

DATA ANALYTICS PROJECT

CASE STUDY: REAL LIFE APPLICATION

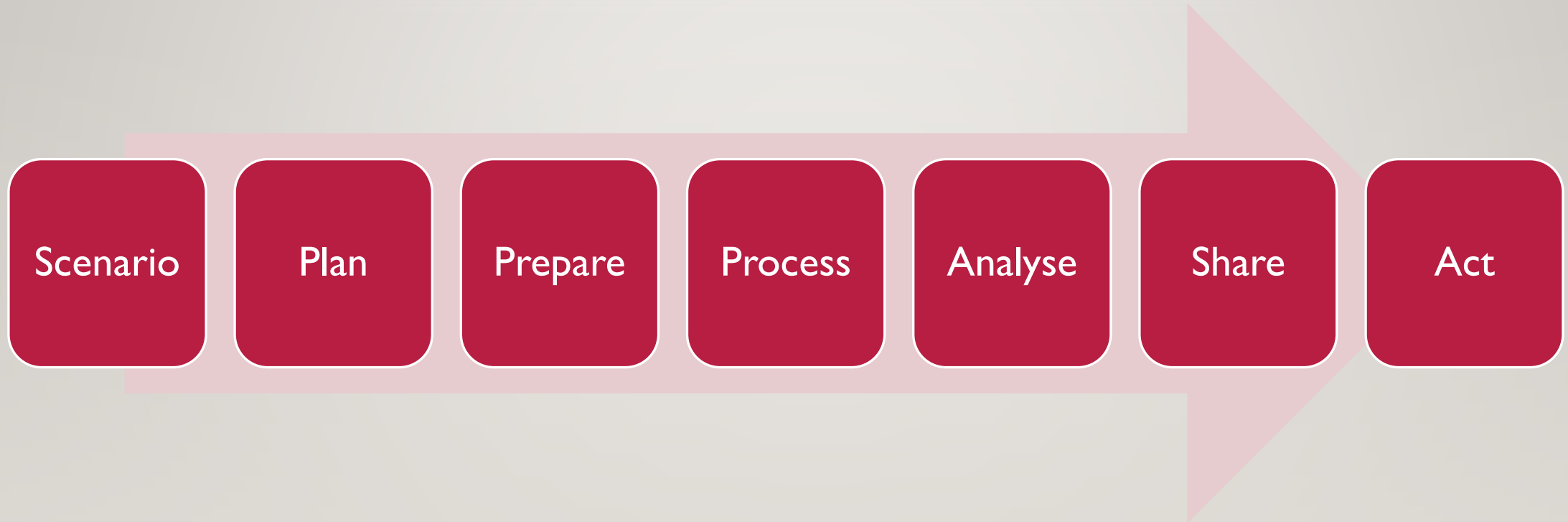


DATA ANALYTICS PROCESS

The data analytics process begins with identifying the problem and objectives. Data collection follows, gathering relevant information from various sources. This data undergoes cleaning to remove inaccuracies and inconsistencies. After cleaning, the data is explored and analyzed to uncover patterns and insights using statistical and computational techniques. Visualization tools help in presenting the findings clearly, facilitating understanding. The insights are then interpreted and used to make informed decisions. Finally, the outcomes are evaluated to measure the effectiveness of the solutions, and the process is iterated as needed to refine and improve results continuously.



CONTENT



SCENARIO: BUY A HOUSE

House price prediction involves collecting data on various factors like location, size, age, and market trends. This data is cleaned and analyzed using statistical models and machine learning algorithms to identify patterns. Predictions are visualized for clarity, providing insights for buyers, sellers, and investors to make informed decisions about property values and future market behavior.



- .1 **Plan:** I decide to plan buy a home . I need to determine the location, city, budget, sqrt fit .
- .2 **Prepare:** I research different locations, accommodation options, and near by amenities. I also assess my budget and gather the necessary funds for buy a home.
- .3 **Process:** I analyse various factors, such as area of location, size oh house like number of rooms, bathrooms and balcony as well I analyse distance of schools, gyms and parks.
- .4 **Analyse:** I analyse the collected data to make informed decisions. For example , I might go through websites that predict price, best time to buy, read reviews of particular society, and visit for bank loan. based on this data I find insights and make informative decision.
- .5 **Share:** I share my house buy plan with friends or family members. I might also consult real estate forums or online communities to get recommendations and advice from people who have been to buy home before.
- .6 **Act:** Finally, I register for home based on analysis and recommendations.



LINKING WITH DATA-ANALYTICS PROCESS:

Plan: This step involves identifying what information I need to make a decision. In this case , I need to plan buy a home and decide on various aspects like location, budget, and size of house.

Prepare: Gathering the necessary data is crucial for making inform decisions. I collect data from different sources and checking amenities near by.

Process: I analyse and process collect data to narrow down my choices. This could involve comparing costs, checking the facilities and understanding local culture.

Analyse: Here, I delver deeper into the data. I might analyse size of house, historical data about real estate, and reviews to ensure I'm making the best choices.

Share: Sharing my plans with others and seeking advice is akin to collaboration in data analytics. Others might offer insights based on their experiences, adding a social element to the decision-making process.

Act: Finally, I make decisions based on my analysis and recommendations. This mirrors the action phase in data analytics where decisions are implemented based on insights.



CONCLUSION

- **Key Factors:** Location, property size, age, and market trends are crucial in determining house price.
- **Data Accuracy:** Reliable, clean data is essential for accurate predictions and analysis.
- **Model Effectiveness:** Statistical and machine learning models can effectively uncover patterns and predict prices.
- **Market Insights:** Analysis provides valuable insights for buyers, sellers, and investors.
- **Continuous Improvement:** Ongoing data collection and model refinement enhance prediction accuracy over time.