

TNSDC

DATA ANALYTICS USING EXCEL

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Customer Behavior Analysis

Understanding and Analyzing
Purchase Patterns

Problem Statement

- Understanding customer behavior is crucial for optimizing marketing strategies, enhancing customer retention, and improving sales. Companies face challenges in identifying high-value customers and predicting purchase patterns effectively.

Project Overview

- This project aims to analyze customer behavior using data analytics techniques in Excel. It includes segmentation of customers, identifying purchase trends, and visualizing insights to support decision-making.

End Users

- - Marketing Teams: To plan targeted campaigns.
- - Sales Teams: To identify high-value customers.
- - Business Analysts: To derive actionable insights.
- - Management: For strategic decision-making.

Our Solution and Proposition

- By analyzing customer purchase data, we propose:
 - - Segmenting customers based on purchase frequency and amount.
 - - Identifying trends in customer preferences.
 - - Visualizing key metrics using dashboards and charts.
 - - Providing actionable insights to improve customer engagement.

Dataset Description

- The dataset contains:
 - - Customer ID
 - - Purchase Frequency
 - - Total Spending
 - - Product Categories
 - - Region and Time of Purchase

Modelling Approach

- 1. Data Cleaning: Handling missing or inconsistent data.
- 2. Segmentation: Using formulas to categorize customers (e.g., High-Value, Frequent).
- 3. Visualizations: Pie charts and dashboards for trends.
- 4. Metrics: Calculation of total spending, average purchase amount, and frequency.

Results and Discussion

- - High-Value Customers: Identified as 20% contributing to 80% of revenue.
- - Seasonal Trends: Peaks in spending during holidays.
- - Preferred Categories: Electronics and Home Appliances.
- - Regional Insights: Higher spending in urban areas.

Conclusion

- Customer behavior analysis provides valuable insights into purchase patterns and preferences. These insights can guide businesses in making informed decisions, tailoring marketing strategies, and enhancing customer satisfaction.