DATA ANALYTICS POWERED BY TABLEAU

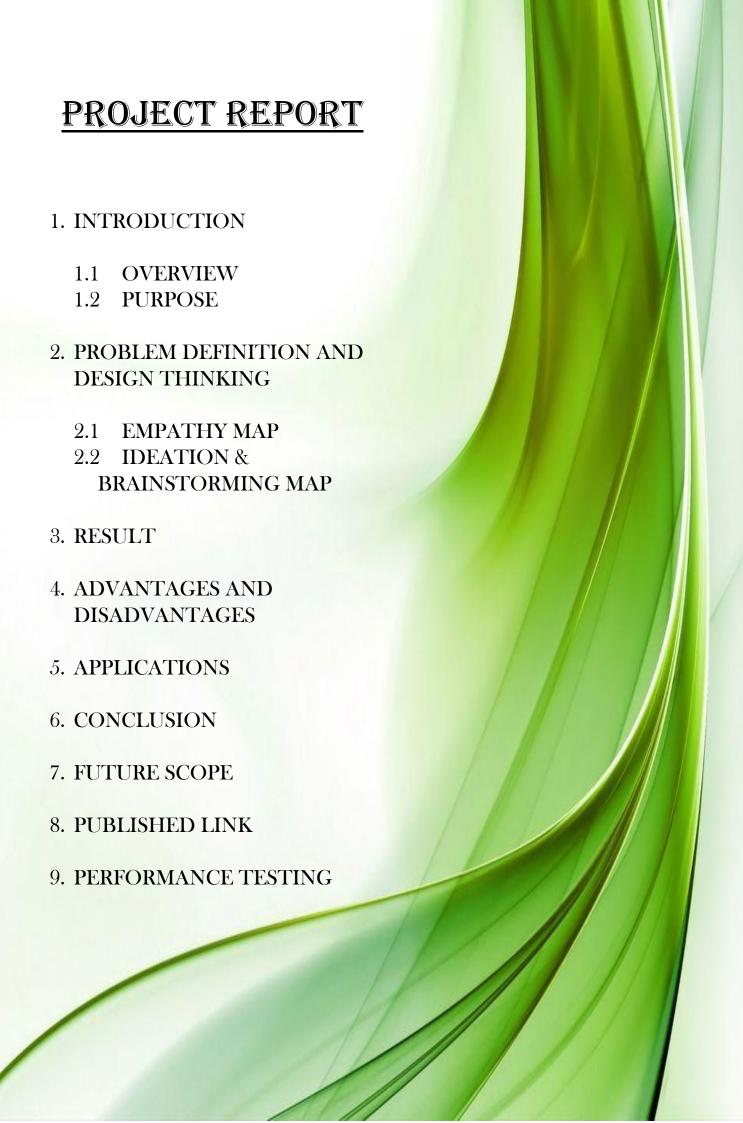
#### PROJECT TITLE

# ANALYSING HOUSING PRICES IN METROPOLITAN AREAS OF INDIA

TEAM ID: NM2023TMID07763

TEAM MEMBERS

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# ANALYSING HOUSING PRICES IN METROPOLITAN AREAS IN INDIA



# 1. <u>INTRODUCTION:</u>

#### 1.1. PROJECT DESCRIPTION:

The "analysis of housing prices in Indian metropolitan areas" project aims to delve into the intricate dynamics of the real estate market within major Indian cities. The focus is on understanding housing price trends, affordability factors and their impact on urban development. Through robust data analysis and cutting-edge technology, the project endeavours to provide actionable insights for various stakeholders, including investors, developers, policy makers and the general public.

#### 1.2. PURPOSE:

Analysing housing prices in metropolitan areas of India serves several purposes.

#### ➤ Market Understanding:

Understanding the dynamics of the real estate market, helps stakeholders comprehend the trends, demand-supply dynamics, and investment opportunities.

#### ➤ Policy Formulation:

Governments and regulatory bodies give this analysis to formulate policies related to housing, urban developments and real estate to ensure sustainable growth and affordable housing options.

