Automated LinkedIn Video Post Approval & Publishing Workflow

1. Use Case Title

- LinkedIn Video Post Approval & Publishing Workflow

2. Use Case Description

This workflow automates the process of announcing new YouTube video uploads on LinkedIn. When a new video is detected via an RSS feed, the workflow drafts a LinkedIn post using AI, sends it to a manager for approval via email, and publishes the post upon approval. The workflow prevents duplicate posts, logs all actions to Google Sheets, and provides robust error handling for each critical step. This automation saves time for marketing teams, ensures content quality through human review, and maintains a transparent log for auditing.

3. Workflow File (.json)

- Attached file named Linkedin Post Drafter.json

4. Workflow Documentation

Workflow explanations as follow:

a. Node Breakdown

Node Name	Node Type	Purpose	Key Settings/Expressions Used
RSS Feed Trigger	RSS Feed Trigger	Monitors YouTube channel for new video uploads.	feedUrl, polling times
Validate - link	IF	Checks if RSS data contains a valid video link OR title.	$json.link exists, $json.title exists
PostLog	Google Sheets (Read)	Reads all logged posts from Google Sheets for deduplication.	documentId, sheetName
Filter	Filter	Filters out already published video links from sheet data.	$json['Video Link'] !== $json.link
Merge	Merge	Combines video info and approval data for	Combine by Position, include unpaired items

		post creation.	
Agent: Creat Post/Rewrite Post	AI Agent (Groq)	Drafts or rewrites LinkedIn post using video data and manager feedback.	Dynamic prompt with video details and feedback
Send a mail to manager	Gmail (Send & Wait)	Sends draft to manager for approval, collects approval/decline and feedback.	Custom form (Respond dropdown, Notes field)
If	IF	Checks for manager response to proceed or error.	$json.data.Respond not empty
Email Accept/Decline	IF	Branches based on manager's approval or decline.	$json.data.Respond !== "Decline"
Create a post	LinkedIn	Publishes the approved/revised post to LinkedIn.	Uses AI output as post text
validate - Published	IF	Confirms LinkedIn post was published (checks URN).	$json.urn exists
PostLog1	Google Sheets (Append)	Logs final post details and status to Google Sheets.	Maps fields: Post Text, Status, Video Link, Title, Date
Stop and Error- failure in RSS	Stop and Error	Terminates flow and logs error if RSS validation fails.	errorMessage: $json.link does not exist
Stop and Error	failure in email response	Stop and Error	Terminates flow and logs error if no manager email response.
Stop and Error	fail to publish post	Stop and Error	Terminates flow and logs error if LinkedIn publish fails.

b. Flow Explanation

Step-by-Step Logic

1. **Start:**
   o Triggered by new video on YouTube channel via RSS Feed Trigger.

2. **Validation:**
   o IF node checks if the RSS data contains a valid video link or title.
   o If missing, workflow stops with error.

3. **Deduplication:**
   o Reads Google Sheet to check if video link is already published.
   o Filter node ensures only unpublished videos proceed.

4. **Draft Creation:**
   o Merge node combines video and approval data.
   o AI agent drafts LinkedIn post (or rewrites based on manager feedback).

