



Fitness Analytical Dashboard – Case Study Report

A Comprehensive Analysis of Gym Performance, Member Demographics, and Strategic Opportunities



Executive Summary

This case study analyzes a Fitness Analytical Dashboard to assess the gym's performance across key areas: financials, membership, demographics, and member engagement.

Financial Health: The gym is highly profitable, with \$4M in Revenue, \$1M in Expenses, and a \$3M Profit.

Member Base: A strong core of 100 members is supported by 20 trainers, providing a healthy member-to-trainer ratio.

Retention: There is a significant opportunity to improve member retention, especially in the Gold and Silver tiers, which show high churn rates.

Demographics: The gym's core audience is the 40–60 age group and female members, who dominate all age segments.

Seasonal Trends: The business experiences a clear seasonality effect, with a peak in new members in December and a low in January.

Engagement Tools: The dashboard's built-in BMI and Calorie calculators are powerful tools for member personalization and engagement.

👉 These insights provide a clear roadmap for improving retention, targeting profitable demographics, and enhancing overall customer satisfaction.



The Business Problem

In a highly competitive fitness market, sustainable growth depends not only on acquiring new clients but also on retaining them, managing costs, and personalizing services to foster loyalty. This analysis aims to answer the following critical business questions:

- What is the current financial status and trend of the gym?
- What are the key demographics and membership statuses of our clients?
- Which membership tiers and age groups require targeted retention strategies?
- How can our health-tracking tools improve member engagement?

Methodology

Our analysis is based on data sourced from the gym's core business functions and presented through an interactive Power BI dashboard.

- **Data Source:** Membership, trainer, financial, and health records.
- **Tools:** Power BI dashboard for interactive visualization and storytelling.
- **Techniques:** Time-series analysis for financial data, segmentation for membership tiers, demographic profiling for age and gender, and evaluation of personalization tools.

Key Findings

Financial Performance

- Revenue: \$4M | Expenses: \$1M | Profit: \$3M
- Upward trend in revenue and profit observed from October to December, confirming December as the peak profit month.
- Low expense-to-revenue ratio indicates highly efficient operations.

Membership Trends

- Total Members: 100 | Trainers: 20
- Monthly Joiners: Peak in December (14), lowest in January (6)
- Membership by Tier:
 - Platinum: 18 active | 15 expired
 - Gold: 15 active | 20 expired
 - Silver: 11 active | 21 expired
- Insight: High expiration rates in the Gold and Silver tiers indicate opportunities for retention improvements.

Demographic Insights

- Age Distribution:
 - 40–60: 34 active (53 total)
 - 25–40: 16 active (32 total)
 - 18–25: 9 active (15 total)
- Gender Distribution: Female members outnumber males across all age groups.
- Insight: Core market is the middle-aged female demographic.

Health & Personalization Tools

- BMI Calculator: Example BMI of 24.5 (Normal range).
- Calorie Calculator: Provides personalized metrics (BMR, TDEE) and tailored calorie goals, offering valuable resources for members.

Strategic Recommendations

Improve Member Retention

- Target Gold and Silver members with re-engagement offers and loyalty discounts.
- Implement personalized outreach campaigns for expired members to drive renewals.

Leverage Demographic Strengths

- Design new programs and classes for the 40–60 age group.
- Develop targeted, female-centric marketing campaigns highlighting nutrition, wellness, and specialized group classes.

Capitalize on Seasonal Demand

- Launch holiday and New Year campaigns from October to December.
- Offer special "early-bird" packages in January to counter post-holiday drop-offs.

Upsell to the Platinum Tier

- Highlight exclusive benefits to convert Gold and Silver members to Platinum.

Maximize Trainer Utilization

- Trainers should leverage BMI and Calorie calculators to create personalized fitness plans for each member.



Expected Business Impact

- Increase member retention rates by 20–30%
- Boost premium membership conversions and average revenue per member
- Strengthen core female and middle-aged client base
- Enhance profitability through effective seasonal campaigns
- Differentiate the gym as a modern, data-driven, health-focused brand



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