

Problem Definition & Design Thinking

Title: Customer Behaviour Analysis

Problem Statement:

In today's competitive market, understanding customer behaviour is essential for business to tailor their strategies effectively. Despite the availability of large volumes of customer data, many organisations struggle to extract actionable insights. This results in poor customer engagement, low retention rates, and missed opportunities for upselling or cross-selling. The absence of targeted marketing approaches often leads to inefficient resource allocation. Analysing patterns in purchasing behaviour, preferences and, feedback can significantly enhance decision making. However, integrating data from multiple resources and interpreting it accurately remains a challenge.

This project aims to develop a robust framework for customer behaviour analysis using data-driven techniques. The goal is to help businesses identify key customer segments, predict future behaviours, and personalise marketing efforts. Effective analysis can lead to improved customer satisfaction and increased business revenue.

Target Audience:

- Marketing managers use it to run smarter, targeted campaigns.
- Sales teams understand customers better to boost conversions.
- Retailers optimise products pricing and promotions.
- Product managers build features that customers actually want
- Data scientists predict churn and segment customers.

Objectives:

- To personalise marketing strategies based on customer insights.
- To improve sales effectiveness through better customer understanding.
- To strengthen loyalty programmes through behaviour tracking.
- To inform strategic planning with real customer data.
- To help retailers and e-commerce platforms optimise offerings.

Design Thinking Approach:

Emphasize:

The project aims to analyse customer behaviour to uncover key insights that drive better decision-making and strategies. By leveraging data-driven techniques, it seeks to understand customer preference, pain points, and buying patterns.

Key User Concerns:

- Customers may feel uncomfortable with too much targeting (over targeting).
- Users worry about how their personal data is collected and used (data privacy).
- Excessive personalisation may overwhelm users.

Define:

Customer behaviour analysis involves examining data on customer actions, preference, and interactions. It helps businesses understand purchasing patterns, motivations, and needs. This insight enables informed decisions in marketing, product development, and customer engagement.

Key Features Required:

- Data integration from multiple sources like CRM, social media, and Analytics.
- Segmentation tools to categorise customers based on behaviour and demographics

- Predictive analytics to forecast future customer actions and trends

Ideate:

Some potential ideas for the solution include:

- Brainstorm potential solutions based on identified customer pain points and insights
- Generate creative ideas for personalised marketing strategies, products offerings, and customer engagement.
- Prioritise ideas based on feasibility, potential impact, and alignment with business goals.
- Refine and iterate based on feedback and data to improve solutions.

Brainstorming Results:

- Personalised marketing campaigns tailored to individual customer preference and buying habits.
- AI-powered product recommendations that suggest items based on previous purchases and browsing behaviour.
- Gamification of loyalty programmes to increase engagement and repeat purchases.

Prototype:

Developing a basic chatbot where users can

- Design customer dashboards to display key insights, such as purchasing patterns and segment-specific behaviour.
- Create personalised recommendation features that suggest products or offers based on individual customer behaviour.
- Prototype a real-time notification system that triggers message based on customer actions, like cart abandonment or new arrivals.

Key components of Prototype:

- The UI displays customer behaviour insights in a simple intuitive dashboard.
- The Data Engine processes real-time data to generate useful insights.

- The recommendation system delivers personalised suggestions based on user behaviour.

Test:

Test the prototype with small group of target users to gather real feedback. Monitor how users interact with features like dashboards and recommendations. Analyse feedback and usage data to refine and improve the prototype.

Testing Goals:

- To evaluate how efficiently users can navigate and understand the customer behaviour dashboard and insights.
- To assess the accuracy and relevance of personalised recommendations generated by the system.
- To identify usability issues and gather feedback for improving the overall user experience and functionality.