# **Financial Equation**

-- By Parv Kaul

The app adopts a monthly subscription model with tiered pricing designed to cater to various business sizes and needs. This model includes a free tier for basic features and premium tiers priced at ₹500, ₹2,000, and ₹5,000 per month for Basic, Advanced, and Enterprise plans, respectively. The subscription model ensures a steady and predictable revenue stream while allowing small and medium-sized businesses to access essential tools at an affordable cost. By targeting a wide range of users and offering scalable features, the app can sustain operational costs, invest in further development, and expand its user base over time. This approach aligns with the app's mission to empower small businesses with data-driven insights, ensuring profitability and long-term growth for both users and the platform.

To calculate the monthly revenue for the app, the basic form of the financial equation would be:

Revenue 
$$(y)$$
= $(Monthly Subscription Price) \times (Number of Active Users (x))$ - $(Operating Costs)$ 

For example, using the provided freemium model:

1. **Basic Tier**: ₹500/month

Advanced Tier: ₹2,000/month
 Enterprise Tier: ₹5,000/month

# Assume the following:

• Number of users: Basic = 800, Advanced = 150, Enterprise = 20

Monthly operating cost: ₹2,00,000

#### Revenue:

$$y=(500\times800)+(2000\times150)+(5000\times20)-2,00,000$$

$$y=3,00,000+3,00,000+3,00,000-3,00,000=3,00,000=3,00,000$$

$$+3,00,000+3,00,000-3,00,000=3,00,000$$

If the active user count (x) varies across tiers, the formula generalizes as:

$$y=(500x1)+(2000x2)+(5000x3)-2,00,000$$

# **Implementation Plan Based on the Report**

### 1. Revenue Sources:

- a. Subscription tiers (Basic, Advanced, Enterprise).
- b. Potential partnerships with retail consultants.

#### 2. Cost Breakdown:

- a. Development (initial setup cost: ₹40,00,000 as per the report).
- b. Monthly cloud hosting and API costs (estimated ₹1,50,000/month).
- c. Marketing, customer support, and maintenance.

## 3. User Base Growth Assumptions:

- a. Initial free-tier users convert to paid tiers at ~10% monthly.
- b. Use predictive analytics to model churn and growth.

# 4. Profitability Insights:

- a. Profit increases with higher-tier adoption.
- b. Targeting enterprise clients could provide significant returns despite lower volume.

### 5. Sustainability Plan:

- a. Scale operations by expanding geographical data sources (e.g., additional APIs, census data).
- b. Optimize costs using economies of scale.