

Product Idea: Eco-Friendly Bamboo Toothbrush

Business Model (Example):

- **Customer Segment:** Environmentally conscious individuals, urban dwellers, health-focused consumers.
- **Value Proposition:** 100% biodegradable, stylish bamboo toothbrushes with soft bristles.
- **Revenue Streams:** Direct sales online (Rs. 150 per toothbrush), subscription models (monthly deliveries).
- **Channels:** Company website, Amazon, retail eco-stores.
- **Cost Structure:** Raw materials (bamboo, bristles), manufacturing, packaging, logistics, marketing.
- **Key Partners:** Bamboo suppliers, courier companies, graphic designers.
- **Customer Relationships:** Social media engagement, subscription discounts, feedback collection.
- **Key Activities:** Sourcing, production, packaging, online marketing.

Develop the Financial Equation

- **Selling Price per Unit** = Rs. 150
- **Monthly Fixed Cost** (marketing, staff, rent) = Rs. 5,000
- **Variable Cost per Unit** (materials + labor) = Rs. 30
- So, **Profit per Unit** = $150 - 30 = \text{Rs. } 120$

Now, assume **x = number of units sold**
Let **y = total profit**

Financial Equation:

$$y = 120x - 5000$$

This shows how monthly profit increases as sales go up, after subtracting fixed costs.

If they sell 100 units:

$$y = 120 \times 100 - 5000 = \text{Rs. } 7,000$$

Product Development Cost Estimation

| Stage | Description | Estimated Cost (INR) |
|-------------------------|--|----------------------|
| 1. Research & Planning | Market survey, user interviews, feasibility study | Rs. 8,000 |
| 2. Design & Prototyping | Toothbrush sketches, sample production, user testing | Rs. 12,000 |
| 3. Manufacturing Setup | Tooling, bamboo purchase, labor training | Rs. 30,000 |
| 4. Marketing & Launch | Branding, packaging design, digital ads | Rs. 15,000 |

Total Product Development Cost = Rs. 65,000

So

Business Model: Eco-friendly toothbrush for green consumers, sold online via a subscription or one-time buy.

Financial Equation:

y = 120x – 5000, where x = sales units/month

Development Cost: Rs. 65,000 before launch