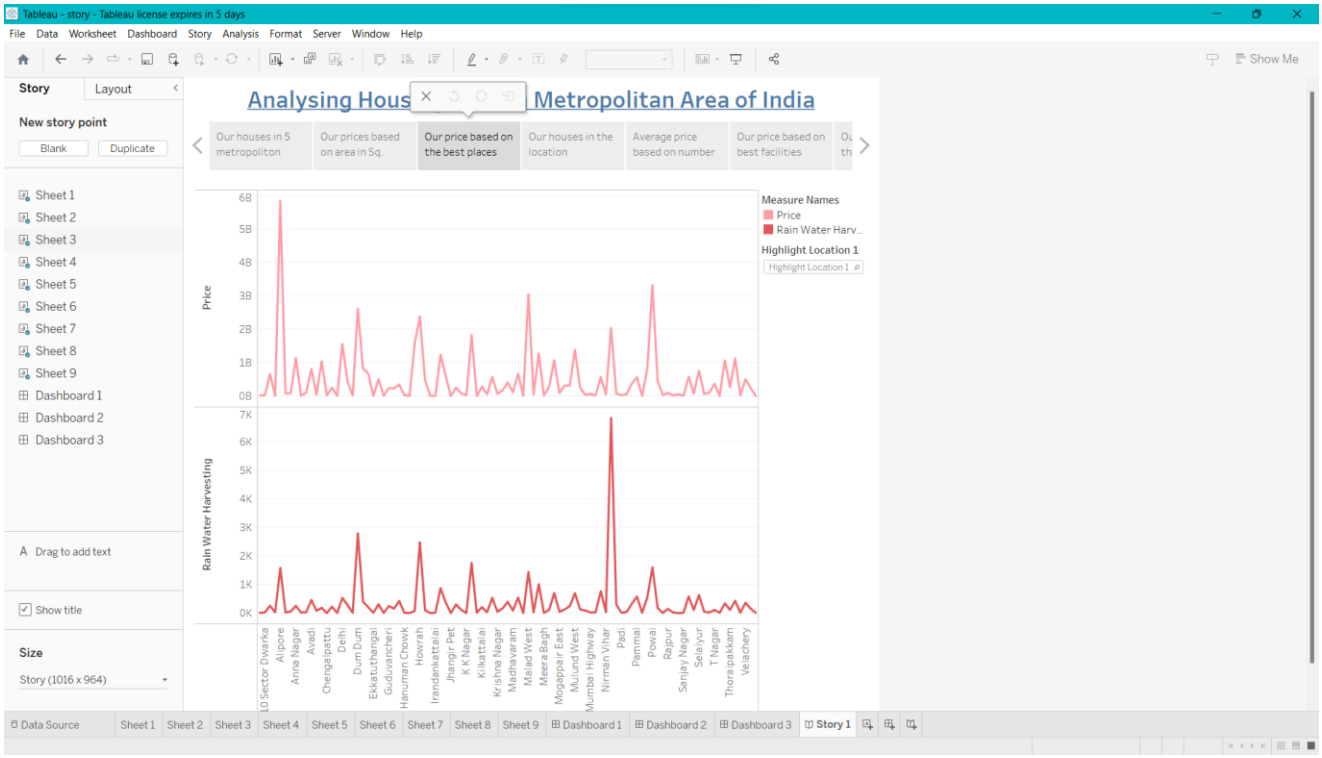
Dashboard 3
Story 1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Our price based on the best places
Our houses in the location
Average price based on number
Our price based on best facilities
Price
Rain Water Harvesting
Measure Names
Price
Rain Water Harv..
Highlight Location 1
Highlight Location 1
10 Sector Dwarka
Alipore
Anna Nagar
Avadi
Chengalpattu
Delhi
Dum Dum
Ekkatuthangal
Guduvancheri
Hanuman Chowk
Howrah
Irandankattalai
Jhangir Pet
K K Nagar
Kilkattalai
Krishna Nagar
Madhavaram
Maid West
Meera Bagh
Mogappair East
Mulund West
Mumbai Highway
Nirman Vihar
Padi
Pammal
Powai
Rajpur
Sanjay Nagar
Selaiyur
T Nagar
Thoraipakkam
