CAPSTONE PROJECT

Maven Fuzzy Factory E-Commerce Analysis

Project Scenario

Congratulations on completing your data analytics bootcamp!

Imagine you have just been hired as a **Junior Data Analyst** at **Maven Fuzzy Factory**, a growing online retailer specializing in teddy bears and plush toys. The company has been in operation for some time and has collected substantial data on their marketing efforts, website performance, and sales.

The leadership team has tasked you with conducting a comprehensive analysis of their ecommerce operations. They want to understand what's working, what's not, and where they should focus their resources to maximize growth and profitability. This is your opportunity to showcase everything you've learned and make a real impact!

About the Data

The Maven Fuzzy Factory database contains **multiple related tables** with marketing and sales data, including:

- **Website Sessions:** User traffic data including sources and timestamps
- **Pageviews:** Detailed user navigation through the website
- **Orders:** Transaction records with order details and revenue
- **Order Items:** Individual products within each order
- **Products:** Product catalog information

Dataset Size: 499 records across 25 fields (multiple tables)

Data Coverage: The dataset tracks the complete customer journey from initial website visit through purchase, along with detailed marketing channel attribution.

Suggested Questions to Get You Started

Here are some questions to guide your thinking, but you should explore beyond these. Think critically about what insights would be most valuable for the business:

1. What is the trend in website sessions and order volume?

2. What is the session to order conversion rate? How has it trended?

3. Which marketing channels have been most successful?

4. How has the revenue per order evolved? What about revenue per session?

Your challenge: Based on your exploration of the data and understanding of the ecommerce industry, what other business problems can you identify and solve? What questions should the leadership team be asking that they have not thought of yet?

Task Objective

Your goal is to conduct a comprehensive analysis and deliver insights that drive business decisions. Start by exploring the data thoroughly. Understand the table relationships, check data quality, and familiarize yourself with the ecommerce industry and key metrics. Then, develop a list of business questions that address growth, profitability, customer behavior, marketing effectiveness, and operational efficiency. Prioritize these questions based on potential business impact.

Once you have completed your analysis, prepare a **professional presentation (10 to 15 slides)** for the Maven Fuzzy Factory leadership team. Your presentation should include an executive summary with your top findings and recommendations, an introduction to your methodology, key insights supported by clear visualizations, actionable recommendations prioritized by impact, and a conclusion with proposed next steps. Remember: the best analysts do not just report numbers. They tell compelling stories that drive decisions and demonstrate business value.

Download the dataset and get started at: https://mavenanalytics.io/data-playground/toy-store-e-commerce-database