# Finlatics Investment Banking Experience Program – Project 2

**Proposal Chosen:** Social Media Application – AI-Based Caption Recommendation Tool

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## 1. Stage of the Business in the Life Cycle

Among the five stages of the company life cycle, the social media application lies in the **Validation stage**. This stage is characterized by an existing prototype or product being tested in the real market, with initial traction and user feedback being gathered to validate the product-market fit.

The application, which uses AI to recommend personalized captions for Instagram posts, has already seen **500,000 downloads**, indicating strong initial traction. However, the business is yet to figure out **monetization** and **repeat user engagement**, which are critical to move into the efficiency and scaling stages.

While traction indicates interest, the lack of revenue shows that the core challenge is converting that interest into sustainable value. The product appears to have found a **use case with Gen Z and content creators**, but now needs to move from novelty to **habitual utility**, and from utility to **revenue**.

Some of the companies like TikTok and Facebook faced similar issues as well, i.e., going viral for being a 'cool tool' but struggling to build scalable and sustainable revenue streams.

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## 2. SWOT Matrix

### Strengths

- AI-powered personalization creates emotional connection and content relevance.

- Surge in short-form content (Instagram Stories, Reels) fuels demand for fast, witty captions.

- Seamless UX: frictionless integration into user posting habits.

### Weaknesses

- Difficulty in producing truly "humanized" captions that reflect authenticity.

- High compute costs for image processing and real-time personalization.

- Potential user fatigue if captions lack diversity over time.

### Opportunities

- Collaborations with influencers, social media platforms, and creators to increase stickiness.

- Monetization via micro-subscriptions, branded content prompts, or ad-based models.

- Expansion into memes, tweets, or brand marketing content.

### Threats

- Instagram or Snapchat launching similar native features could erode differentiation.

- Data privacy concerns regarding AI scanning user images.

- AI-generated content fatigue or user backlash on over-automation.

## 3. Challenges and Solutions

**Primary Challenge: Monetization**

Despite strong download numbers, the biggest hurdle this business faces is **how to monetize its value** without compromising user experience. This is not unique. Similar AI-powered tools like **Lensa AI** or **FaceApp** gained traction but struggled with consistent revenue unless paired with premium features or one-time payments. The app currently offers utility, but not a revenue stream. The open-source accessibility to AI models has created a huge competition in market and every day new and better models are emerging

**Challenge 1: Human-Like Personalization**

Crafting captions that truly resonate emotionally and contextually remains a challenge. AI models often miss nuances—sarcasm, cultural references, or inside jokes. The humane

aspect of social media is very valuable to the masses and automation by AI for crafting the very soul of a message may risk hate and negative publicity for many popular creators.

Solutions:

- **Fine-tuning LLMs with social media text data** (e.g., tweets, reels, trending captions).
- **User-trained models**: Allow users to rate, flag, or favorite captions to personalize further.
- **Segmented caption models**: Separate AI engines trained for humor, romance, motivation, etc., with user-selectable filters.

### Challenge 2: Privacy and Trust

Since the application processes user photos, concerns about data misuse or AI overreach can reduce retention. **Snapchat** and **Replika AI** have faced similar backlash.

Solutions:

- **Edge processing**: Run caption generation locally without storing photos.
- **Transparent privacy policies** and opt-out mechanisms.
- **Non-invasive UX** that avoids constant camera access.

### Challenge 3: Content Authenticity and User Retention

AI-generated captions may feel robotic over time. Instagram thrives on perceived authenticity. Users don't just want relevant text—they want voice and style.

Solutions:

- Introduce **creator packs**—caption styles based on influencers or fictional personas (e.g., "caption like @deepikapadukone").
- Enable users to build and train their **caption personality** over time.
- Hiring human copywriters to refine outputs.

**Parallels from Real-World Success**:
Apps like **Canva** initially struggled with monetization until they introduced team tools, brand kits, and social media integrations. Chatgpt was trained to generate more relevant and less generic text by human intervention and refinement. Similarly, this app could:

- Offer premium features (scheduled posts, multi-caption drafts).
- Provide analytics on best-performing captions.
- Offer basic features in Free version and more authentic answers and brand related hashtags etc in a Premium version.

The AI hype offers visibility, but long-term success depends on building a loyal, paying base while protecting user trust and delight. Differentiation and outperforming apps with a massive user base like Instagram will p[ose the greatest hurdle but, the traction acquired by free version is a sign of relief for the success of the model.

## 4. Convertible Note Milestones and Conversion Terms

As the business is in the **validation stage**, convertible notes provide a low-friction entry for investors while allowing time for the business to prove revenue potential. Given the app's traction, Rs. 50 lakhs will be invested via a convertible note over a 5-year horizon.

| Milestone | KPIs | Expected Timeline | Conversion Rate Range |
|---|---|---|---|
| **Milestone 1: Monetization Initiated** | At least ₹10L annual revenue generated via premium features or ads | 12 months | 22–24% |
| **Milestone 2: User Engagement Deepening** | Monthly Active Users (MAU) ≥ 1.5 lakh, Retention (Day 30) ≥ 20% | 24 months | 16–21% |
| **Milestone 3: Break-even Achieved** | Revenue ≥ ₹1.5 Cr, CAC:LTV ratio ≥ 1.5 | 36 months | 10–15% |
| **Milestone 4: Strategic Partnerships** | Collaborations with at least 5 brands or creator networks | 48–60 months | 6–9% |

The higher the achievement, the lower the conversion rate—rewarding efficiency, traction, and scale. If the company fails to meet Milestone 1 within 2 years, the note would carry a **default conversion at 25%**.

## 5. Customer Lifetime Value and Customer Acquisition Cost Analysis

Assumptions:

- Average CAC (via influencer marketing + digital ads): ₹70 per user
- Premium conversion rate: 5% of total users
- Monthly subscription price: ₹49
- Average premium user churn: 25% annually → ~4 years average lifetime
- Avg Premium LTV = ₹49 × 12 × 4 = ₹2,352

| Metric | Value |
|---|---|
| **CAC** (targeted to premium users) | ₹70 / 5% = ₹1,400 |
| **LTV (4 years)** | ₹2,352 |

**Break-even period**              ~2 years

To recover the ₹1,400 CAC per premium user, the business must retain users for just under **2 years**. Beyond that, every month contributes to profitability. The freemium model makes the cost per acquisition high initially, but good retention and upselling strategies (e.g., meme packs, creator style packs) can shorten the breakeven window.