Velachery
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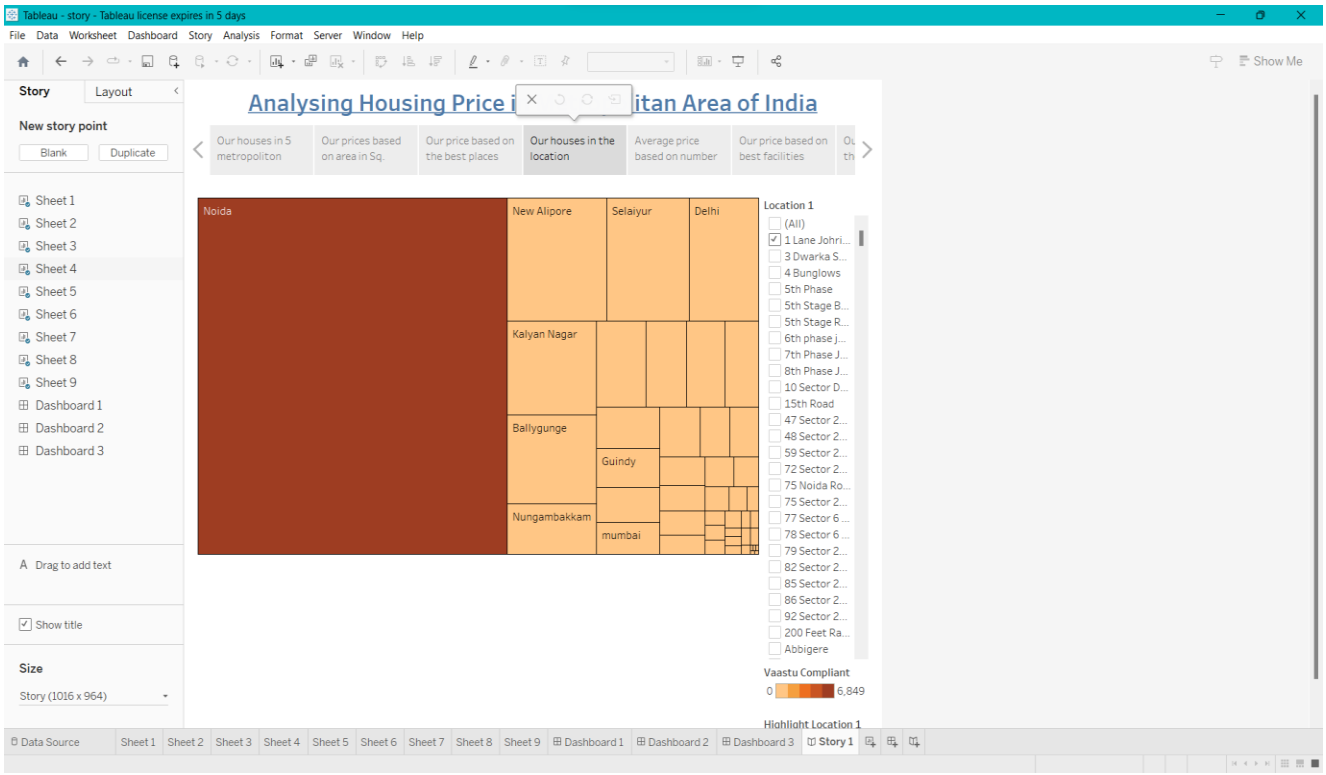
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Our prices based on area in Sq.
Our price based on the best places
Our houses in the location
Average price based on number
Our price based on best facilities
Noida
New Alipore
Selaiyur
Delhi
Kalyan Nagar
Ballygunge
Guindy
Nungambakkam
mumbai
Location 1
(All)
1 Lane Johri...
3 Dwarka S...
4 Bunglows
5th Phase
5th Stage B...
5th Stage R...
6th phase j...
7th Phase J...
8th Phase J...
10 Sector D...
15th Road
47 Sector 2...
48 Sector 2...
59 Sector 2...
72 Sector 2...
75 Noida Ro...
75 Sector 2...
77 Sector 6 ...
78 Sector 6 ...
