PROJECT TITLE: A PROFITABILITY ANALYSIS FOR STYLEHUB'S FOOD TRUCK BUSINESS

BUSINESS QUESTION

Which truck location generates the most profitable customers?

OBJECTIVE

StyleHub, a fashion brand targeting customers aged 18–35, operates mobile fashion trucks across multiple locations. With limited marketing budgets and rising competition, the leadership team wants to identify which truck locations bring in the most valuable customers, not just in terms of total sales, but overall customer profitability.

DATASET OVERVIEW

Column Name	Description
Date	Transaction date
Truck_ location	Physical location of the truck
Marketing_ channel	Marketing channel driving traffic
Customers	Number of customers served
Avg_ order _ value	Average order value per customer
Total _ sales	Total sales made per day
Repeat_ customers	Count of customers who came back
Weather	Weather condition on that day

PROFITABILITY LOGIC

To determine customer profitability by location, the analyst created a profitability score that considers:

Profitability_ score = (total_ sales / customers) +

(avg_ order _value * 0.4) +

(repeat_customers/ customers)

Total _ sales / customers: How much money each customer brings in.

Avg _order_ value: How big the average spend is.

Repeat_ customers / customers: How loyal the customer base is at each location.

KEY INSIGHTS

Metric	Top Location	Value
Most profitable customers overall	Suburbia	8.94 score
Highest average order value	Suburbia	$12.65

Most loyal customers(repeat ratio)	Midtown	Highest Ratio
Most total revenue	Downtown	Highest sum
Best $ per customer	Suburbia	highest

BUSINESS RECOMMENDATION

1. Double down on Suburbia for high value customer campaigns.
2. Leverage Midtown for loyalty programs and retention strategies
3. Optimize pricing and marketing in Downtown, high volume but not as profitable per customer.

TOOLS USED

1.Python (Jupyter Notebook)

2. pandas, matplotlib, seaborn

3. Custom feature engineering(Profitability Score)

4. Grouped aggregations and EDA