

Autonomous Video Engine

A repeatable production pipeline from a news signal to a finished short-form video.

INPUT

Trending stories and a defined presenter voice

OUTPUT

Videos for YouTube and TikTok

SCOPE

234-node n8n workflow

HOW THE SYSTEM FITS TOGETHER

01

Research

Select a relevant story

02

Write & voice

Prepare the script and narration

03

Produce

Create visuals, avatar and edit

04

Publish

Prepare metadata and distribute

WHAT THE SCOPE COVERS

- Story discovery, source reading and editorial selection.
- A consistent script persona and expressive voice generation.
- Per-segment layout, imagery, avatar generation and ffmpeg assembly.
- Publishing handoffs, a status ledger and failure alerts.

DESIGN DECISIONS

Separate the production stages

Each stage has a clear input and output, making a long chain easier to inspect and operate.

Choose layouts per segment

The system selects from seven layouts instead of repeating one visual treatment throughout the video.

Keep the operator informed

Execution status and failure alerts make it possible to investigate an incomplete run.

DOCUMENTED N8N BUILD

The orchestration and assembly run on owner-controlled infrastructure. Media generation and publishing depend on external services, their costs and their availability.

n8n / SerpAPI / Jina / Fish Audio / Gemini / Kling / ffmpeg / Late

[Read the full case study](#)

Scope and tradeoffs, explained in detail