79 Sector 2...
82 Sector 2...
85 Sector 2...
86 Sector 2...
92 Sector 2...
200 Feet Ra...
Abbigere
Vaastu Compliant
0
6,849
Highlight Location 1
Data Source
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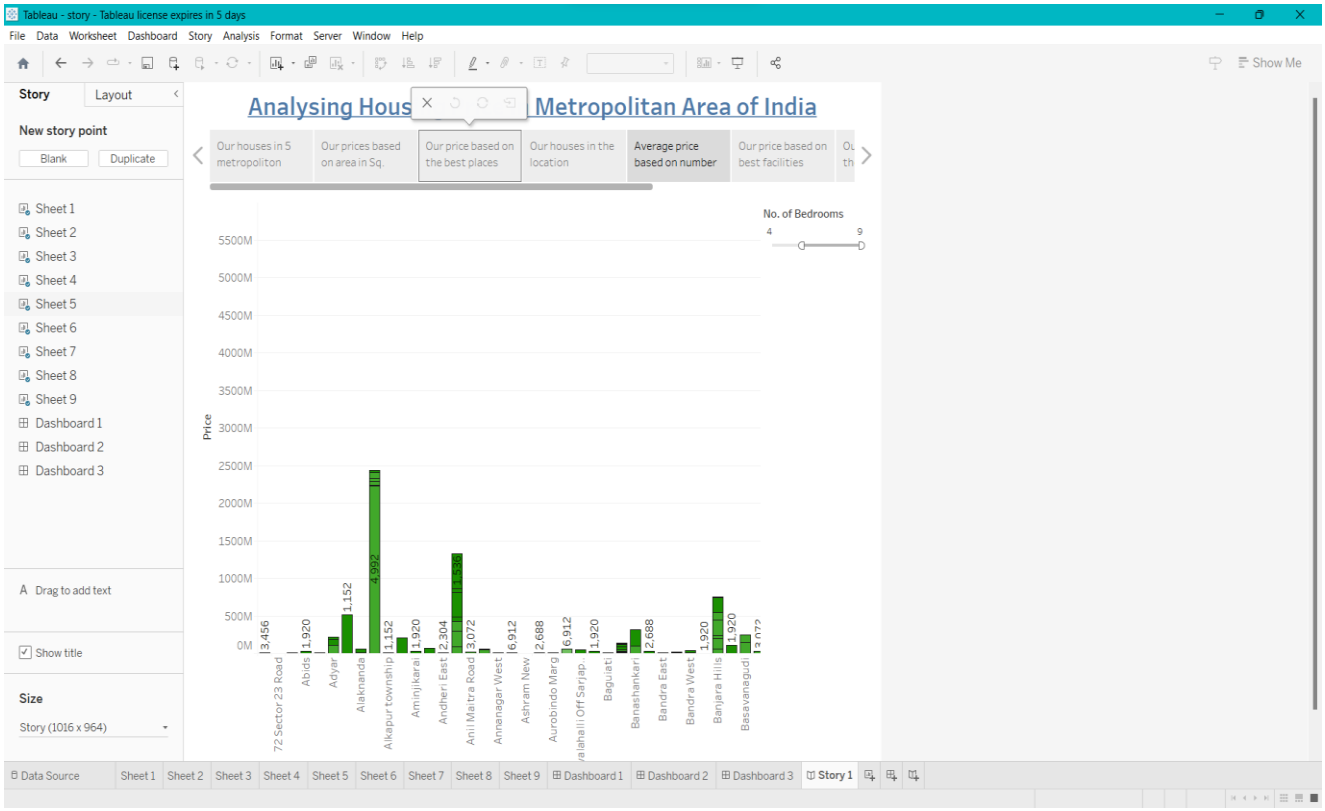
Story 1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Our houses in 5 metropoliton
Our prices based on area in Sq.
Our price based on the best places
Our houses in the location
Average price based on number
Our price based on best facilities
No. of Bedrooms
4
9
Price
5500M
5000M
4500M
4000M
3500M
3000M
2500M
2000M
1500M
1000M
500M
0M
3,456
1,920
1,152
4,992
1,152
1,920
2,304
3,072
6,912
2,688
6,912
1,920
2,688
1,920
1,920