#### ➤ Investment decision-making:

Investors use housing price analysis to make informed decision about property investments, predicting potential returns and assessing risk associated with the real estate market.

#### ➤ Affordability assessment:

Understanding housing prices helps in assessing housing affordability for different segments of the population aiding policy makers in creating affordable housing strategies.

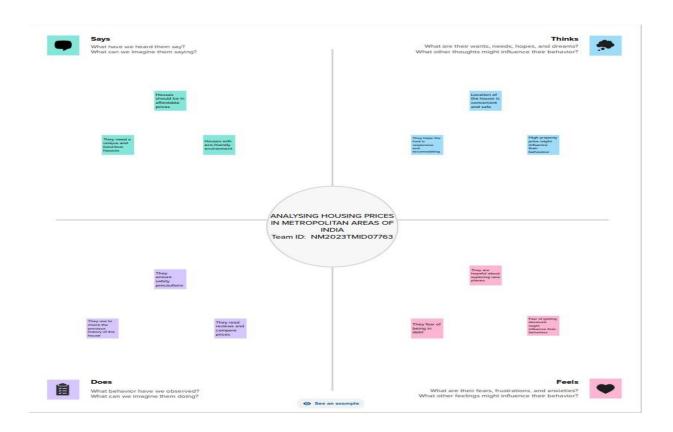
#### ➤ Socio-economic impact assessment:

Studying housing prices helps in assessing the socioeconomic impact on residence, identifying disparate and planning interventions to address social inequalities.

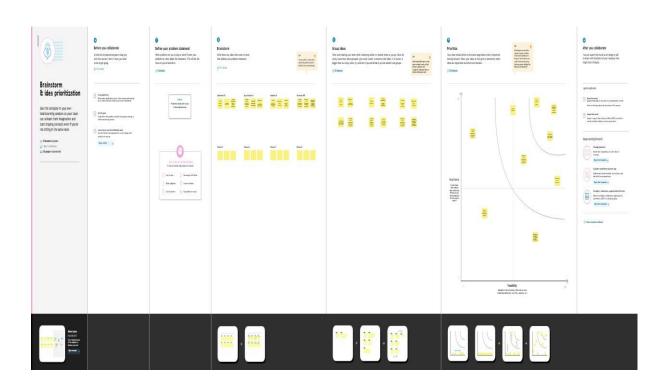
# 2. PROBLEM DEFINITION & DESIGN THINKING:

The housing market in Indian metropolitan areas lacks comprehensive and accurate analysis, causing challenges in understanding trends, pricing factors and market dynamics. The challenge is to accurately analyse factors affecting prices and affordability, providing valuable insights for informed decision making by stakeholders and policy makers.

# 2.1. EMPATHY MAP:

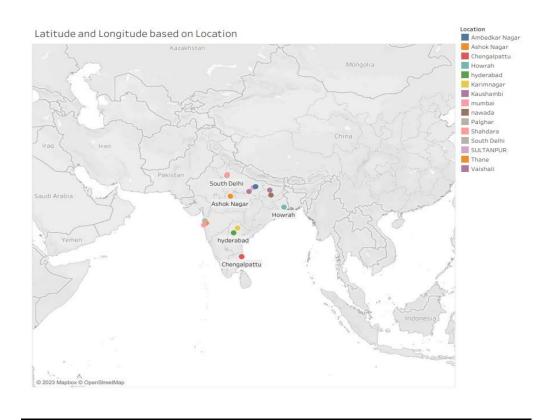


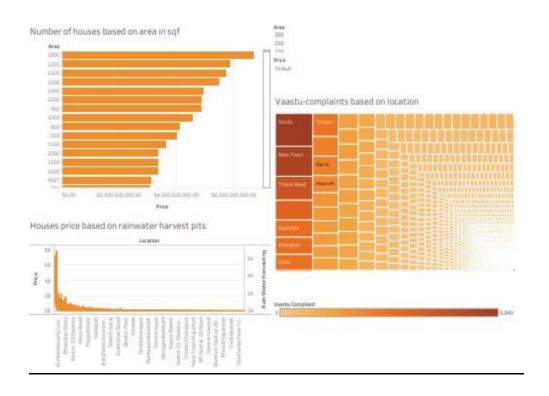
#### 2.2. <u>IDEATION & BRAINSTORMING MAP</u>

