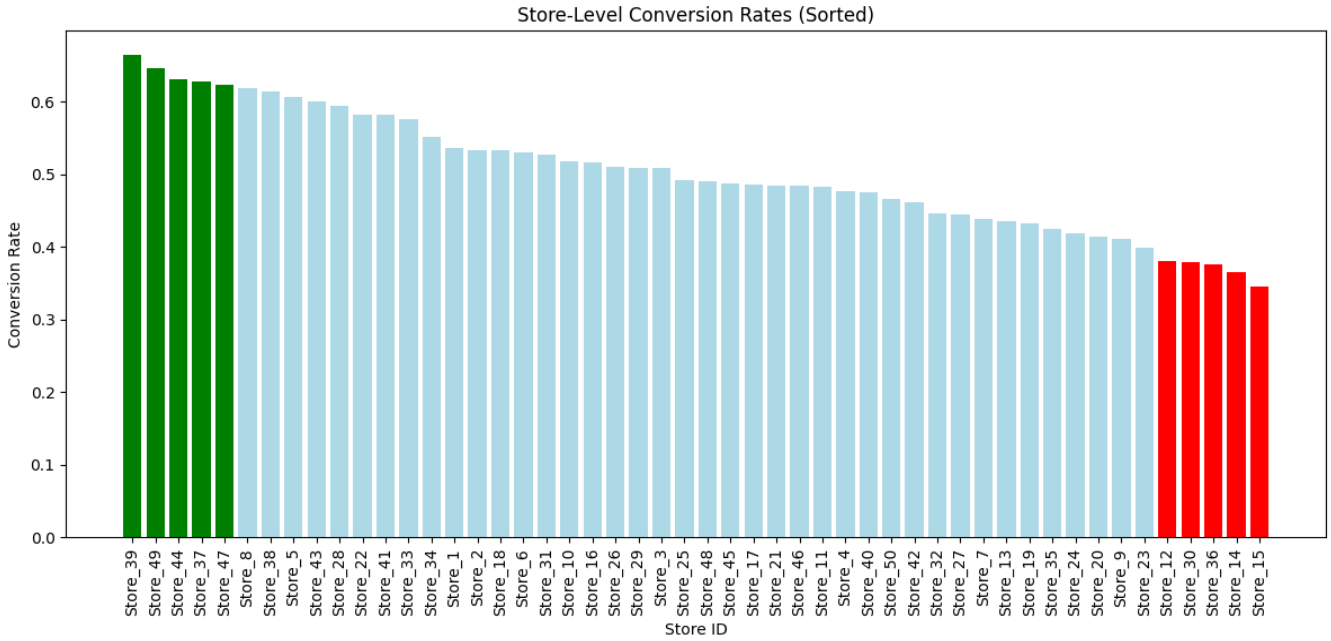
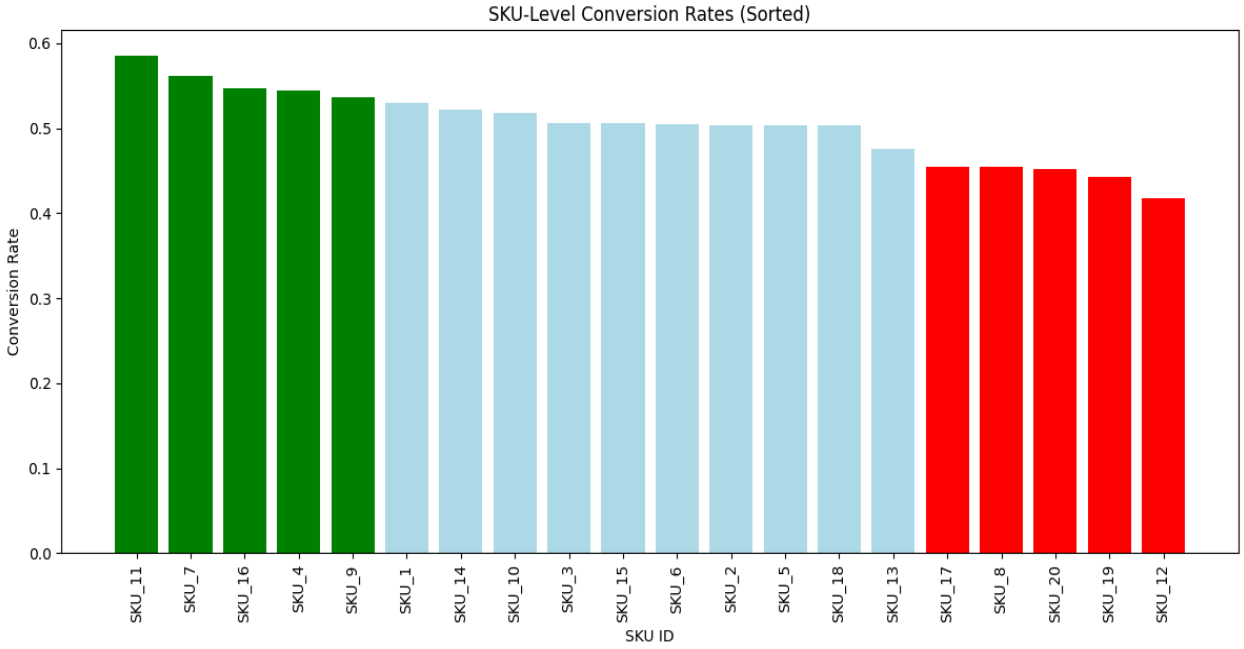