72 Sector 23 Road
Abids
Adyar
Alaknanda
Alkapur township
Aminjikarai
Andheri East
Anil Maitra Road
Annanagar West
Ashram New
Aurobindo Marg
Baguiati
Banashankari
Bandra East
Bandra West
Banjara Hills
Basavanagudi
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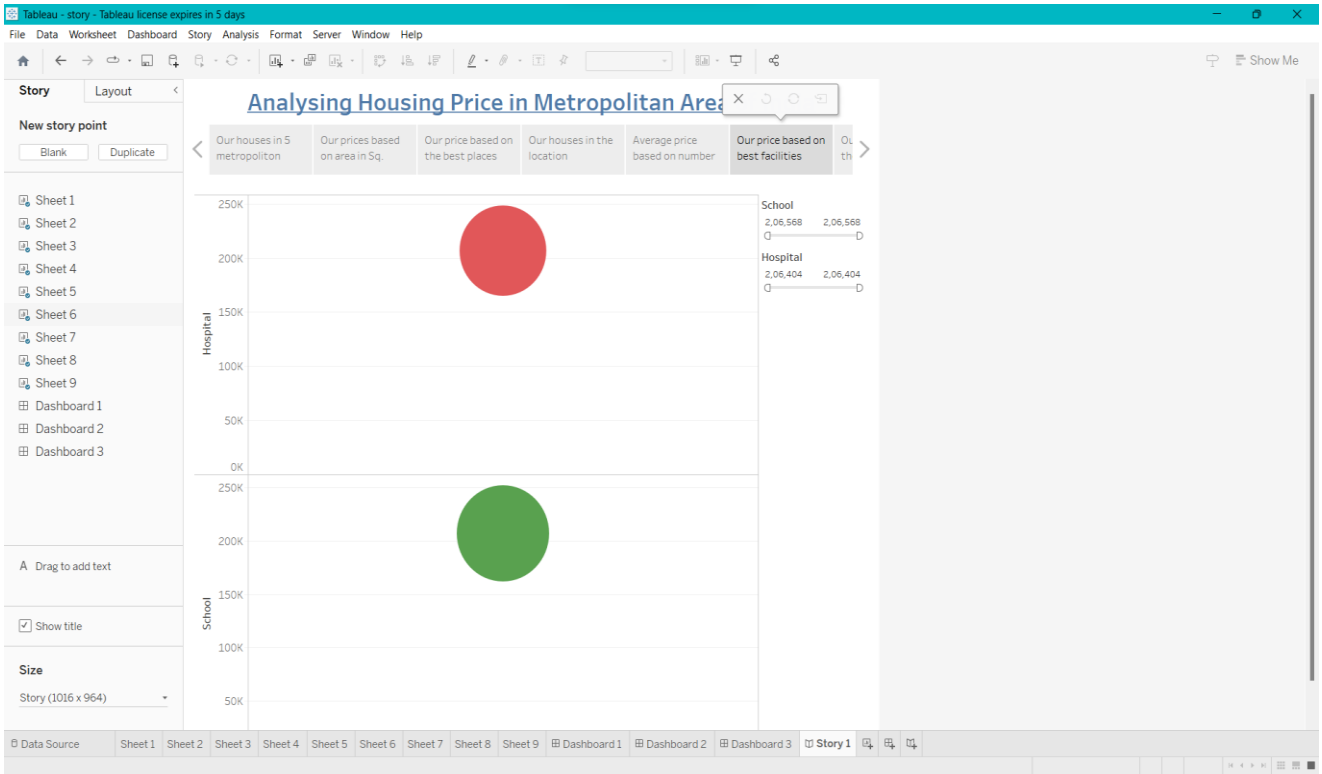
Dashboard 3
Story 1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Dashboard 1
Dashboard 2
Dashboard 3
Drag to add text
Show title
Size
Story (1016 x 964)
Analysing Housing Price in Metropolitan Area
Our houses in 5 metropoliton
Our prices based on area in Sq.
Our price based on the best places
Our houses in the location
Average price based on number
Our price based on best facilities
