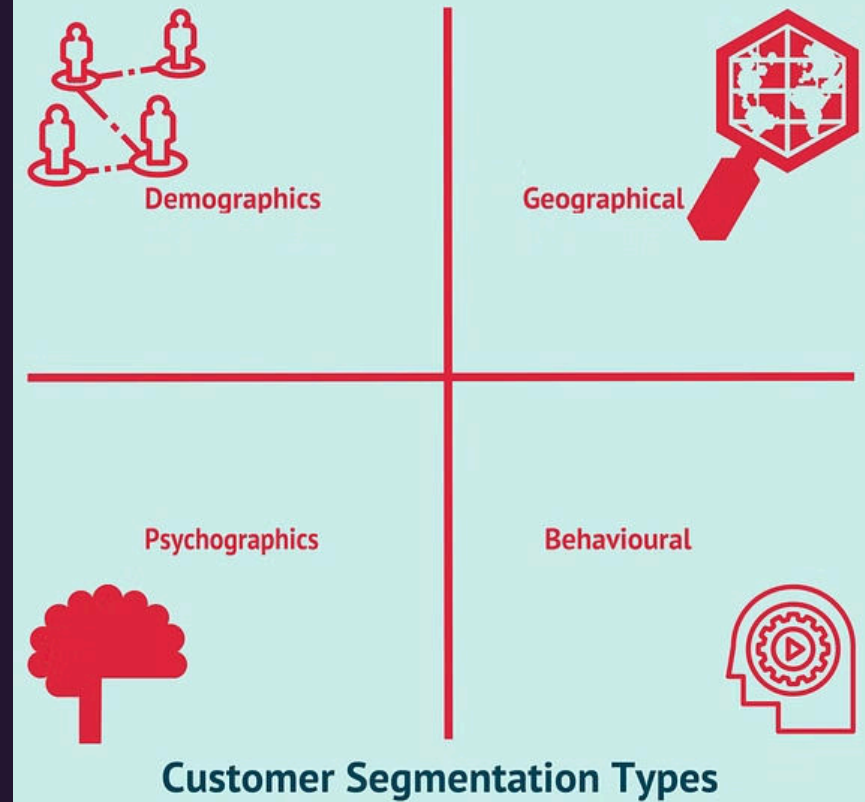# Introduction to Customer Segmentation Analysis

The aim of this data analytics project is to perform customer segmentation analysis to better understand and target different customer groups. By dividing the customer base into groups with similar traits, behavior, or other characteristics, businesses can tailor their marketing strategies, products, and services to meet the specific needs of each segment.

by Sanjay Nayak

mentation In A Nutshell

arketing method that divides the customers in sub-groups, that share oduct, marketing and engineering teams can center the strategy from go ent and communication around each sub-group. Customer segments ca s, such as demographics, geography, psychographics and more.

Demographics

Geographical

Psychographics

Behavioural

Customer Segmentation Types

Project Objectives and Scope

1 — **Define Objectives**

Set clear goals for the project, including what you aim to achieve through customer segmentation analysis.

2 — **Scope Definition**

Determine the boundaries and constraints of the project to ensure a focused and effective analysis.

3 — **Stakeholder Alignment**

Ensure that all stakeholders are aligned with the project's objectives and scope.

Data Collection and Preprocessing

Data Sources

Identify and gather data from various sources such as CRM systems, online transactions, and surveys.

Data Cleaning

Clean and prepare the collected data by handling missing values, outliers, and inconsistencies.

Feature Engineering

Create new features from the existing data to improve the performance of the segmentation model.

Exploratory Data Analysis

Problem Understanding · Data Preparation/Exploration · Modelling · Evaluation · Deployment

1 Data Visualization

Visualize and explore the data to identify patterns, trends, and correlations.

Input: Raw Data

2 Descriptive Statistics

Calculate summary statistics to understand the distribution and characteristics of the data.

Exploratory Data Analysis

3 Segmentation Variables

Identify key variables which are important for the segmentation analysis.

Output: Enriched Data

Data Visualization

Customer Segmentation Techniques

Cluster Analysis

Group customers based on similarities in their attributes and behavior.

Regression Analysis

Assign scores to customers based on their predicted value or behavior.

Decision Tree Analysis

Split customers into segments based on a set of rules and conditions.

Results and Insights

Segment	Characteristics	Marketing Strategy
Segment 1	High spenders with low frequency	Target with personalized offers and incentives
Segment 2	Occasional buyers with high loyalty	Focus on retention and loyalty programs
Segment 3	New customers with varied behavior	Implement onboarding programs and product education
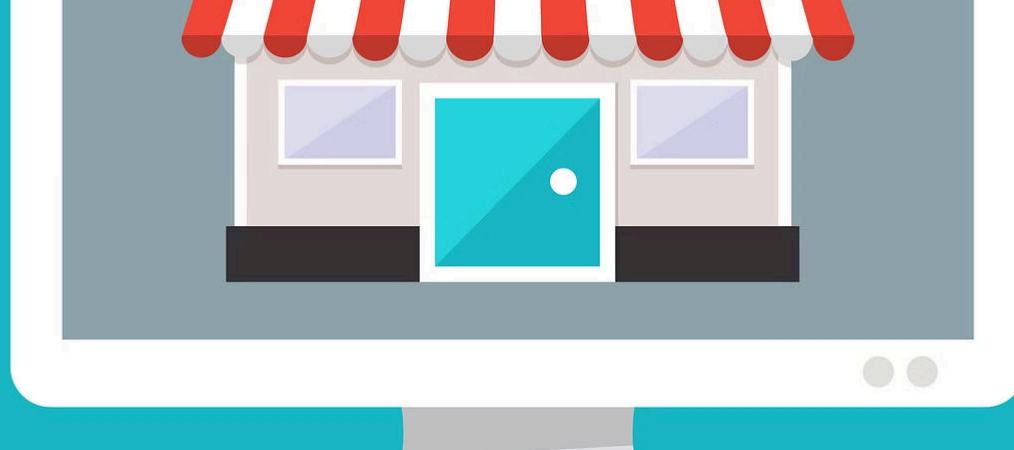
Business Recommendations

Personalized Marketing

Utilize the segmentation insights to craft customized marketing campaigns for each customer group.

Loyalty Programs

Implement loyalty rewards and incentives designed to retain and engage high-value customers.

Customer Journey Mapping

Map the customer journey for each segment to optimize touchpoints and interactions.

Conclusion and Next Steps

Analyze Outcomes

1 Review the impact of the implemented strategies to monitor the effectiveness of the segmentation.

Refine Segmentation Model

2 Continuously refine the segmentation model based on new data and evolving customer behaviors.

Expand Segmentation

3 Consider expanding the analysis to include newer customer data and additional segmentation variables.