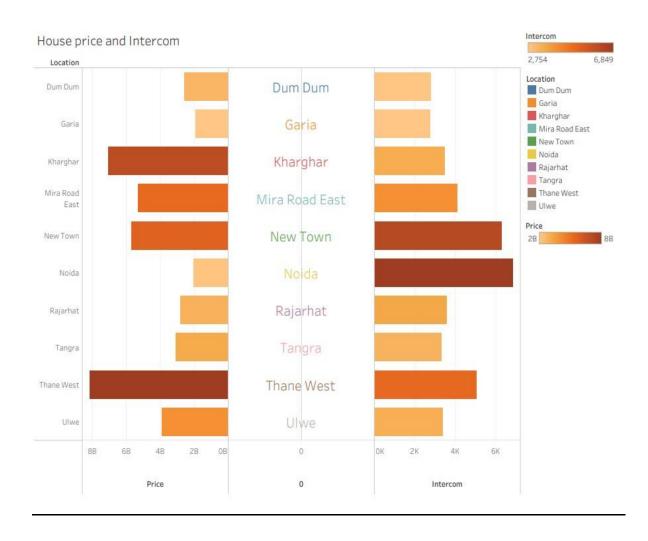


# 3. <u>RESULT:</u>

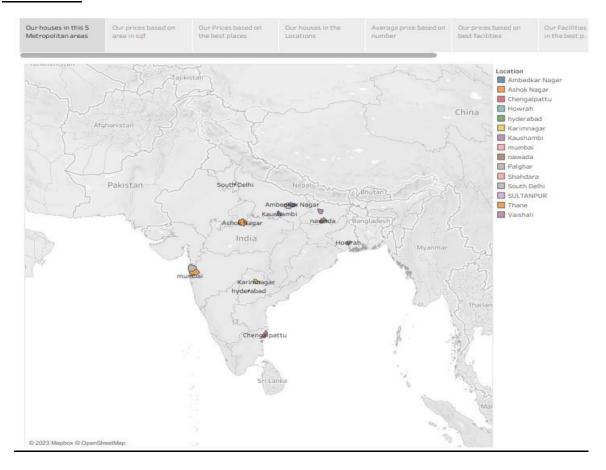
# **DASHBOARD**

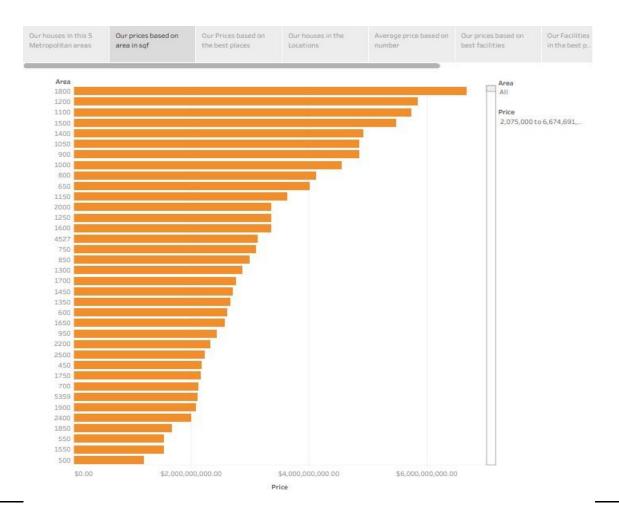


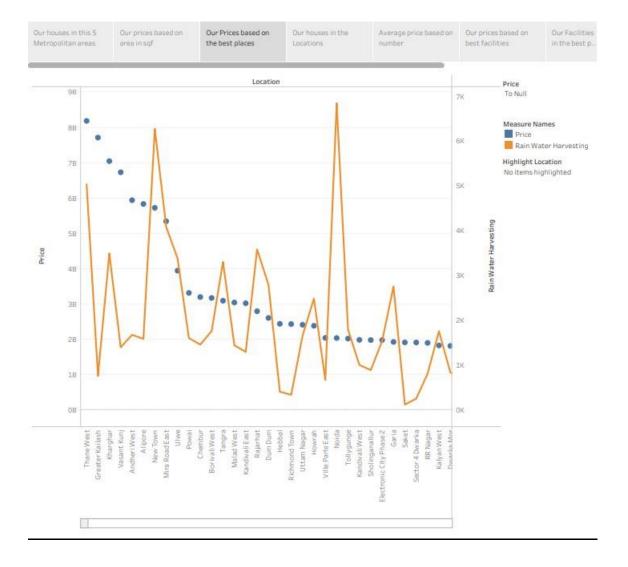


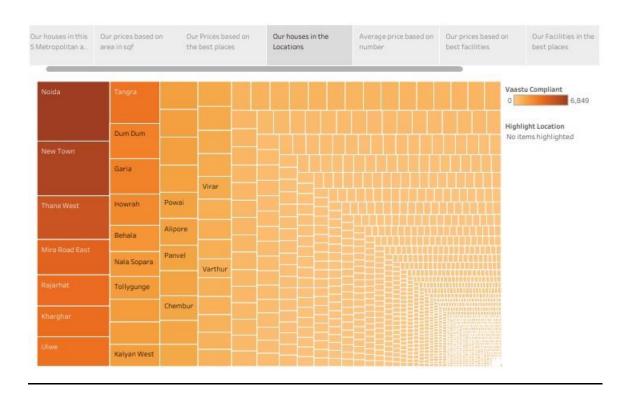


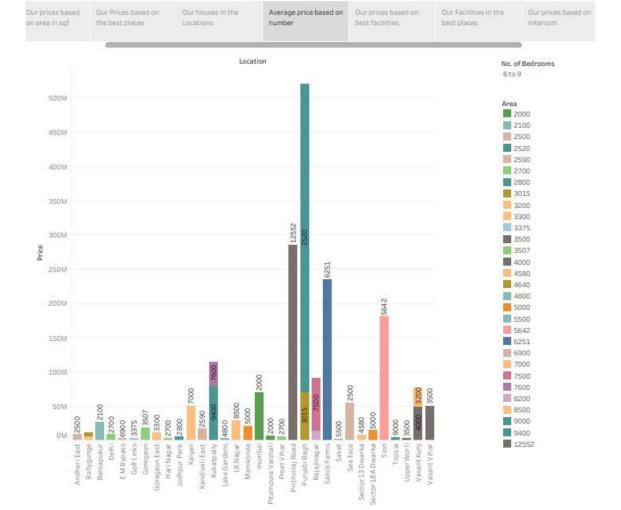
#### **STORY**

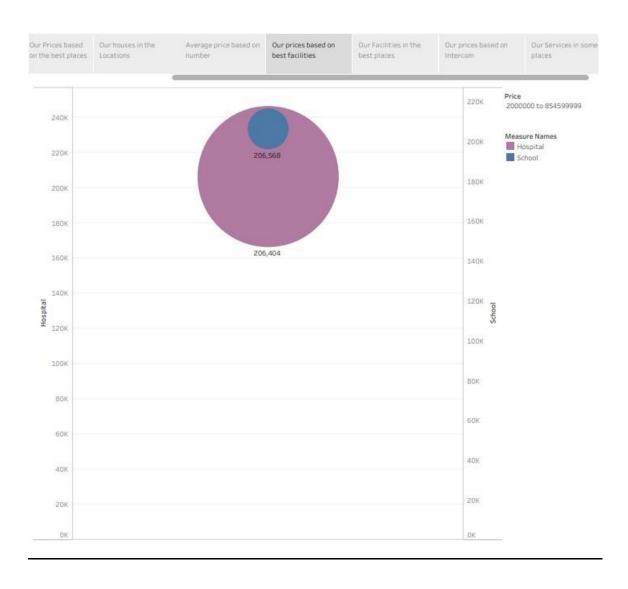


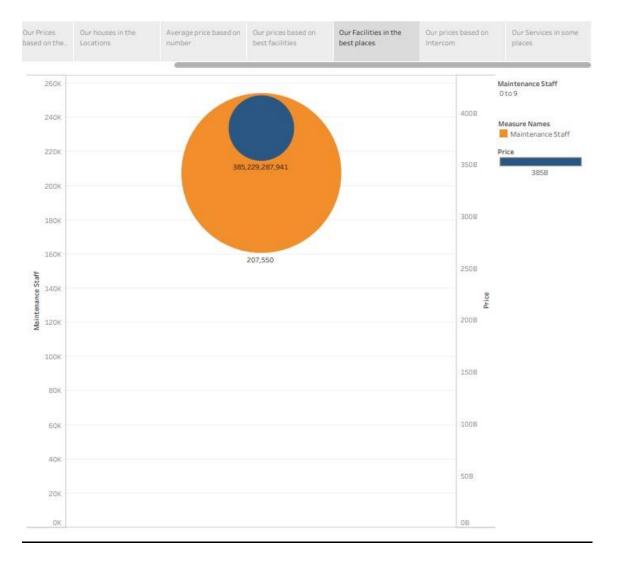


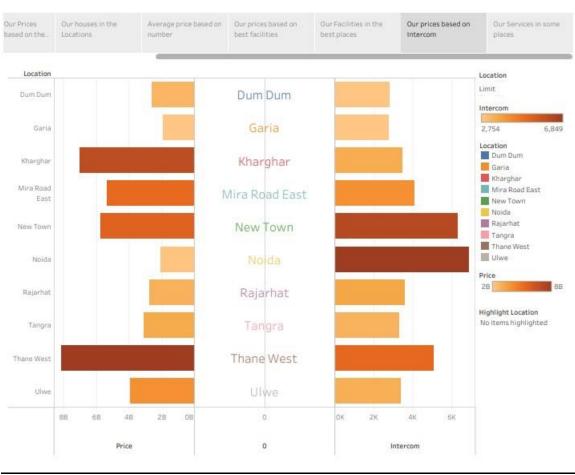


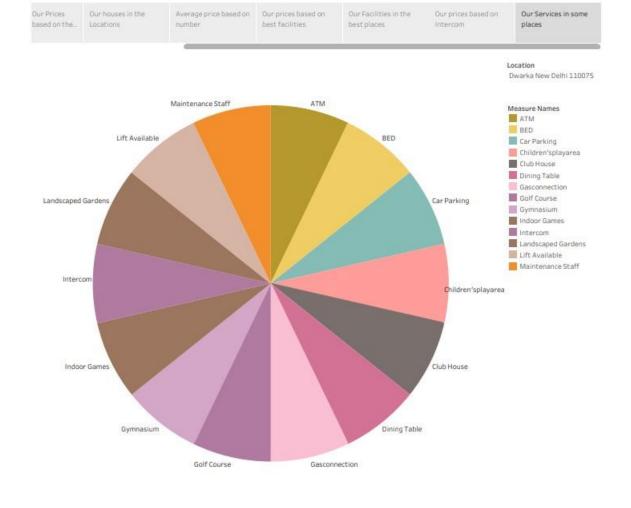












# 4. ADVANTAGES & DISADVANTAGES

#### **ADVANTAGES**



Understanding housing prices helps in identifying trends, demand-supply dynamics and market behaviour. This insight is invaluable for developers, investors and buyers.



Analysing housing prices
aids in urban planning,
enabling cities to plan
infrastructure,
transportation, and
amenities based on housing
demand and location



Governments can use this data to formulate effective housing policies, addressing affordability promoting sustainable urban development and ensuring adequate housing for the



Utilizing advanced analytics and AI can enhance accuracy and predict future trends, enabling proactive decisions and strategic planning for both



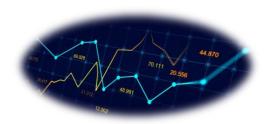
Studying housing prices
helps in assessing
affordability for various
income groups, facilitating
initiatives to improve
accessibility to housing for
a broader section of

#### **DISADVANTAGES:**

Obtaining accurate and comprehensive data on housing prices can be challenging, particularly in emerging markets where data collection may not be standardized or easily accessible.