School
2,06,568
2,06,568
Hospital
2,06,404
2,06,404
Hospital
250K
200K
150K
100K
50K
0K
School
250K
200K
150K
100K
50K
Data Source
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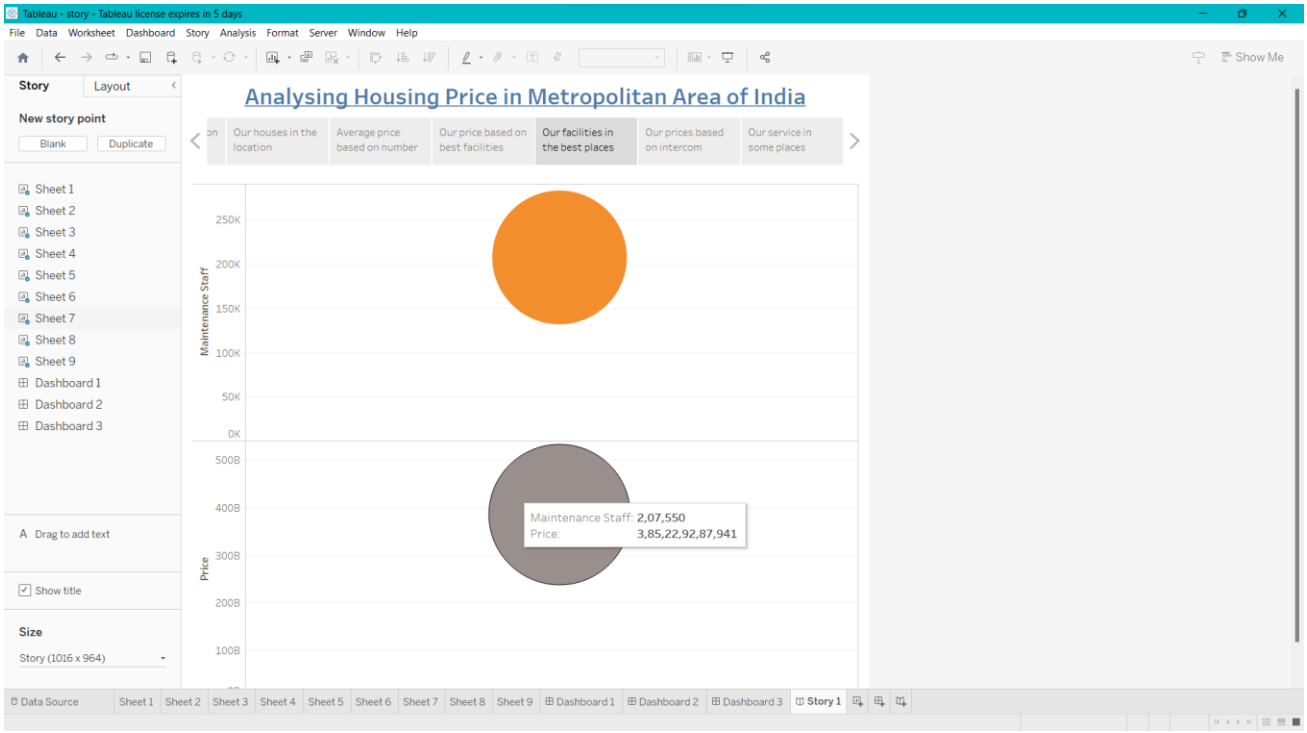
Story 1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Dashboard 1
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Dashboard 3
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Show title
Size
Story (1016 x 964)
Analysing Housing Price in Metropolitan Area of India
Our houses in the location
Average price based on number
Our price based on best facilities
Our facilities in the best places
Our prices based on intercom
Our service in some places
