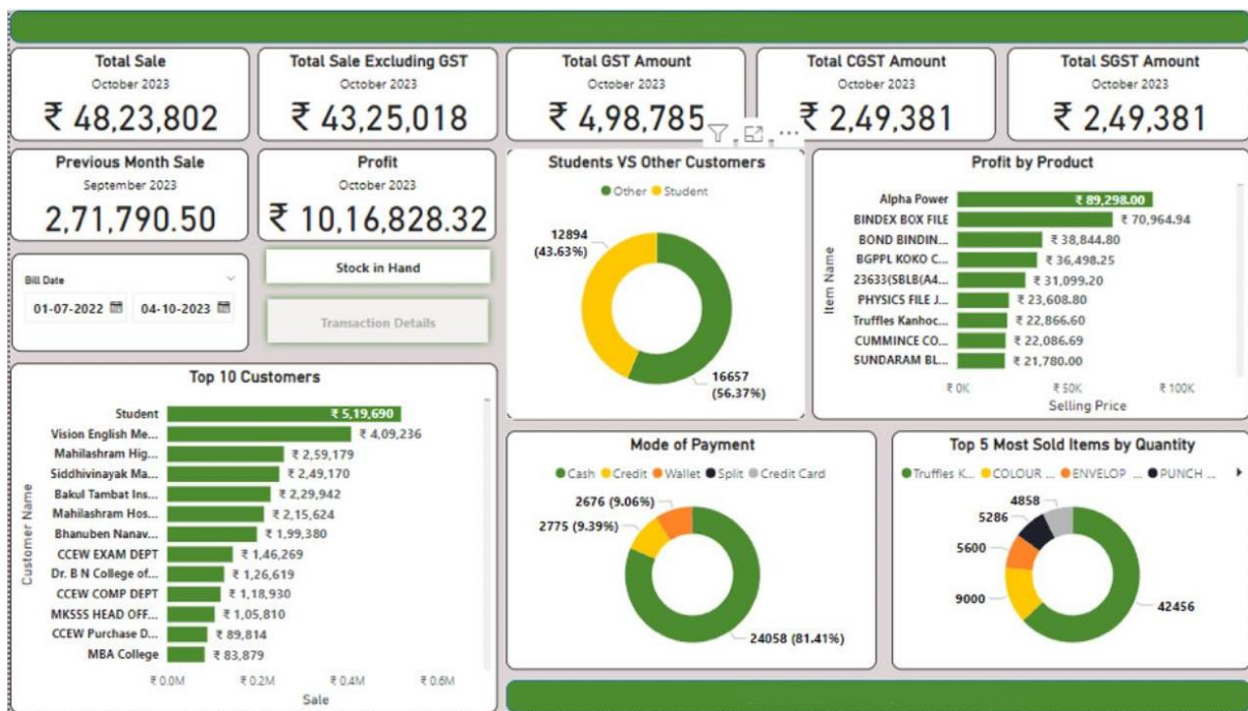# Vastu Bhandar Project

❖ Project Overview

Aim

The Vastu Bhandar Power BI project aims to analyze sales and inventory data to provide insights into the store's performance. The project involves visualizing key metrics such as total sales, profit, customer segmentation, and stock levels. The goal is to identify trends, patterns, and actionable insights to support informed business decisions.

Business Problem

Retail businesses often face challenges in optimizing sales and inventory management. Key issues include:

• Lack of real-time insights into sales trends and stock levels.
• Difficulty in identifying top customers and tailoring marketing efforts.
• Inefficient inventory management, leading to stock shortages or excess.
• Unclear product profitability, making pricing and promotion decisions difficult.

This project aims to address these challenges by providing data-driven insights to improve decision-making and operational efficiency.

❖ Data Sources & Tools

Data Sources
The data for this project was obtained from Vastu Bhandar's transaction records and inventory management system. The primary datasets include:
• Transaction Details
• Sales Details
• Stock in Hand Details

Tools Used
• Power BI – Data visualization and dashboard creation.
• Microsoft Excel – Initial data preparation and cleaning.
• DAX (Data Analysis Expressions) – For calculated columns and measures in Power BI.