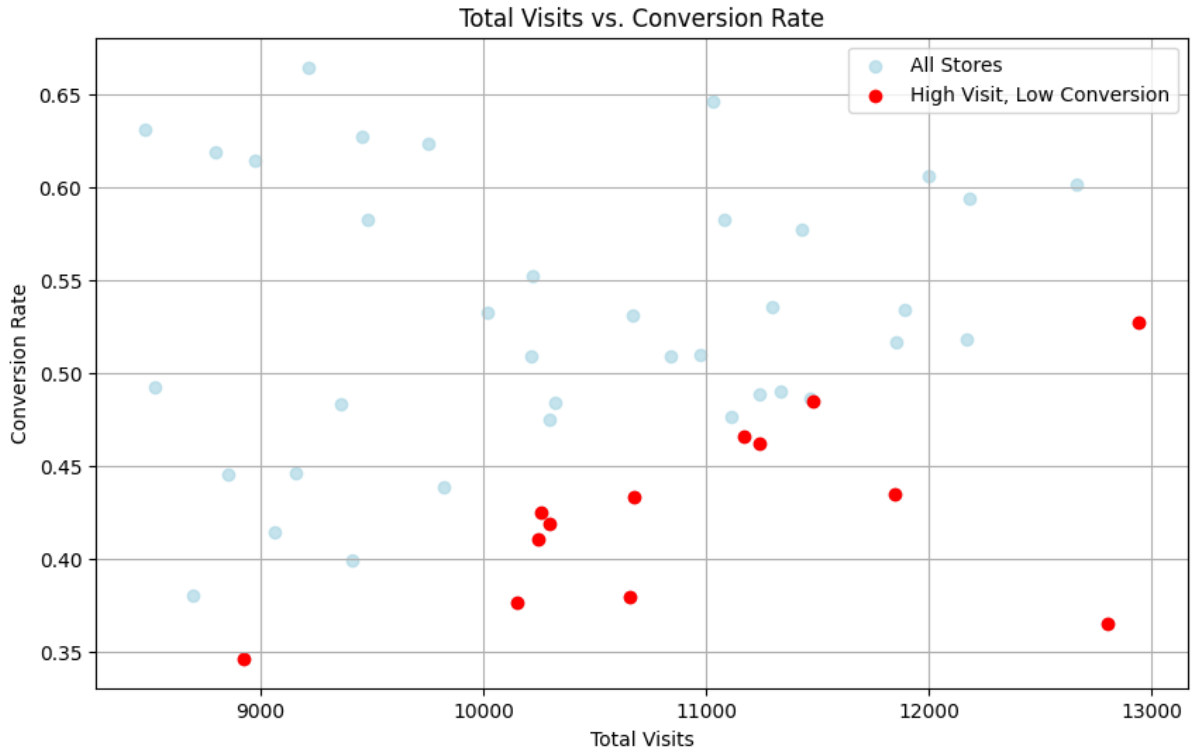
The top 5 performing stores based on conversion rates at store level are store_39, store_49, store_44, store_37, store_47.
The bottom 5 performing stores based on conversion rates at store level are store_12, store_30, store_36, store_14, store_15.



