# Data Analytics with Cognos-Group2

**Project Title:** Customer Churn Prediction

#### 1. Problem Definition:

Clearly Define the Problem: Start by defining the specific problem you want to address, such as customer churn. In IBM's context, it could be related to clients leaving IBM services or products.

Understand the Impact: Assess the impact of customer churn on IBM in terms of revenue, reputation, and customer relationships.

Identify Stakeholders: Recognize the key stakeholders involved, including IBM's sales and customer support teams, marketing, and, most importantly, the customers themselves.

## 2. Design Thinking Approach:

## a. Empathy (Understanding):

User Research: Gather data and insights by conducting surveys, interviews, and analyzing historical customer data. Understand why customers are leaving and what factors contribute to churn.

Persona Creation: Create customer personas to better empathize with different customer segments and their specific needs.

# b. Define (Problem Framing):

Problem Statement: Refine the problem statement based on the insights gathered during the empathy phase. Ensure it's clear and actionable. For example, "How can we reduce customer churn by improving customer satisfaction and loyalty?"

# c. Ideation (Generating Ideas):

Brainstorming: Engage cross-functional teams to brainstorm potential solutions. Encourage a wide range of ideas, such as improving customer support, enhancing product features, or personalized communication.

Idea Collection: Gather a range of ideas for addressing the churn problem. Consider both short-term and long-term strategies.

# d. Prototyping (Experimentation):

Develop Prototypes: Create prototypes of potential solutions. These could be in the form of improved customer support processes, new loyalty programs, or data-driven predictive models.

Feedback Loop: Share prototypes with stakeholders, including customers if possible, to gather feedback. Iterate on the prototypes based on feedback.

## e. Testing (Validation):

Pilot Testing: Implement a small-scale pilot of the proposed churn reduction strategies to evaluate their effectiveness.

Measure Results: Define key metrics for success, such as customer retention rate, and monitor these metrics during the pilot phase.

# f. Implementation (Execution):

Scaling Up: If the pilot is successful, develop a plan for scaling the chosen solution(s) across IBM's customer base.

Cross-functional Collaboration: Collaborate with relevant departments and teams within IBM to ensure a coordinated and effective implementation.

# 3. Monitoring and Evaluation:

Continuous Monitoring: Continuously track the impact of the implemented solutions on customer churn. Use data analytics and predictive modeling to monitor and predict churn rates.

Feedback Mechanisms: Establish mechanisms for gathering ongoing feedback from customers and internal teams. Adjust the solution as needed based on feedback and changing customer needs.

#### 4. Communication:

Transparent Communication: Communicate openly with stakeholders about the progress, outcomes, and any changes related to customer churn prediction and reduction efforts.

# 5. Adaptation:

Flexibility: Recognize that customer preferences and market conditions can change. Be prepared to adapt your solutions as needed to address evolving challenges and trends.

# 6. Learning and Knowledge Sharing:

Document Lessons: Keep records of your design thinking process, including what strategies worked well and what didn't.