

Data Enrichment: A guide to smarter decisions and uplifted sales

Overview

Real estate has always been a lucrative sector in the US economy. With over 200,000 residential brokerage firms and 35,000 commercial firms, this industry is worth an impressive \$235 billion per year in revenue!

Over the past five years, the Real Estate Sales & Brokerage in the US industry has grown by 5.5% to reach revenue of \$166bn in 2019. In the same timeframe, the number of businesses has grown by 3.5% and the number of employees has grown by 3.8%. A significant growth in the industry has led to an increase in the essential data that is generated. This data includes information about specific neighbourhoods, property lots sizes, number of bedrooms, utility costs,

property market valuations and average cost of living. Some distinctly exciting opportunities can be unlocked if a detailed analysis of this data is done.

This information is invaluable to realtors looking to advise their clients that are looking for properties. For builders who are developing new housing estates, the analyzed information could prove to be very crucial in terms of better decision making. The decision makers can get better insights about the properties that would yield the maximum result.



About the client

Our client has recently stepped into the real estate business and is still a growing firm. The business manages its own property sales due to which it becomes immensely challenging when it comes to competing with the already established realtors. Being a new entrant in this business our client lacked the access to the kind of insights being used by the competitors in the marketplace. While most of the projects taken up by the firm were fairly successful, there were some which could not deliver the expected revenue.

Problem statement

Our client being a growing US house building firm did not have access to the insightful information that other established firms had. For improving the position of the firm in the market, our client needed a solution which would provide them with the details about different properties in development and renting sector. Details about properties in the

development side and the retail side were crucial to them. The business was in need to access the data on a single window which could save the time spent on coming up with the correct business strategies.

Client expectations

Being a new entrant in the real estate business, our client was looking forward to acquire perspective in terms of the kind of properties which could satisfy customer demands. They had recognized the potential benefit of data analysis and business intelligence in the decision making of a firm.

They were keen on leveraging the power of data to unlock the intelligent insights which could multiply their profitability and increase the return on investment. The business sought to support both development and the retail side with the abilities of data analytics.



Strategy and implementation

Data analytics and business intelligence has changed the way a business works. It ensures more effective and informed decisions are taken. In the retail sector the information about the types of properties is of major importance to meet the likely consumer demand.

Our client required a solution which could provide complete details about the various

properties in the local as well as the neighbouring areas.

Using the Microsoft BI, our data experts created a highly interactive dashboard which could provide all the necessary information required by our client at a single interface. The dashboard that we developed assessed selected sites based on a range of complex data collated from a wide span of sources.

The dashboard provides information about the most effective use of a particular plot of land based on the data of the neighbouring properties and the local area. Precise insights from the solution makes it possible to assess information about the potential of different types of properties in the retail sector. In the process, online search data, property valuation and mortgage data is used.

Methodology

Each of the data analytics and business intelligence projects starts with the collection of good quality and reliable data.

- In this project we used the data which was publically available, however, it was not available in a format which could be easily interpreted or analyzed.
- Using data scraping techniques, we pulled together all the data to produce a detailed spreadsheet with numerous columns of data.
- Since our client was keen to explore both development and retail data, we then established which of the datasets was relevant to each of the domains.
- We provided a solution which gave a comparative view between purchase and rental data. Using this information the client could assess the opportunity of business diversification in the building development and rental markets.
- Utilizing the processed data we created visualizations which highlighted property development, property sales and property rentals.
- A dashboard was created using the interrelationship between the data, where different factors could be compared.
- The dashboard made it possible to choose specific locations and development sites. Specific properties were used to identify the consumer best suited with the local neighbourhood. The board also gave details of individual buildings and larger estates. The total functionality of the visual dashboard helped the business to make informed and accurate decisions.

Technology used

Microsoft Power BI was used to provide solution to the challenge at hand. Power BI is a data analytics tool that connects disparate datasets into coherent, visually immersive, and iterative insights. The data that we used in this case was mortgage, valuation and online search data. We collated the data and created a dashboard which showcased specific details about different properties in the neighbourhood and the local area. By choosing a specific property, the dashboard was able to identify the best fit customer based on the details of local neighbourhood data.

Results derived

The detailed visualization of the data that we provided as a solution has changed the way the business works. Now the senior management group of the firm no longer relies on their experience and the narrative evidence alone. They are now able to make decisions on the basis of detailed analysis of the data. This has given the business confidence to expand in the areas in which insights lacked previously. The business now has access to the data required to develop new sites. The yield from the sites which were previously difficult to develop has maximized.

- 15% increase in sales volume.
- 27% improvement in return on investment.
- Refined planning for each site thus maximising the number of managed properties.
- Enhanced opportunities of examining new sites where lack of information was a limiting factor in the past.

