

# 1. System Architecture (Cost-Effective → Scalable)

## Phase 1: MVP Architecture (Low Cost)

**Goal:** Launch fast, keep infra simple, avoid over-engineering.

```
Mobile App (Flutter)
  ↓
API Gateway (Nginx)
  ↓
Backend (Node.js / NestJS - Monolith)
  ↓
PostgreSQL (Main DB)
  ↓
Object Storage (Videos)
  ↓
CDN (Video Delivery)
```

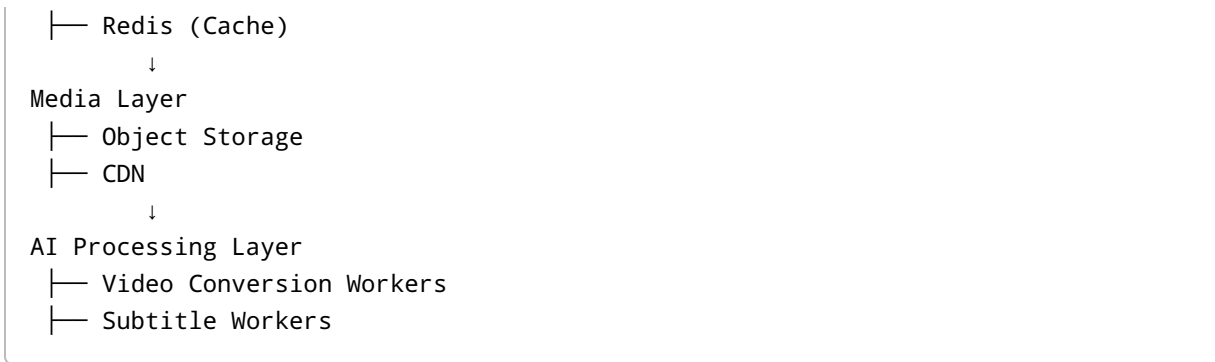
### Components Explained

- **Mobile App (Flutter):** Single codebase for Android & iOS
- **Backend (NestJS):** Auth, feed logic, unlock logic, admin APIs
- **PostgreSQL:** Users, series, episodes, progress
- **Object Storage:** Raw + processed videos
- **CDN:** Cheap global delivery (Cloudflare-style)
- **AI Worker (Single VM):** FFmpeg + Python scripts

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## Phase 2: Growth Architecture (Scalable)

```
Clients (Mobile / Web)
  ↓
API Gateway
  ↓
Microservices
├─ Auth Service
├─ Content Service
├─ Monetization Service
└─ Analytics Service
  ↓
Databases
├─ PostgreSQL
```



### Why This Scales Well

- Stateless services
- AI workers auto-scale
- CDN handles traffic spikes
- DB can be read-replicated

### Data Flow (End-to-End)

1. Creator uploads video
2. Stored in raw storage
3. AI worker converts to 9:16
4. Output stored in CDN bucket
5. Metadata saved in DB
6. Episode becomes live
7. User watches → progress tracked

## 2. Admin Dashboard UX (Web)

**Primary Users:** Internal team, studios, content managers

### Admin Login

- Email / Password
- Role-based access (Admin, Editor)

### Dashboard – Overview

**Widgets:** - Total Series - Total Episodes - Daily Views - Revenue Snapshot

## Series Management Screen

**UI Sections:** - Create New Series - Series List Table

**Create Series Fields:** - Title - Language (Hindi / Urdu) - Genre (Multi-select) - Description - Poster Upload

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## Episode Upload Screen

**Step-Based Flow:** 1. Select Series 2. Upload Raw Video 3. Episode Number 4. Lock Type (Free / Coin / Ad) 5. Trigger AI Processing

**Status Indicators:** - Uploaded - Processing - Ready - Published

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## AI Processing Monitor

- Job Queue
  - Processing Time
  - Error Logs
  - Manual Re-trigger button
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## Monetization Control

- Set coin price per episode
  - Enable / disable ads
  - Bulk pricing rules
- 

## Analytics Screen

- Episode completion rate
  - Drop-off point graph
  - Top series
  - Revenue by series
- 

## 3. Creator Onboarding Flow

**Goal:** Let studios & creators upload content without tech friction.

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## Step 1: Creator Registration

- Studio / Creator name
  - Email & phone
  - Country
  - Content language
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## Step 2: Verification

- ID / Studio proof upload
  - Manual approval (early stage)
  - Auto-approval later
- 

## Step 3: Creator Dashboard

**Sections:** - My Series - Upload Episode - Earnings - Analytics

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## Step 4: Content Upload Flow

1. Select Series or Create New
  2. Upload raw video (any format)
  3. Choose episode length preference
  4. Submit for AI processing
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## Step 5: Review & Publish

- Preview vertical output
  - Edit title & description
  - Publish episode
- 

## Step 6: Earnings & Insights

- Views per episode
  - Ad revenue
  - Coin unlocks
  - Payout history
-

## **Creator Monetization Model (Future)**

- Revenue share (ads)
  - Exclusive content bonus
  - Sponsored series deals
- 

## **Why Creators Will Love This**

- No manual editing needed
  - Vertical AI conversion
  - Clear monetization
  - Local audience reach
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**This setup keeps initial costs low, allows manual control early, and smoothly transitions into a creator-driven scalable platform.**