🚀Teoram CMS: Pipeline & Product Vision

🛳️Core Mission

Teoram is an **AI-powered CMS** that transforms trending tech signals into high-quality, trustworthy articles. It blends automation with human-in-the-loop oversight, ensuring speed **and** credibility. The system must feel world-class for editors (CMS UI/UX) and deliver engaging, reliable content for readers.

Version 1 — End-to-End Publishing Pipeline

Goal: Ship a fully functional discovery → publish flow with clean UI.

1. Discovery & Approve

- **Sources:** Google Trends + YouTube Tech.
- **AI Grouping:** Gemini "Curator" → cluster topics.
- **Deduplication:** Qdrant semantic search.
- **UI:** Discovery board with source list, checkboxes, *Run Discovery* button.
- **Status:** `NEW → APPROVED`.

UX Notes: - Modern card list layout. - Source chips (NEWS, YOUTUBE, BLOG). - Checkbox interactions must feel tactile. - Progress pill → topic status.

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2. Collect

- **API:** `/agents/topics/:id/collect`.
- **Process:** Scrape approved sources, extract main content, pull YouTube transcripts, normalize citations.
- **DB:** `Citation[]` linked to Article placeholder.
- **UI:**
- Button: *Collect Sources*.
- Display citations in elegant research notebook view.
- **Status:** `APPROVED → COLLECTED`.

UX Notes: - Citations table → compact cards with title, snippet, source logo. - Loading shimmer while scraping.

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3. Draft

- **API:** `/agents/topics/:id/draft`.
- **Process:** Gemini "Tech Writer" → synthesize citations into draft (title, tl;dr, body_html, faq_html, outline_json, SEO metadata).

- **DB:** Save draft to `Article`.
- **UI:**
- Button: *Draft Article*.
- Preview panel: Clean editor-like view with citations `[1], [2]`.
- **Status:** `COLLECTED → DRAFTED`.

UX Notes: - Draft preview must look near-final (publish-grade typography). - Inline citation hover shows original source.

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4. Categorize

- **API:** `/agents/topics/:id/categorize`.
- **Process:** Local MiniLM/SBERT classifier assigns `categoryId` & `subcategoryId`. Curator can override.
- **DB:** Category/Subcategory tables.
- **UI:**
- Show AI suggestion.
- Dropdown for manual override.
- **Status:** `DRAFTED → ASSIGNED`.

UX Notes: - Use pill-style dropdowns (with icons) for category selection. - Show confidence score from AI suggestion.

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5. Review

- **API:** `/agents/topics/:id/review`.
- **Process:** LLM "Copy Editor" pass for spelling, clarity, fact checks. Marks as `READY`.
- **UI:**
- *Review & Approve* button.
- Show flagged issues (warnings in sidebar).
- **Status:** `ASSIGNED → READY`.

UX Notes: - Inline annotations for flagged issues. - One-click *Accept Suggestion*.

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6. Publish

- **API:** `/articles/:id/publish`.
- **Process:** Save `publishedAt`, mark `PUBLISHED`, revalidate site.
- **UI:**
- *Publish Article* button.
- Confirmation modal with preview link.
- **Status:** `READY → PUBLISHED`.

UX Notes: - Publish flow must feel final and celebratory (confetti, success toast). - Show live article link with copy/share button.

Version 2 — Enhancements & Wow Features

Goal: Modernize the CMS with intelligent features, engagement, and global reach.

🚠 Discovery Enhancements

- Multi-feed (Reddit Tech, HackerNews, X/Twitter).
- Topic scoring: relevance × freshness × authority.
- Smart filters: auto-drop non-tech with local model.

🗾 Drafting Enhancements

- Multi-agent drafting (Writer → Fact Checker → SEO Editor).
- Article version control (diffs, rollback).
- Infographic & chart auto-generation from data.

Categorization & Personalization

- Incrementally trained classifier (learns from curator overrides).
- Personalized recommendations for readers.
- Tagging for trending technologies (AI, AR/VR, Web3).

🚉 Publishing Enhancements

- Auto-publish to newsletter & socials.
- Multi-format output (AMP, RSS, Markdown).
- Multi-language drafts with human QA.

🏫 Analytics & Feedback

- Per-article performance dashboard: clicks, dwell time, shares.
- Sentiment analysis from Reddit, YouTube, X → Product Score widgets.
- Active learning: retrain from sentiment + fact-check fails.

🩼 Future Vision (3–5 years)

- AI-generated short videos & podcasts from articles.
- Community engagement → readers suggest sources, vote, fact-check.
- Plugin marketplace (new scrapers, AI tools).
- Monetization: premium research reports, sponsor placements.

🕋 UI/UX Principles

- **World-Class Design:**
- Neumorphic cards, clean typography, smooth transitions.
- Always preview in publish-grade style (WYSIWYG for confidence).

- **Guided Workflow:** Stepper at top → shows status journey.
- **Optimistic Updates:** Instant UI feedback, API runs in background.
- **Accessibility:** Keyboard shortcuts, dark mode, WCAG compliance.
- **Delight:** Micro-animations (confetti, toasts, hover reveals).

Immediate Next Steps

1. Implement Collect → Draft → Categorize → Review → Publish APIs.
2. Build `/topics/[id]/page.tsx` with:
3. ProgressStepper.
4. Buttons for each stage.
5. Panels for citations, draft preview, category assignment.
6. Ensure logs, errors, retries are visible in UI.

Summary

- **V1:** Core publishing pipeline from discovery → publish. Reliable, smooth, modern UI.
- **V2:** Intelligent enhancements (multi-feed, sentiment, SEO, analytics, personalization).
- **Vision:** AI-first newsroom with human oversight, global multi-format publishing, community-powered credibility.