Maintenance Staff
250K
200K
150K
100K
50K
0K
Price
500B
400B
300B
200B
100B
Maintenance Staff: 2,07,550
Price: 3,85,22,92,87,941
Data Source
Sheet 1
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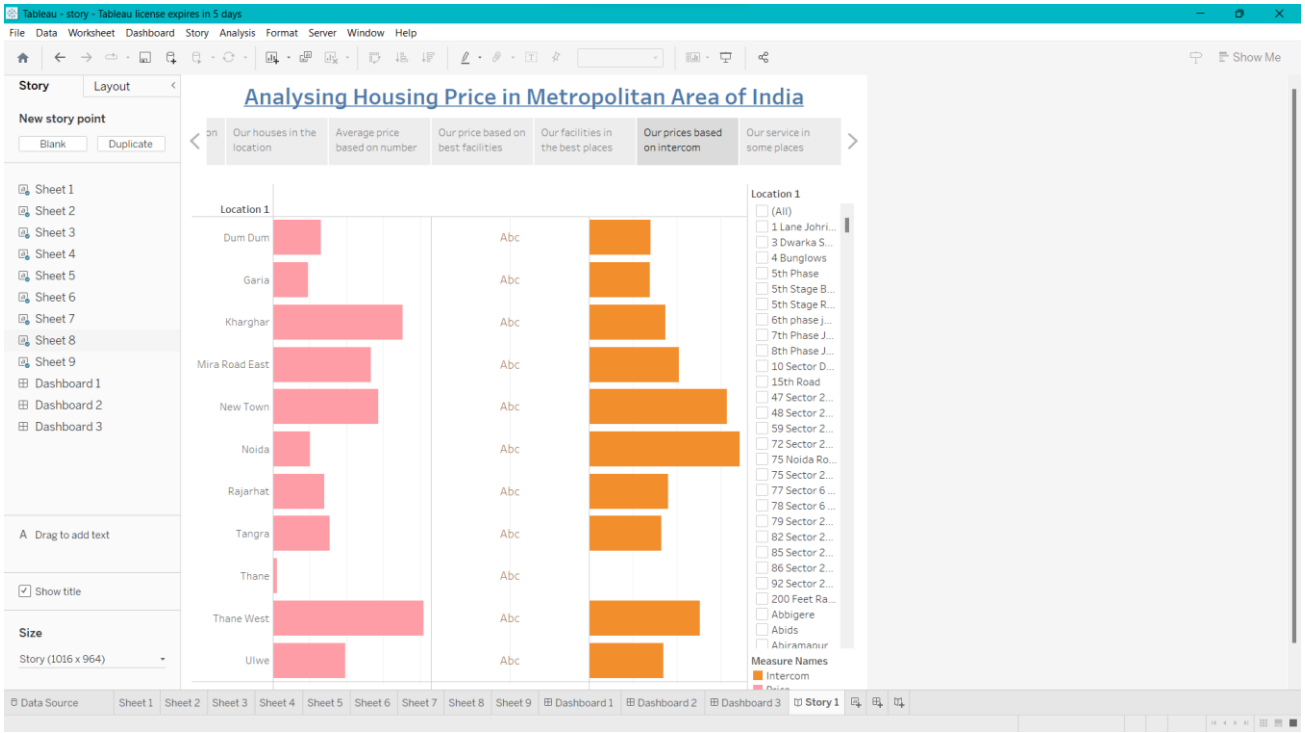
Sheet 7
Sheet 8
Sheet 9
Dashboard 1
Dashboard 2
Dashboard 3
Story 1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Dashboard 1
Dashboard 2
Dashboard 3
A Drag to add text
Show title
Size
Story (1016 x 964)
Analysing Housing Price in Metropolitan Area of India
Our houses in the location
Average price based on number
Our price based on best facilities
Our facilities in the best places
Our prices based on intercom
Our service in some places
