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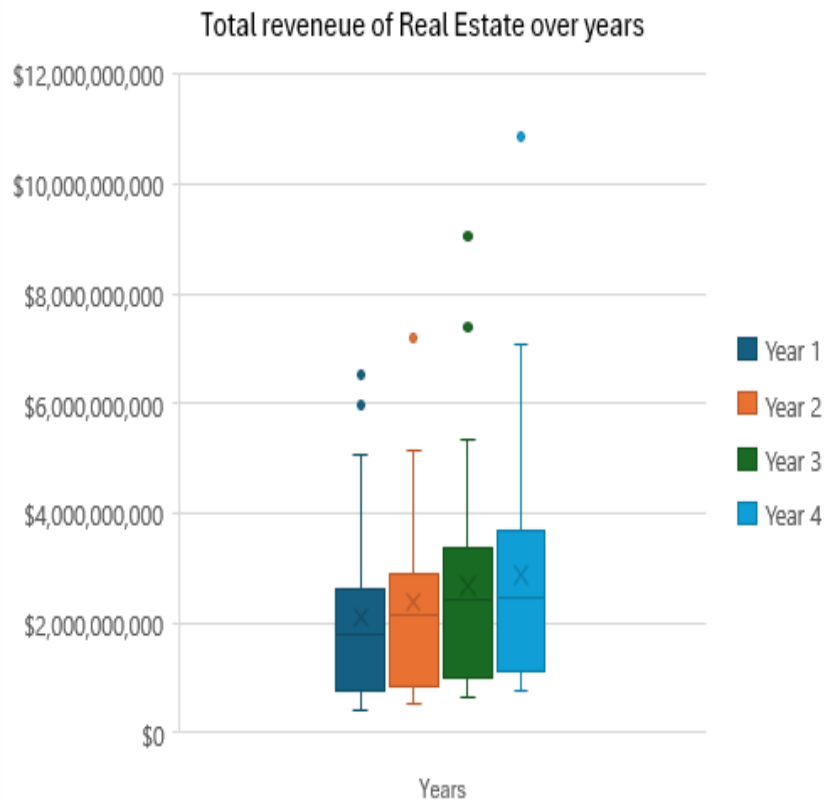
Project 3

Analyze NYSE Data

How does the trend of total reveneu change over years?

Total reveneue of Real Estate over years

This box plot reflects the total revenue performance of the Real Estate sector over a 4-year period. The graph demonstrates a clear upward trend in the sector's revenue:

The average total revenue increased steadily from $2.11 billion in Year 1 to $2.37 billion in Year 2, $2.67 billion in Year 3, and reached its highest point at $2.87 billion in Year 4.

The graph also shows the changes in the maximum and minimum total revenue values across the years. In Year 4, the maximum value reached $10.85 billion, a significant increase from the previous years, while the minimum value was around $782 million.

Comparatively, the maximum total revenue was $9.04 billion in Year 3, $7.25 billion in Year 2, and $6.51 billion in Year 1. The minimum values were $647 million, $520 million, and $409 million, respectively, for those years.

The total revenue of the Real Estate sector in Year 4 has exhibited greater variation compared to the previous years. In Year 4, the standard deviation of total revenue was $2.26 billion, which is higher than the standard deviations observed in the previous years. Whereas the standard deviation of total revenue was $2.05 billion in Year 3, $1.83 billion in Year 2, and $1.65 billion in Year 1. This increase in the standard deviation suggests that the company's total revenue in Year 4 has become less stable and more unpredictable compared to the previous years.

Also, the data indicates that the range of total revenue, calculated as the difference between the maximum and minimum values, expanded from $6.01 billion in Year 1 to $10.07 billion in Year 4. This reflects an increase in the distribution and variability of total revenue within the Real Estate sector over the 4-year period.

In summary, the box plot demonstrates a consistent upward trend in the total revenue performance of the Real Estate sector, with the highest average, maximum, and range of total revenue achieved in Year 4 compared to the previous years. However, this growth has also been accompanied by an increase in the variability and unpredictability of total revenue, as evidenced by the rising standard deviation.