The top 5 performing stores based on conversion rates at SKU level are SKU_11, SKU_7, SKU_16,

SKU_4 and SKU_9.

The bottom 5 performing stores based on conversion rates at SKU level are SKU_17, SKU_8, SKU_20, SKU_19 and SKU_12.



Trend 1: Stores with High Visits but Low Conversion Rates

Some stores attract significant foot traffic but fail to convert visitors into buyers, indicating potential issues such as pricing, product availability, or in-store experience.

Examples: | Store ID | Total Visits | Conversion Rate |

Store_13 | 11846 | 0.435168 |

| Store_14 | 12804 | 0.365042 |

| Store_15 | 8922 | 0.346335 |

| Store_19 | 10678 | 0.433321 | …

- **Observation**: Stores like Store_13 have high visits (11,846) but conversion rates as low as 43.52%, suggesting untapped sales potential.
- **Implication**: These stores could benefit from improved product displays, staff training, or targeted promotions.

Trend 2: SKUs with High Revenue but Low Conversion Rates

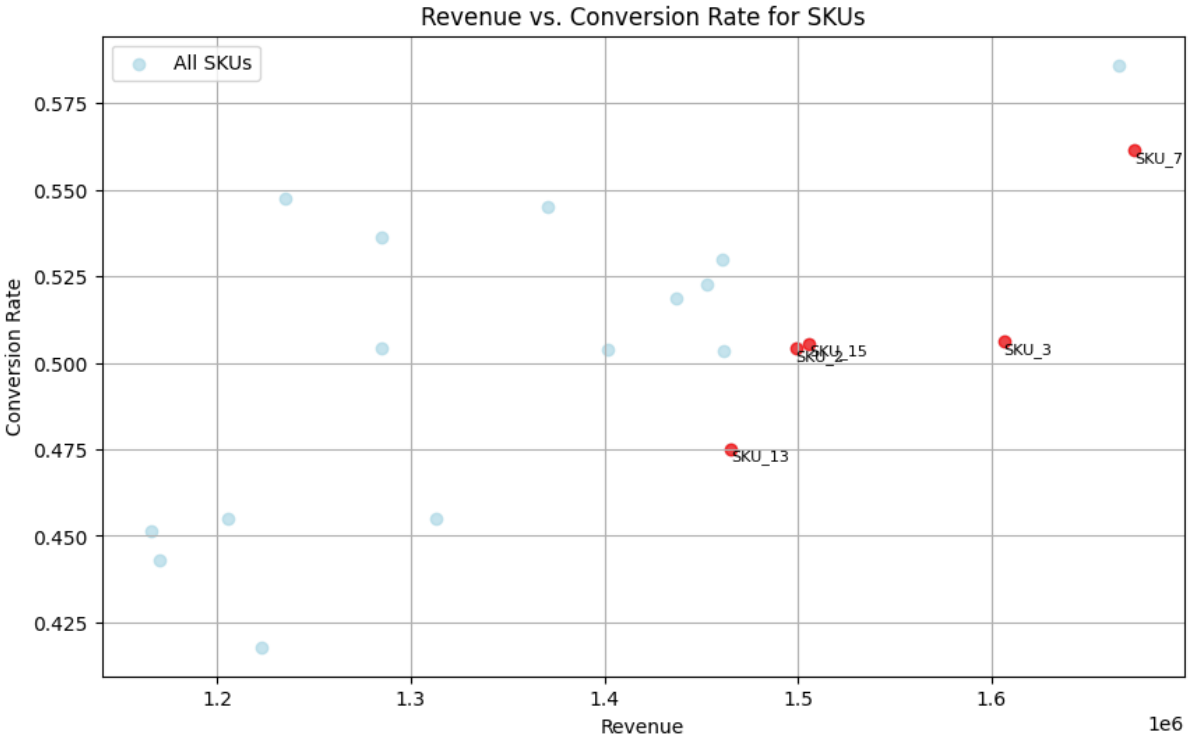
Certain SKUs generate substantial revenue despite low conversion rates, likely due to high pricing or niche appeal.

