AI Video Creation System — Updated Requirements

The system must support three connected workflows: creating reusable video templates, generating topic lists, and producing one video per selected topic. AI performs creation and quality checking, while humans control feedback and final approval.

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1. Build, validate, and save a reusable video template

Human inputs

The human provides:

- An original reference video.
- Comments and instructions describing the desired result.
- Optional reference images.
- Any constraints, such as duration, aspect ratio, language, or budget.

Reference analysis and approach selection

AI analyses the reference video's visual style, scene structure, motion, expressions, pacing, transitions, narration, music, and sound effects.

AI proposes a creation approach, including the production steps, tools, and estimated cost. The human can accept it, override specific choices, or provide feedback for revision.

Before generation, the system defines what "90% match" means for this reference. The evaluation must include weighted criteria and mandatory requirements. Human instructions determine which qualities matter most.

Maker and checker loop

AI acts as both maker and checker through separate creation and evaluation passes:

1. Create the video.
2. Compare the actual output with the original video and instructions.
3. Score the defined criteria and identify specific defects, including timestamps where relevant.
4. Revise the affected scenes or components where possible.
5. Repeat until the overall match score reaches at least 90% and every mandatory requirement passes.

The checker must evaluate the generated video itself. Its score is an assessment against the agreed criteria; human approval remains required.

Every run must have configurable limits for cost, attempts, and time. If the target cannot be reached, or improvement stalls, retain the best attempt and send it for human review with the remaining issues clearly listed.

Human review and template validation

The human reviews the result and can approve it, request changes, or reject it.

After the reference recreation is approved, AI converts the production process into a reusable template that distinguishes:

- Fixed rules, such as style, pacing, and scene structure.
- Variable inputs, such as topic, characters, setting, and facts.
- Conditional rules describing how the process adapts to different topics.

Validate the template on 2–3 different topics. The human reviews these samples before the template becomes available for production.

Save the approved template with its instructions, steps, code, skills, prompts, model and tool settings, reusable assets, evaluation rules, sample outputs, and version number.

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2. Generate and approve topics for a saved template

Human inputs

The human selects an approved template and supplies:

- Sample topics.
- Instructions describing the topics required.
- Any constraints, such as audience, language, quantity, exclusions, or duration.

Topic generation

AI uses all three inputs—the selected template, sample topics, and instructions—to generate a topic list.

Before presenting the list, AI checks for:

- Relevance to the instructions and intended audience.
- Duplicate or overly similar topics.
- Suitability for the template's format and duration.
- Production requirements that exceed the template's capabilities or configured budget.

Topics requiring exceptions must be flagged with an explanation.

Human review and queue

The human can approve individual topics, approve multiple topics, reject topics, or provide feedback for revision.

Only approved topics enter the production queue. Each queued topic must retain its associated template version and approved instructions.

Approving a topic does not automatically start video production.

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3. Generate one video per selected topic

Selection and production

The human selects one or multiple approved topics from the queue and starts production.

AI creates one separate video for each selected topic, using its associated template and instructions. Each video has its own progress, quality results, feedback, and approval status.

Production quality checking

AI checks each video against:

- The approved template’s style and production rules.
- The selected topic and its instructions.
- Required content and factual correctness where applicable.
- Visual continuity, motion, audio, timing, text, and technical quality.

New videos must follow the template while adapting their content to the selected topic. Their quality check must assess that adaptation rather than require them to reproduce the original reference’s subject matter.

AI revises failed components within the configured cost, attempt, and time limits. Videos that remain below requirements are marked as needing human attention.

Individual human review

The human reviews each video separately and can:

- Approve it.
- Request changes and provide feedback.
- Disapprove and reject it.

Requested changes trigger revision and another review. Approval of one video does not approve other videos in the batch.

Rules applying across all three workflows

- Feedback scope: Every change must identify whether it applies to one video, a selected batch, future topic generation, or the reusable template.
- Versioning: Template changes create a new version. Existing videos retain their original version unless explicitly selected for migration.
- Traceability: Preserve the inputs, instructions, outputs, evaluations, feedback, costs, and approval history for every run.
- Recovery: Failed jobs can resume from completed steps where possible. Retrying must not create duplicate production jobs.
- Approval: AI quality checks never count as human approval. Only human-approved videos are marked final.

Mockups

https://files.winds-os.com/video-workflow-mocks-20261029/