Final Insights & Pricing Suggestions

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1. Average Price by Neighbourhood

The "Average Price by Neighbourhood" visual shows noticeable variation across different wards.
Neighbourhoods such as **Fifteenth Ward, Eighth Ward, and First Ward** exhibit higher average prices, indicating stronger demand and better location advantage.

➢ **Suggestion**

Hosts operating in high-performing neighbourhoods should maintain **premium pricing**, especially during peak seasons.
Listings in lower-priced wards can attract bookings by offering **competitive or discounted prices**.

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2. Average Price by Room Type

The room type analysis highlights that:

- **Entire home/apartment** listings have significantly higher average prices

- **Private rooms** are comparatively lower priced

This indicates that **privacy and full-space availability** are major contributors to pricing.

➢ **Suggestion**

Hosts offering entire homes should adopt **value-based pricing**, while private room hosts can compete by focusing on affordability and occupancy.

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3. Quality Score vs Price Contribution

The "Sum of Price by Quality Score" visual shows that listings with **higher quality scores contribute more to total pricing value**.
This confirms that better-quality listings are priced higher and generate greater revenue.

➢ **Suggestion**

Improving listing quality through better amenities, cleanliness, and guest experience can justify **higher recommended prices**.

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4. Price Adjustment Percentage (Dynamic Pricing Control)

The **Price Adjustment % slider** allows users to simulate dynamic pricing changes.
As the adjustment percentage increases, the suggested price updates accordingly, enabling real-time pricing strategy evaluation.

➢ **Suggestion**

Hosts can use this feature to:

- Increase prices during **high-demand periods**

- Apply discounts during **off-peak seasons**

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5. Suggested Price by Season

The seasonal analysis clearly shows:

- **Peak season** has the highest suggested price

- **Shoulder season** has moderate pricing

- **Off-peak season** has the lowest suggested price

This confirms that seasonality directly affects demand and pricing.

➢ **Suggestion**

Hosts should apply **season-based pricing strategies** instead of fixed pricing to maximize revenue throughout the year.

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6. Listing Name–wise Analysis

The listing name table highlights premium properties such as large villas, mansions, and multi-bedroom homes that command higher prices.
These listings typically combine **review, suggested price, and room type**.

➢ **Suggestion**

High-end listings can sustain premium pricing, while smaller listings should focus on **competitive positioning**.

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7. Overall Pricing Recommendations

- Dynamic pricing is more effective than static pricing

- Location, room type, quality score, and season are key pricing drivers

- High-quality listings can safely charge higher prices

- Off-peak discounts help improve occupancy rates

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8. Conclusion

The Airbnb Dynamic Pricing Recommendation Engine successfully demonstrates how data-driven insights can support smarter pricing decisions.
By combining **Python-based data processing** and **Power BI interactive visuals**, the system provides flexible and transparent pricing recommendations tailored to market demand.

"Dynamic pricing enables Airbnb hosts to align prices with demand, improve occupancy, and maximize overall revenue."