Examples: | SKU ID | Revenue | Conversion Rate |

| SKU_13 | 1.46517e+06 | 0.475163 | | SKU_15 | 1.50567e+06 | 0.505578 | | SKU_2 | 1.49893e+06 | 0.504142 | | SKU_3 | 1.60643e+06 | 0.506085 | | SKU_7 | 1.67402e+06 | 0.561391 |

- **Observation**: SKUs like SKU_13 generate $1,465,168.53 in revenue but have a conversion rate of only 47.52%.

- **Implication**: These SKUs may be premium products. Consider bundling or discounts to boost conversion rates while maintaining revenue.



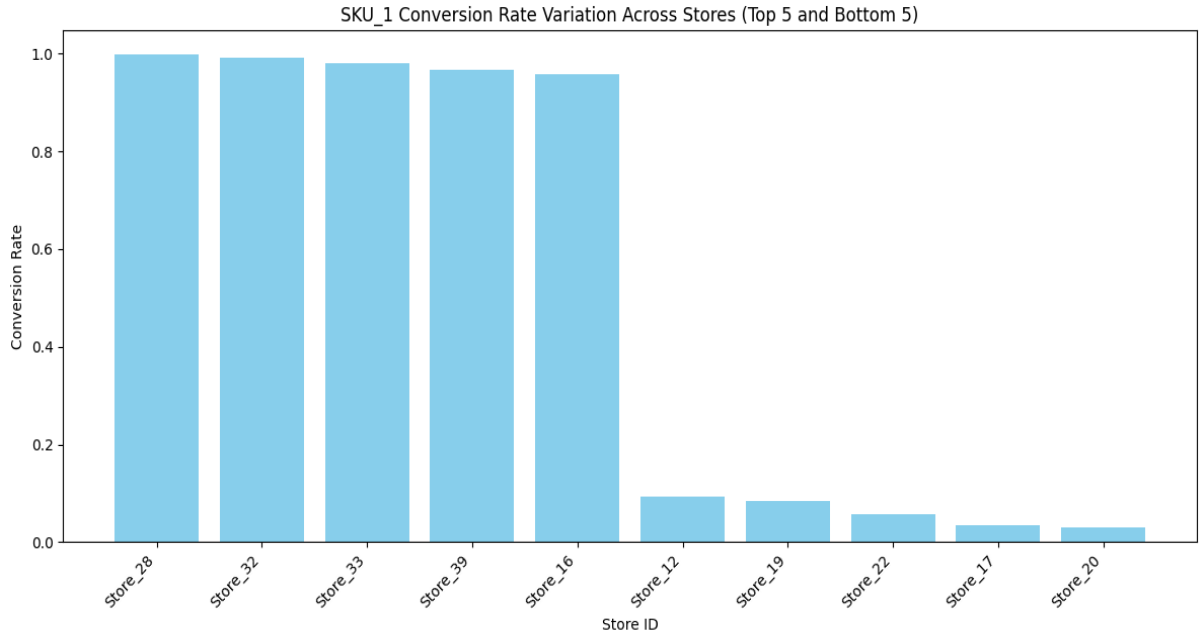
Trend 3: Significant Variation in SKU_1 Performance Across Stores

SKU_1 shows considerable variation in conversion rates across stores, indicating store-specific factors like location or customer demographics.