Housing markets can be influenced by external factors like policy changes, economic fluctuations or geopolitical events, leading to unexpected shifts and making predictions less reliable.



Interpreting housing data accurately requires a deep understanding of various market factors, making it challenging for those without specialized knowledge or expertise in real estate economics.



Analysing housing prices can sometimes highlight significant disparities in housing affordability and access, potentially exacerbating social inequalities and disparities.



Conducting through market analysis requires substantial resources, including financial investments, skilled professionals and time which can be a barrier for smaller stakeholders or organisations.



# 5. APPLICATIONS:

#### **❖** REAL ESTATE INVESTMENT STRATEGY:

#### 1. Investment decisions:

Investors can use price trends to make informed choices, optimizing their real estate fort polio for maximum returns.

#### 2. Risk assessments:

Analysing housing data helps in assessing investment risks and potential market fluctuations.

#### **❖** URBAN PLANNING AND POLICY FORMULATION:

#### 1. Infrastructure development:

Housing analysis informs decisions on infrastructure planning, ensuring it aligns with housing needs and population distribution.

#### 2. Affordability policies:

Helps in formulating policies to enhance housing affordability for different income groups, fostering inclusive urban growth.

#### **GOVERNMENT POLICY IMPACT ASSESSMENT:**

#### 1. Policy evaluation:

Enables assessment of the effectiveness of existing housing policies and helps tailor new policies to address market dynamics.

#### 2. Public housing planning:

Informs planning and allocation of resources for public housing projects based on market demands.

### **SOCIO ECONOMIC DEVELOPMENT:**

#### 1. Social equality:

Supports initiatives to reduce housing disparities and improve access to adequate housing for vulnerable or under served populations.

#### 2. Economic growth:

Aids in promoting housing projects that stimulate economic growth and employment opportunities.

#### **\*** TECHNOLOGY INTEGRATION AND INNOVATION:

#### 1. AI-based solutions:

Utilizing AI and machine learning for predictive modelling, enhancing accuracy in predicting housing market trends.

#### 2. Proptech advancements:

Drives innovations in proptech, enabling new platforms and tools to streamline property transactions based on market insights.

# 6. <u>CONCLUSION:</u>

Analysing housing prices in metropolitan areas of India is a multifaceted endeavour with both advantages and disadvantages. It provides valuable insights into market dynamics, trends and affordability, aiding informed decision making for investors, developers, policy makers and the general population. Understanding housing trends is vital for sustainable urban planning, promoting socioeconomic growth and formulating effective housing policies. However, challenges such as data availability, market volatility, ethical considerations and the potential for speculative behaviour need to be carefully addressed. By responsibly unitizing advanced analytics and considering the broader socio-economic contest, stakeholders can navigate the complexities of the real estate market, contributing to balanced urban development and improved housing accessibility for all.

# 7. <u>FUTURE SCOPE:</u>

Analysing housing prices in metropolitan areas in India holds significant future potential. With urbanization and population growth, understanding housing trends, affordability and market dynamics will be crucial for both policy makers and real estate stakeholders. Factors like economic development, demographic shifts, government policies and sustainability concerns will play pivotal roles in shaping the housing market. Advanced analytics, machine learning and AI can enhance accuracy in predictions, aiding informed decision making for investors, developers and individuals seeking housing solutions. Additionally, integrating data on infrastructural developments and environmental impact can provide a comprehensive view of the housing landscape, contributing to sustainable urban planning and development.

# 8. PUBLISHED LINK:

#### Dashboard 1

https://public.tableau.com/views/Dashboard1\_16956210350330/Dashboard1?:language=en-

US&publish=yes&:display\_count=n&:origin=viz\_share\_link

#### Dashboard 2

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#### Dashboard 3

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#### Dashboard 4

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#### Story 1

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# 9. PERFORMANCE TESTING:

