PROJECT TITLE

ANALYSING HOUSING PRICES IN METROPOLITAN AREAS OF INDIA

BY

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1.INTRODUCTION

1.1 OVERVIEW

Purpose: The analysis of housing prices in metropolitan areas in India aims to understand market dynamics, inform investment decisions, shape policies, and promote equitable access to housing.

Data Collection: Historical housing price data is collected from various sources, including government agencies, real estate websites, and market reports.

Factors Influencing Prices: Key factors impacting housing prices include economic indicators, demographics, infrastructure development, government policies, interest rates, and supply-demand dynamics.

Analysis Methods: Statistical and data analysis techniques are employed to explore trends, correlations, and predictive models. Time series and spatial analysis methods may also be used.

Segmentation: The metropolitan area is divided into sub-markets or neighborhoods to analyze price variations.

Predictive Modeling: Machine learning models, such as regression and decision trees, can be employed to forecast future housing prices.

Visualization: Data is presented visually through maps, graphs, and charts for better understanding.

Interpretation: Results are interpreted to identify the most significant factors influencing housing prices.

Recommendations: Insights and recommendations are provided for investors, policymakers, and urban planners based on the analysis.

Goals: The analysis aims to aid investment decision-making, assess risk, formulate policies, plan urban development, address affordability challenges, and promote economic growth and sustainability.

Analyzing housing prices in metropolitan areas in India serves as a vital tool for stakeholders in the real estate sector and urban planning to navigate the complex and dynamic real estate market effectively.

1.2 PURPOSE

Analyzing housing prices in metropolitan areas in India serves several important purposes and can help achieve various goals:

Market Understanding: A comprehensive analysis provides a deep understanding of the real estate market in a metropolitan area. This knowledge is valuable for real estate developers, investors, and policymakers to make informed decisions.

Investment Decision-Making: Investors can use this analysis to identify areas with potential for high returns on investment. They can assess which neighborhoods or property types are likely to appreciate in value.

Risk Assessment: By analyzing historical price data and market factors, stakeholders can assess the level of risk associated with specific real estate investments. Understanding market dynamics can help mitigate risks.

Policy Formulation: Policymakers can use the analysis to formulate policies that address issues like affordable housing, urban planning, and infrastructure development. It can guide decisions related to taxation and regulations affecting the real estate sector.

Urban Planning: Urban planners can use the data to make decisions about infrastructure development and city expansion. They can prioritize areas that are experiencing rapid price growth and increased demand for housing.

Affordability Analysis: Assessing housing prices in relation to income levels helps policymakers and advocacy groups understand the affordability challenges faced by residents in metropolitan areas. This can lead to initiatives to increase housing affordability.

Market Forecasting: Predictive modeling can help forecast future housing price trends. This information is invaluable for buyers, sellers, and investors to plan their strategies.

Equity and Inclusion: The analysis can reveal disparities in housing prices among different neighborhoods. This information can inform efforts to promote equitable access to housing and reduce housing inequality.

Consumer Decision-Making: Homebuyers can use the analysis to make informed decisions about when and where to buy a property. It can help them assess whether it's a good time to enter the market.

Market Transparency: Providing access to data and analysis can increase market transparency, which can foster trust and confidence among investors and consumers.

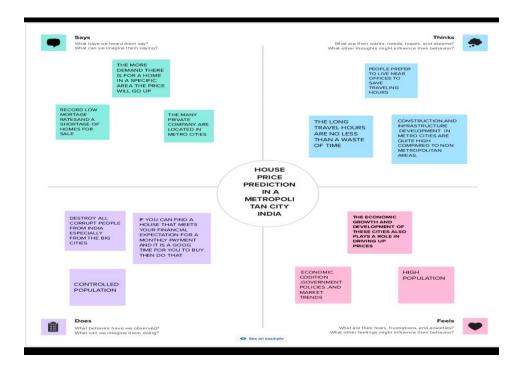
Economic Development: A healthy real estate market contributes to economic growth. Understanding housing price dynamics can help promote economic development in metropolitan areas.

Sustainable Development: Analysis can identify areas where urban sprawl is occurring and where sustainable development practices can be implemented to manage growth effectively.

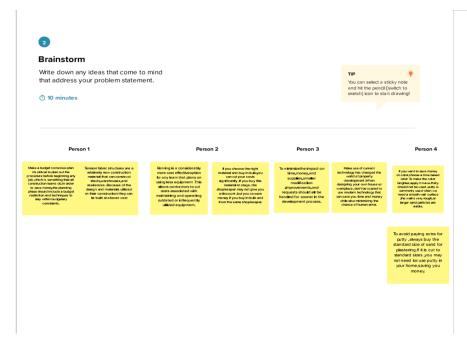
In summary, analyzing housing prices in metropolitan areas in India serves a wide range of purposes, from guiding investment decisions to shaping public policy and fostering sustainable urban development. It's a valuable tool for stakeholders across the real estate and urban planning sectors to better understand and navigate the complex real estate market.

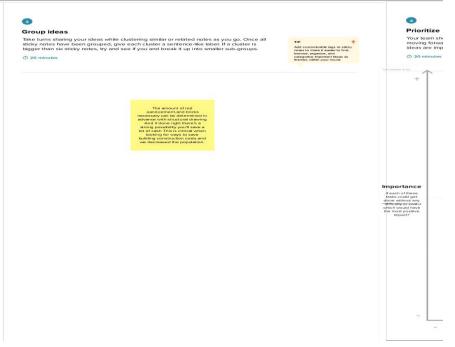
2.PROBLEM DEFINITION AND DESIGN THINKING

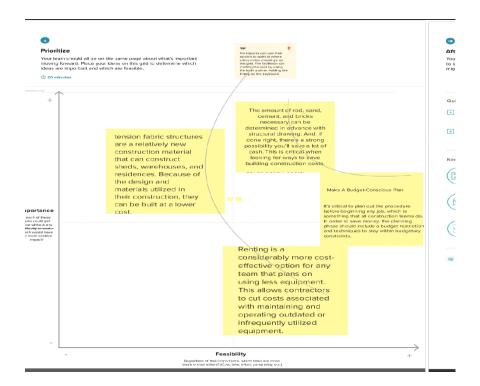
2.1 EMPATHY MAP



2.2 IDEATION AND BRAINSTORMING MAP







3.RESULT

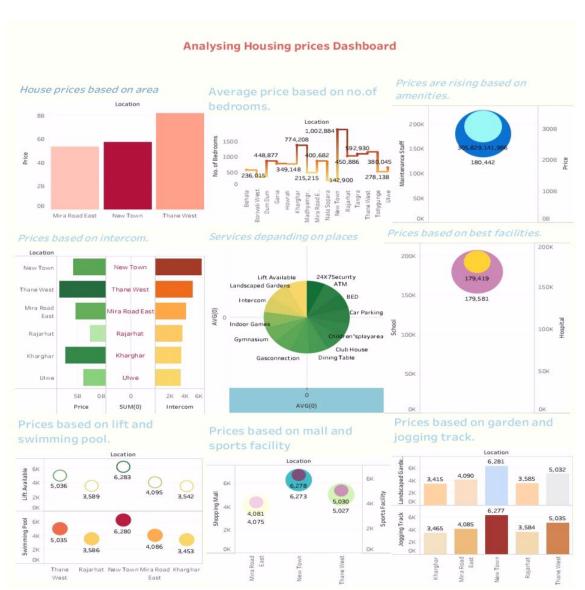
3.1 DATA MODEL:

| OBJECT NAME | FIELD IN THE OBJECTIVE |
|----------------------------|---------------------------|
| OBJECT 1: | |
| ЕМРАТНУ МАР | MURAL |
| BRAINSTORMING AND IDEATION | |
| OBJECT 2: | |
| DATABASE | MY SQL DATA TYPES |
| ОВЈЕСТ 3: | |
| WORK SHEET | TABLEAU PUBLIC DATA TYPES |

3.2 ACTIVITY AND SCREENSHORTS

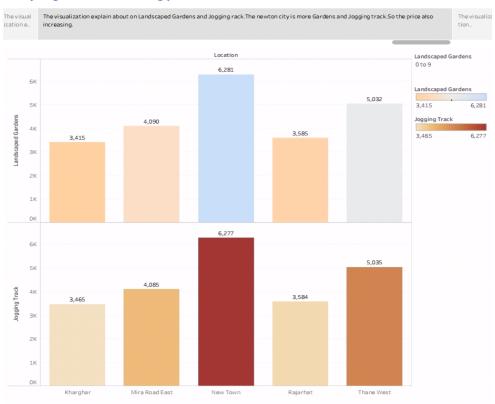
A dashboard is a grahical user interface (GUI) that displays information and data in an oranized ,esay-to-read format. Dashboards are often used to provide real -time monitoring and analysis of data, and arev typically designed for a specific purpose or use case. Dashboard can be used in a varity of settings, such as business, finance, manufacturing, healthcare, and many other industries. They can be used to track key performs indicators (KPIs), monitor performs metrics, and display data in the form of charts ,graphs ,and tables.

DASHBOARD 1



STORY





4. TRIALHEAD PROFILE PUBLIC URL

TEAM LEAD: https://www.salesforce.com/trailblazer/malleshwari5919

TEAM MEMBER 1: https://www.salesforce.com/trailblazer/monikak0546

TEAM MEMBER 2: https://www.salesforce.com/trailblazer/thenmozhi9360

TEAM MEMBER 3: https://www.salesforce.com/trailblazer/vasuntharadevi

5. ADVANTAGE

Creating a metropolitan housing prices dashboard offers several advantages for various stakeholders, including real estate professionals, investors, policymakers, and the general public:

Data Visualization: Visualizing housing price data makes complex information more accessible and understandable. Users can quickly grasp trends and patterns, even without a deep understanding of statistics.

Informed Decision-Making: Real estate professionals and investors can use the dashboard to make data-driven decisions about buying, selling, or investing in properties. It helps in identifying opportunities and risks.