Location 1
Dum Dum
Garia
Kharghar
Mira Road East
New Town
Noida
Rajarhat
Tangra
Thane
Thane West
Ulwe
Abc
Location 1
(All)
1 Lane Johri...
3 Dwarka S...
4 Bunglows
5th Phase
5th Stage B...
5th Stage R...
6th phase j...
7th Phase J...
8th Phase J...
10 Sector D...
15th Road
47 Sector 2...
48 Sector 2...
59 Sector 2...
72 Sector 2...
75 Noida Ro...
75 Sector 2...
77 Sector 6 ...
78 Sector 6 ...
79 Sector 2...
82 Sector 2...
85 Sector 2...
86 Sector 2...
92 Sector 2...
200 Feet Ra...
Abbigere
Abids
Measure Names
Intercom
Data Source
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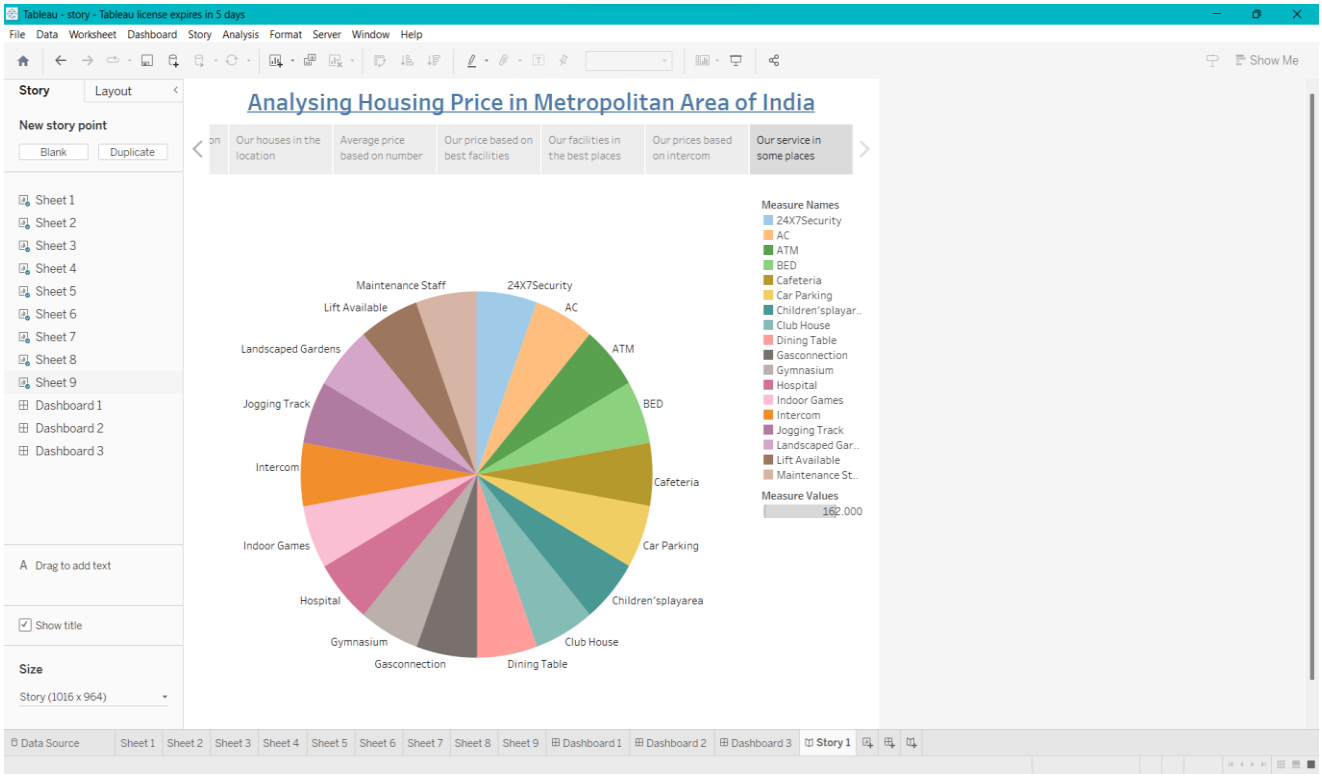
Dashboard 1
Dashboard 2
Dashboard 3
Story 1



