Phase 1: Problem Definition and Design Thinking

Project Title:Customer Segmentation using Data science

Problem Definition:

Customer segmentation with data science involves using advanced techniques to categorize a company's customer base based on specific traits or behaviors. This process starts with collecting and cleaning customer data from various sources. Key features are then selected or engineered, providing insights into customer behavior. Utilizing algorithms like clustering or classification, the data is grouped to form distinct segments. These segments are then analyzed to understand their unique characteristics. Tailored marketing strategies are applied to each group, enhancing customer engagement and satisfaction. Regular updates and refinements ensure the segmentation remains effective over time, ultimately leading to more efficient resource allocation and improved business outcomes.

Design Thinking:

Design thinking for customer segmentation with data science involves a customer-centric approach:

- Empathize: Understand customer needs and behaviors through interviews and data collection.
- Define: Clearly state the problem you aim to solve with segmentation.
- Ideate: Brainstorm attributes for segments, considering demographics and behaviors.
- Prototype: Create initial segmentation models and experiment with algorithms.
- Test: Evaluate prototypes with real customer data, gather feedback, and refine.