Week 1 – Use Case Proposal
Fitness Club Business Intelligence Project

1. Industry Description

The fitness and sports industry has experienced rapid growth in recent years, driven by increasing health awareness, lifestyle changes, and the popularity of gym memberships and personal training services. Fitness clubs operate in a highly competitive environment where customer retention, service quality, and operational efficiency are critical to long-term success. Data-driven decision-making is becoming essential for gym operators to understand member behavior, optimize resources, and improve profitability.

2. Organization Description

PulseFit is a fictional multi-branch fitness club operating in several major cities in Tunisia. The company offers monthly and annual memberships, group classes, personal training sessions, and access to modern fitness equipment. Each branch operates independently in terms of trainers and schedules, but all branches report to a centralized management team. PulseFit collects data related to memberships, payments, member visits, trainers, and classes, but currently lacks a unified analytical view of this data.

3. Business Problem

Despite a steady increase in new memberships, PulseFit is facing a high member churn rate and inconsistent engagement levels across its branches. Many members cancel their subscriptions within the first few months, and some branches consistently underperform compared to others. Management does not have clear visibility into the factors driving member retention, branch performance, or trainer effectiveness. Without a Business Intelligence solution, decisions are made based on intuition rather than data, leading to inefficient marketing spending and suboptimal operational planning.

4. Analytical Questions

- What is the overall membership growth trend over time?
- What percentage of members cancel their subscriptions each month?
- Which branches have the highest and lowest churn rates?
- How does member attendance vary by time of day and day of week?
- Is there a relationship between visit frequency and membership renewal?
- Which membership types (monthly, annual) have the highest retention rates?
- Do members who attend group classes stay longer than those who do not?
- How does personal trainer engagement impact member retention?
- Which branches generate the highest revenue per member?
- What marketing promotions lead to long-term members versus short-term sign-ups?

5. Key Performance Indicators (KPIs)

- Total Active Members: Number of members with an active subscription.
- Churn Rate: Percentage of members who cancel their membership during a given period.
- Retention Rate: Percentage of members who renew their membership.

- Average Visits per Member: Average number of gym visits per member per month.
- Revenue per Member: Average revenue generated by each active member.
- Branch Performance Index: Comparison of revenue and attendance across branches.
- Trainer Utilization Rate: Percentage of trainer working hours booked by members.
- Class Attendance Rate: Average occupancy rate of group fitness classes.