❖ Data Cleaning & Preparation
• Data Import: Imported the raw data files into Power BI.
• Data Transformation: Used Power Query to clean and transform the data:
 - Handled missing values.
 - Corrected data types.
• Data Enrichment: Added calculated columns and measures using DAX to enhance the dataset with additional metrics.

❖ Exploratory Data Analysis (EDA)
• Distribution Analysis: Analyzed sales quantities and net amount distributions.
• Trend Analysis: Identified monthly and yearly sales trends.
• Customer Segmentation: Categorized customers based on purchase behavior and total spend.

❖ Core Data Analysis
• Sales Performance: Evaluated total sales, profit, and growth rates.
• Customer Analysis: Identified top customers based on total spend and purchase frequency.
• Product Analysis: Determined top-performing products and categories.
• Inventory Analysis: Assessed stock levels and identified items requiring restocking.

❖ Dashboard Features & Functionality

• Sales Trends:
  - Line charts & bar graphs showcasing monthly and yearly trends.
• Top Customers & Products:
  - Highlighting high-value customers and most profitable products.
• Inventory Overview:
  - Stock levels and alerts for low-stock items.
• Interactive Filtering:
  - Users can filter by time period, product category, or customer segment.

❖ Key Findings & Insights

Observations

• Top Customers: The top 10 customers significantly contributed to total sales.
• The highest spender was Vision English Medium.
• Profitable Products: Items like "Alpha Power" and "BINDEX BOX FILE" were the most profitable.
• Sales Trends: October 2023 had a significant increase in sales compared to previous months.

Recommendations

• Customer Loyalty Programs: Implement loyalty programs for top customers to increase retention and spending.
• Product Promotion: Prioritize marketing campaigns for high-margin products like "Alpha Power".
• Inventory Management: Optimize inventory processes to ensure timely restocking of popular items.
• Sales Strategies: Develop targeted strategies for different customer segments to maximize revenue.

❖ Conclusion & Future Enhancements

Conclusion

The Vastu Bhandar Power BI Dashboard provides comprehensive insights into sales performance, inventory levels, and customer behavior. By leveraging these insights, the business can enhance decision-making, improve customer retention, and optimize stock management.

Total Items Sold	Stock in Hand: Less than 20	Stock in Hand: 40-60	Total Items
207080	Stock in Hand: 20-40	Stock in Hand: Greater than 60	**673**
	All		

Bill Date
01-07-2022
04-10-2023

Stock in Hands Details

Order Stock
☐ Don't Order
☐ Order

Item Name	Total Quantity	Sum of Item Net Amount	Stock in hand	Order Stock
Duster Board - White (White Board)	34	₹ 1,000	7	Order
HAIR BAND SMALL NEW	5	₹ 75	7	Order
MEDIKER SHAMPOO SHCHET	15	₹ 150	7	Order
PUNCH MACHINE 52	6	₹ 570	7	Order
SMART VYA.PARIABHY.1VIG(M)-5 STD	13	₹ 676	7	Order
Tooth Brush AYUSH	65	₹ 1,084	7	Order
VIKAS VIG . KRUTIPUSTIKA (M) - 6 STD	1	₹ 32	7	Don't Order
VIKAS VIG . KRUTIPUSTIKA (M) - 6 STD	17	₹ 544	7	Order
CAMEL POSTER COLOUR 14 SHADE	35	₹ 7,000	8	Order
Card Sheet White	4	₹ 48	8	Don't Order
D-Ring File Bindex	2	₹ 190	8	Don't Order
K 1020 N - SCI & TECH .PRACTICAL BOOK (E) -10 STD	1	₹ 56	8	Don't Order
PINS LION 100 GM	2	₹ 64	8	Don't Order
PINS LION 100 GM	14	₹ 448	8	Order
STAPLER NO.10	2	₹ 140	8	Don't Order
STICKER LABEL MPL	4	₹ 1,598	8	Don't Order
Total	**207080**	**₹ 48,23,802**	**6151080**	