4: Advantages & Disadvantages

#Advantages

- ***Investment Potential:*** *Metropolitan areas often offer higher appreciation potential for property values, making real estate a lucrative investment option.*
- ***Employment Opportunities:*** *These areas are economic hubs, providing numerous job opportunities, attracting a workforce that drives demand for housing.*
- ***Infrastructure and Amenities:*** *Metropolitans usually have better infrastructure, healthcare facilities, educational institutions, and recreational amenities, enhancing the quality of life.*
- ***Networking Opportunities:*** *Metropolitans offer more opportunities to network and build professional and personal connections, which can be crucial for career advancement and personal growth.*
- ***Real Estate Investment:*** *Historically, real estate in metropolitan areas has shown appreciation in value over time, making it a potential long-term investment*

#Disadvantages

- ***High Cost of Living:*** *The most significant drawback is the high cost of living, which includes housing prices, rent, utilities, and other daily expenses. This can be a burden, especially for lower-income individuals and families.*
- ***Housing Unaffordability:*** *In many metropolitan areas, housing prices have skyrocketed, making it extremely difficult for the average person to buy a home. This leads to a lack of affordable housing options.*
- ***Traffic Congestion:*** *Many metros face severe traffic congestion, which can result in long commute times and increased stress levels.*
- ***Pollution and Environmental Issues****: Air and noise pollution are often higher in metropolitan areas, affecting the overall health and well-being of residents.*
- ***Competitive Real Estate Market:*** *The real estate market in metros can be highly competitive, making it challenging for buyers to find suitable properties, and sellers may still face difficulties in a saturated market.*
- ***Space Constraints:*** *In densely populated metropolitan areas, living spaces can be smaller, with limited open spaces and green areas.*

Applications

Real Estate Investment:

- *Housing prices influence investment decisions. Investors may buy properties for rental income or capital appreciation based on price trends.*

Homeownership:

- *Affordable housing prices make homeownership more accessible to a broader section of the population. Higher prices can restrict access to housing for many.*

Economic Growth:

- *Real estate and construction industries contribute significantly to India's GDP. Rising housing prices can stimulate economic growth by encouraging new construction and development projects.*

Infrastructure Development:

- ***Housing prices often reflect the state of infrastructure in an area. High demand and prices can drive investments in roads, transportation, and amenities.***

Rental Market:

- ***Housing prices influence rental rates. High purchase prices may result in high rents, affecting the affordability of housing for renters***

Urbanization:

- ***High housing prices can lead to urban migration as people move to metropolitan areas in search of better job opportunities, education, and a higher standard of living.***

5.Conclusion

Rising Prices: ***Housing prices in metropolitan areas in India had generally been on an upward trajectory for several years. Factors contributing to this included population growth, urbanization, and increased demand for urban housing.***

Regional Variations: ***There were significant regional variations in housing prices. For example, cities like Mumbai, Delhi, and Bengaluru typically had higher property prices compared to other cities. Mumbai, in particular, was known for having one of the most expensive real estate markets in the country.***

Supply-Demand Dynamics: ***In some cases, housing prices were driven by a lack of supply relative to demand, which resulted in increased competition and higher prices. In other cases, oversupply in certain segments of the market had led to price corrections.***

Government Initiatives: ***The Indian government had introduced various policies and initiatives to promote affordable housing, such as the Pradhan Mantri Awas Yojana (PMAY) and the Real Estate (Regulation and Development) Act (RERA). These initiatives aimed to make housing more accessible and protect the interests of homebuyers.***

Policy Changes: ***Government policies and regulations continued to evolve, impacting the real estate sector. For example, the implementation of the Goods and Services Tax (GST) and changes in stamp duty in various states had effects on property prices.***

6.Future scope

Economic Factors: *The trajectory of housing prices is closely linked to the overall economic health of the country. A strong economy with rising income levels tends to drive up housing prices. On the other hand, economic downturns can lead to a stagnation or decline in prices.*

Supply and Demand: *Supply and demand dynamics play a significant role. If there's a shortage of housing in metropolitan areas, prices are likely to remain high or increase. Conversely, an oversupply of housing can lead to a decrease in prices.*

Technological Disruptions: *The emergence of new technologies and trends, such as remote work and smart homes, can influence the demand for certain types of housing.*

Infrastructure Development: *Improvements in infrastructure, such as transportation networks and amenities, can boost property values in metropolitan areas.*

Government Policies: *Government policies related to real estate, such as tax incentives, subsidies, and regulations, can have a substantial impact on housing prices. Policies like the Pradhan Mantri Awas Yojana (PMAY) have influenced the housing market in India.*

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