Power BI Business Insights Report

**Self-Service Business Analysis Using Power BI  
Organization: kaggle website** <https://www.kaggle.com/datasets/rajneesh231/retail-insights-a-comprehensive-sales-dataset> **(retail insight)  
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This report presents a self-service data analysis conducted using Microsoft Power BI, based on the **Retail Insights** dataset available on Kaggle. The dataset is a **synthetic snapshot of sales transactions**, comprising **5,000 entries** across **24 columns**, covering a wide range of business dimensions—from order processing to customer and shipment information [kaggle.com+2kaggle.com+2kaggle.com+2](https://www.kaggle.com/datasets/kyanyoga/sample-sales-data?utm_source=chatgpt.com)[kaggle.com](https://www.kaggle.com/datasets/rajneesh231/retail-insights-a-comprehensive-sales-dataset?utm_source=chatgpt.com).

Key parameters in the dataset include:

* **Order details**: Order number, order and shipping dates, order priority
* **Customer information**: Customer name, address, city, state, postal code, country, customer type, account manager
* **Product data**: Product name, category, container type
* **Pricing and financials**: Cost price, retail price, profit margin, subtotal, discount (%, $), order total, shipping cost, total paid
* **Shipping attributes**: Shipping mode

The objective of this assignment is to demonstrate the capabilities of Power BI for uncovering **actionable business insights**. By exploring trends in sales, profitability, discounts, and logistics, the report aims to support informed decision-making and strategic recommendations to enhance future business performance.

**Total Sales Value by Car Model**

📈 **What the chart shows**  
This column chart displays the total revenue (sum of price) generated by each car model. The model "1500" leads with the highest total sales, followed by "Golf" and "F-150".

💡 **Insight/Conclusion**  
The "1500" and "Golf" models are top revenue drivers, together contributing the majority of overall sales. In contrast, models like "Sierra 1500" and "Grand Cherokee" show significantly lower performance but still in the top 5, we can see that the distribution is similar to pareto.

📌 **Recommendation**  
Focus marketing and inventory efforts on the "1500" and "Golf" models to maximize revenue. Consider reevaluating pricing or promotional strategies for underperforming models.

**A graph of blue squares

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AI-generated content may be incorrect. (lowest preforming models)**

**Customer Visits by Number of Doors and Seller Type**

📈 **What the chart shows**  
This clustered column chart displays the total number of visits based on the number of car doors, segmented by seller type (dealer vs. owner). Vehicles with 4 doors received the highest number of visits from both sources.

💡 **Insight/Conclusion**  
Cars with 4 doors are the most visited, especially those listed by dealers. Two-door vehicles also attract significant interest, while cars with 3 or 5 doors, or unspecified ("others"), have minimal engagement.

📌 **Recommendation**  
Prioritize inventory and promotional efforts around 4-door vehicles, particularly through dealer channels. Consider investigating why interest drops sharply for 3- and 5-door cars to address potential market gaps.

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AI-generated content may be incorrect.**

**Visits by City and Drivetrain Type**

📈 **What the chart shows**  
This treemap shows total visit counts segmented by city and drivetrain. The City of Toronto and Calgary dominate, with AWD and 4x4 vehicles being most popular. The goal is to investegate the difference between the cities and there prefferd drive terrain.

💡 **Insight/Conclusion**  
AWD and 4x4 drivetrains are highly favored in top cities, likely due to weather or terrain.

📌 **Recommendation**  
Promote AWD and 4x4 vehicles in key urban centers, especially Toronto and Calgary, to match buyer preferences. But more AWD in Toronto , and more 4X4 in Calgary.

**A screenshot of a computer screen

AI-generated content may be incorrect.**

**Most Frequent Car Makes by Year**

📈 **What the chart shows**  
This word cloud displays the top 20 car brands based on the number of yearly entries. Larger words represent higher counts.

💡 **Insight/Conclusion**  
Ford, Toyota, Ram, and Chevrolet appear most frequently, indicating they are the dominant makes in the dataset.

📌 **Recommendation**  
Prioritize inventory, ads, and search optimization for top brands like Ford and Toyota to align with user demand, cross referance with the most profitable and the chance to close a customer.

A close up of words

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**Vehicle Kilometers vs. Year by Seller Type**

📈 **What the chart shows**  
This scatter plot shows the kilometers driven, segmented by seller type (dealer vs. owner). Each bubble represents vehicle listings, with larger bubbles indicating higher total vistis.

💡 **Insight/Conclusion**  
Newer cars (2015–2023) have lower average kilometers and are listed more frequently, especially by dealers. Older vehicles show higher mileage and are more often listed by private owners. Morseso when the car is the dealer it have a greater effect on the amount of visits with respect to the kilometers driven.

📌 **Recommendation**  
Emphasize low-mileage newer models in marketing and encourage dealers to highlight them as a competitive edge. Or maybe emphasize this more when marketing.

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**Vehicle Visits by Make, Model, and City**

📈 **What the chart shows**  
This matrix visual breaks down the number of visits by vehicle make and model across different cities. Each row represents a make/model combination, and each column a city.

💡 **Insight/Conclusion**  
Calgary and the City of Toronto record the highest visit volumes for most vehicle brands. Specific models like the Acura TL and RDX perform strongly across multiple cities.

📌 **Recommendation**  
Use city-level demand insights to optimize vehicle distribution—prioritize high-performing models in top cities like Calgary and Toronto.

A screenshot of a data

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