Market Transparency: Providing a centralized dashboard increases market transparency. It ensures that users have access to reliable and up-to-date information, reducing information asymmetry.

Risk Assessment: Users can assess market risks more effectively by examining historical price trends and fluctuations. This helps in mitigating potential losses.

Policy Formulation: Policymakers can use the dashboard to formulate housing and urban development policies more effectively. It helps in addressing affordability challenges, promoting equitable access to housing, and making informed regulatory decisions.

Urban Planning: Urban planners can use the data to make informed decisions about infrastructure development and city expansion. They can allocate resources more efficiently based on housing price trends and demand.

Equity and Inclusion: The dashboard can highlight disparities in housing prices among neighborhoods, which can inform efforts to promote equitable access to housing and reduce housing inequality.

Market Forecasting: Predictive models within the dashboard can help forecast future housing price trends. This is valuable for long-term planning and investment strategies.

Time Efficiency: Users can save time by accessing all relevant housing market information in one place. They don't need to search through multiple sources or perform their own data analysis.

Customization: Dashboards often allow users to customize their view by applying filters or selecting specific criteria. This personalization enhances the user experience and ensures that users see data relevant to their needs.

Interactive Exploration: Interactivity features, such as filters and clickable elements, enable users to explore data and answer specific questions. This promotes deeper engagement with the data.

User Feedback and Collaboration: Users can provide feedback on the dashboard, leading to continuous improvements and updates. Collaboration among stakeholders can lead to a more comprehensive and accurate view of the housing market.

In summary, a metropolitan housing prices dashboard serves as a valuable tool for stakeholders by providing data-driven insights, enhancing transparency, supporting decision-making, and facilitating collaboration in the real estate sector and urban planning.



5.1 DISADVANTAGE:

Data Privacy and Security: Housing price data may contain sensitive information. Protecting this data and ensuring compliance with data privacy regulations (e.g., GDPR) can be challenging.

Complexity: Creating a comprehensive housing prices dashboard can be complex, especially for large metropolitan areas with diverse housing markets. Data integration and visualization can be time-consuming and require expertise.

Resource Intensive: Developing and maintaining a dashboard, especially if it involves real-time data updates, can be resource-intensive in terms of time, manpower, and infrastructure costs.

Limited Access: Not everyone may have access to the dashboard, potentially creating information disparities. Access may be restricted to certain stakeholders or paid subscribers.

6.APPLICATION

Homebuyers and Renters: Prospective homebuyers and renters can use the dashboard to explore housing prices in different areas, helping them make informed decisions about where to buy or rent property.

Real Estate Professionals: Real estate agents and brokers can use the dashboard to provide clients with data-driven insights, helping them make more informed buying or selling decisions.

Policymakers and Urban Planners: Government officials and urban planners can use the dashboard to inform policies related to affordable housing, urban development, and infrastructure planning.

Financial Institutions: Banks and mortgage lenders can use housing price data to assess lending risks and make decisions about loan approvals.

Market Analysts and Economists: Analysts and economists use these dashboards to study trends in the real estate market, which can provide insights into broader economic conditions.

Housing Advocacy Groups: Organizations advocating for affordable housing and social equity can use the data to identify areas with affordability challenges and support their advocacy efforts.



7.CONCLUSION

Housing price dashboards provide insights into historical and current market trends, helping users make informed decisions regarding real estate investments, property purchases, or rental choices. They enhance market transparency, support risk assessment, and facilitate the formulation of effective policies related to urban development and affordable housing. Overall, metropolitan housing price dashboards contribute to data-driven decision-making, promote transparency, and foster collaboration among stakeholders in the real estate sector, ultimately working towards more efficient and equitable housing markets in metropolitan areas. Their applications span from individual homebuyers and renters to real estate professionals, policymakers, financial institutions, and beyond, making them valuable assets in today's real estate landscape.

8. FUTURE SCOPE

The future scope of metropolitan housing price dashboards is promising, as advancements in technology, data analytics, and urban development continue to shape the real estate landscape. Here are some key areas of future development and opportunities:

Enhanced Data Integration: Future dashboards will likely integrate data from

multiple sources, including IoT devices, social media, and satellite imagery. This will provide a more comprehensive view of the real estate market.

Real-Time Data: The availability of real-time data will become more prevalent, enabling users to access up-to-the-minute information on housing prices, market conditions, and property availability.

Predictive Analytics: Advanced predictive modeling and machine learning techniques will offer more accurate forecasts of housing price trends, allowing users to anticipate market changes.

Geospatial Intelligence: Geographic Information Systems (GIS) and geospatial analysis will play a larger role in housing price dashboards, providing deeper insights into location-specific factors.

Al-Powered Insights: Artificial intelligence (AI) algorithms will analyze vast datasets, extracting valuable insights and trends that may not be immediately apparent to human users.

Global Expansion: Housing price dashboards will not be limited to metropolitan areas within a single country. They will expand globally to serve international investors and real estate professionals.