Examples: | Store ID | Conversion Rate | Total Visits | Transactions |

Store_28	0.997275	734	732		Store_32	0.991128	789	782		Store_33	0.979701	936	917
Store_39	0.966834	995	962		Store_16	0.958738	412	395
Store_20	0.0289855	345	10		Store_17	0.0336606	713	24
Store_22	0.0578387	657	38		Store_19	0.0851689	681	58
Store_12	0.0924262	779	72

- **Observation**: SKU_1 has conversion rates ranging from 2.90% in Store_20 to 99.73% in Store_28.
- **Implication**: High-performing stores could share best practices (e.g., marketing, placement) with low-performing ones to improve consistency.



Recommendations

1. **Optimize Underperforming Stores**:
    - For stores like Store_12, investigate barriers to purchase (e.g., stock availability, staff training, or pricing). Implement targeted promotions to boost conversions.
2. **Enhance Low-Performing SKUs**:
    - For SKUs like SKU_17, consider price adjustments, improved product descriptions, or bundling with high-performing SKUs to increase appeal.
3. **Leverage High-Performing SKUs**:
    - Scale successful SKUs like SKU_11 by increasing inventory in high-performing stores and replicating marketing strategies in underperforming stores.
4. **Address High-Visit, Low-Conversion Stores**:
    - For stores like Store_13, conduct customer feedback surveys to identify pain points (e.g., long checkout times, product visibility) and optimize the shopping experience.

Reasoning

- **Data-Driven Insights**: The analysis highlights specific stores and SKUs with actionable metrics (e.g., conversion rates, revenue). For example, low conversion rates in high-visit stores suggest operational or experiential issues.
- **Targeted Interventions**: Recommendations focus on addressing root causes (e.g., pricing for low-conversion SKUs, operational improvements for stores) to maximize impact.
- **Scalability**: Leveraging high-performing SKUs and stores ensures efficient resource allocation, driving overall sales growth.

For **SriMandir,** I recommend a small team of 5 people acting as a single unit (centralized team). This is easy and organized. Below are their roles and what they are supposed to do:

Data Team Leader (1 person):

- Consolidates the team and determines what data work to be performed.
- Talks to business heads (such as Commerce or Travel managers) to get to know what they need.
- Ensures all of them work in harmony and provide reports on time.

Business Analysts (2 people):

- One for Puja and Chadhava: Examines facts such as numbers of people who order rituals or purchase offerings. Informs these companies what the customers prefer.
- One for Commerce and Travel: Verifies sales facts or holiday bookings. Watches to see how they can sell more or offer better services.
- They meet with business groups and ask, "What do you need to know?" and then collaborate with the Data Analysts to obtain it.

Data Analysts (2 people):

- Work with data by applying tools such as Excel, SQL, or Tableau.
- Create charts and reports, such as indicating the best-selling products in Commerce or the temples where most Puja bookings have taken place.
- Support the Business Analysts by data pulling and data cleaning.

Why This Structure Works

- **The Leader keeps everyone accountable**: Business Analysts work on what each business requires (such as Puja versus Travel), and Data Analysts do the technical data heavy lifting.
- **Aids All Businesses:** Two Business Analysts assist all five business segments (Puja/Chadhava both, Commerce/Travel both, and Data Analysts assist Astro as well).
- **Small and Inexpensive**: A team of 5 is sufficient for an expanding business like SriMandir, so it's not a heavy cost.
- **Quicker Work**: With more people, the team can complete data requests quicker, versus one Product Analyst doing everything.

File: https://github.com/Swagat-modder/Data-Science-Case-study-Forms-Projects/blob/main/Store%20Analysis/BA.ipynb