**AUTO POSTER / POST MANAGER MODULE**

## 🗓️ Overview

This module handles the automatic creation, scheduling, design, and posting of marketing content to Facebook and Instagram. It supports brand-specific modes (Auto, Manual, Assisted), AI-generated captions, and optional image/video generation via Canva or advanced render engines.

Each brand can manage their own post queue, customize tone and interval settings, and track performance via analytics. Posts can be synced with blogs, products, campaigns, and seasonal themes.

## 📘 Features

### 1. Post Creation Engine

* **AI-Generated Posts**
  + Powered by OpenAI (or fine-tuned LLM).
  + Input: Brand voice, product, blog topic, campaign name.
  + Output: Caption + Hashtags + Emojis (optional tone: fun, premium, expert).
* **Modes:**
  + Auto: Fully AI-generated + posted
  + Assisted: AI drafts, human approval required
  + Manual: Admin writes and schedules
* **Prompt Examples:**
* "Write a fun Instagram caption for a post featuring Lavishta's new Vitamin C serum, highlighting glow benefits, use emojis."

### 2. Canva-Based Image Generator (Optional Add-on)

* Templates:
  + Product Highlights
  + Offer Cards
  + UGC Highlights
  + Seasonal Campaigns
* Settings:
  + Brand color, logo, font from Brand Profile
  + Product photo auto-insert from Woo/Shopify media
* **Auto Mode:**
  + System matches template + product
  + AI adds text overlays (title + benefit + CTA)
* Output:
  + High-quality PNG image auto-attached to scheduled post

### 3. Scheduler

* Interface:
  + Calendar-based view
  + List of upcoming posts
  + Filters: Brand, campaign, product, status (scheduled, published)
* Config:
  + Days/times for each brand
  + Frequency control (e.g. max 1 post/day)

### 4. Post Manager Panel

* Draft, Edit, Duplicate, Pause, Delete posts
* Approve Assisted Posts
* Track:
  + Published time
  + Post ID (Meta)
  + Clicks, reactions, comments (via Graph API)

### 5. Link Manager

* Add blog links, product links
* UTM tracking code generator
* Shortlink generator (e.g. lav.link/xxx)
* Click tracking via internal redirect

## 🧱 Tech Stack & APIs

* **Backend**: Node.js or Python FastAPI
* **Scheduler**: Cron + Redis Queue
* **Meta API**: Facebook Graph API for Pages and Instagram Business accounts
* **Frontend**: React + Tailwind
* **Image Engine**: Canva API (or Puppeteer + template HTML rendering)
* **DB**: PostgreSQL for posts, metadata, schedules

## ⚖️ Superadmin Controls

* Enable/Disable Auto Poster per brand
* Canva API usage tracking
* AI Token usage stats
* Approve template access per tier
* Logs: failed posts, rejected creatives

## 🌈 Web UI - Brand Panel

* Settings Tab:
  + Default Tone: [Fun, Premium, Expert, Soft, Gen Z, Neutral]
  + Frequency per week
  + Time slots per day
  + CTA types preferred (Shop Now, Learn More, DM Us)
* Canva Tab:
  + Select templates allowed
  + Upload brand assets

## ✅ Example Use Case

1. Brand sets mode = Auto, tone = Expert
2. Every 2 days, system picks a product with low CTR
3. Writes educational + emotional post
4. Uses Canva template to render PNG
5. Posts automatically to FB Page and IG
6. Link clicks tracked and shown in analytics

Next: **Inbox Reply Engine + UGC Inbox Mining**