5. **Approval:**
   o Sends draft via Gmail to manager.
   o Manager responds via custom form (Approve/Decline, Notes).
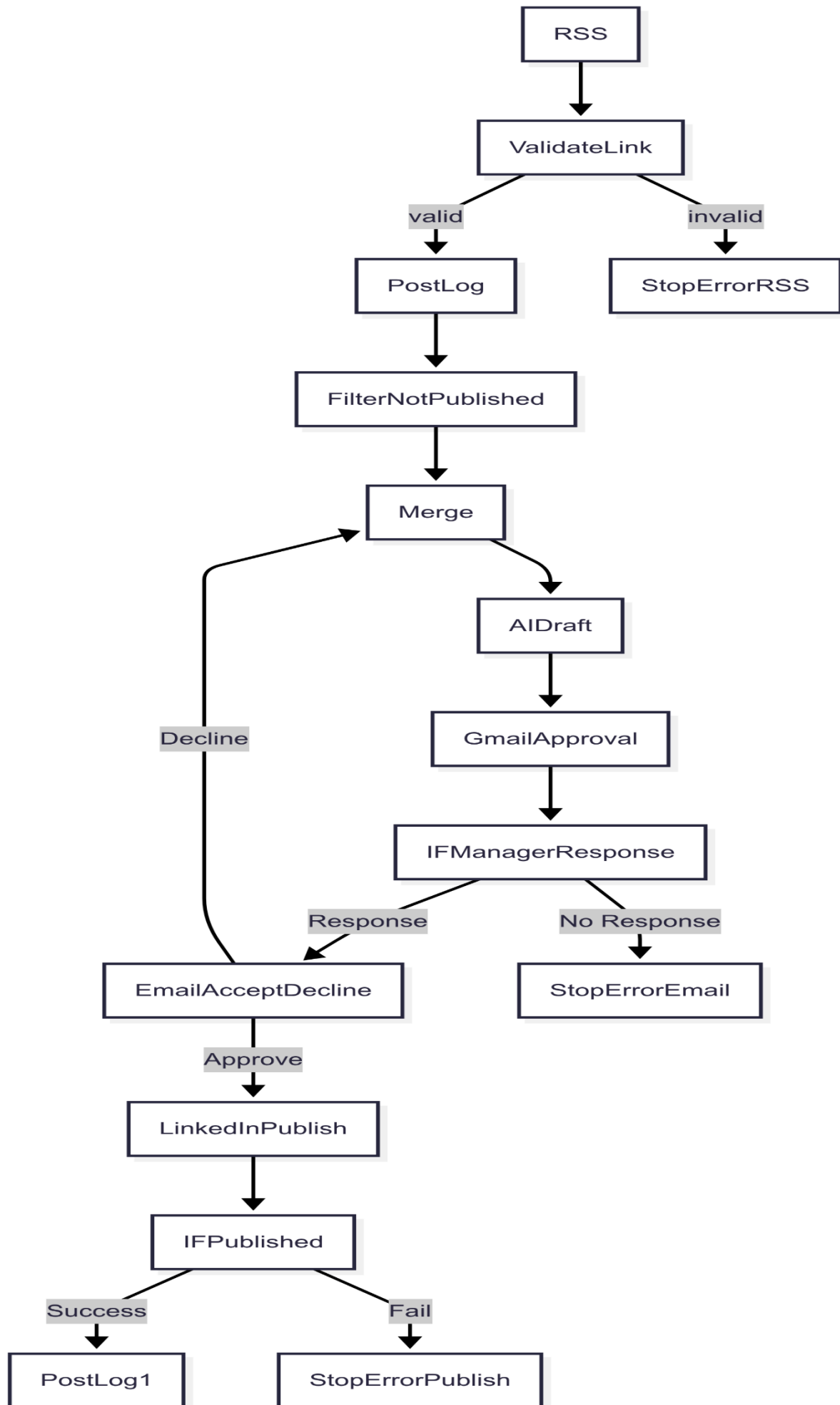
6. **Branching:**
   o IF node checks for manager response.
   o Email Accept/Decline node splits:
      ▪ If "Approve", proceeds to publishing.
      ▪ If "Decline", cycles draft through AI agent for rewrite.

7. **Publishing:**
   o LinkedIn node publishes post.
   o IF node confirms successful publish (urn exists).
   o If failed, workflow stops and logs error.

8. **Logging:**
   o Appends all relevant data (post content, status, video link/title, date published) to Google Sheets.

Flow Chart

RSS

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ValidateLink

├─ valid → PostLog
└─ invalid → StopErrorRSS

PostLog

↓

FilterNotPublished

↓

Merge

↓

AIDraft

↓

GmailApproval

↓

IFManagerResponse

├─ Response → EmailAcceptDecline
└─ No Response → StopErrorEmail

EmailAcceptDecline

├─ Decline → Merge
└─ Approve → LinkedInPublish

LinkedInPublish

↓

IFPublished

├─ Success → PostLog1
└─ Fail → StopErrorPublish

5. Error Handling Strategy

- **Error Trigger Workflow:**
  - Configured in workflow settings (`Global Error Handler`) to catch uncaught errors globally.
- **Stop and Error Nodes:**
  - After RSS validation, email response, and LinkedIn publish, used to halt workflow
- **IF Nodes for Data Validation:**
  - Used throughout to check for required fields and correct states.
- **Deduplication:**
  - Prevents duplicate posts by checking Google Sheets before proceeding.
- **Manual Review:**
  - Manager can decline/rewrite posts, reducing risk of poor content.

6. Assumptions and Requirements

- **APIs & Credentials:**
  - Google Sheets (OAuth2)
  - Gmail (OAuth2)
  - LinkedIn (OAuth2)
  - Groq AI (API Key)
- **External Services:**
  - YouTube RSS feed (public channel link from the channel)
- **Environment Setup:**
  - n8n running on localhost
- **Test Data:**
  - Google Sheet should have columns: Video Link, Status, Video Title, Post Text, Date
  - Use actual or dummy YouTube videos for testing trigger
- **Manager Email:**
  - Valid email address for approval process

Screenshots

- Screenshot of the workflow:
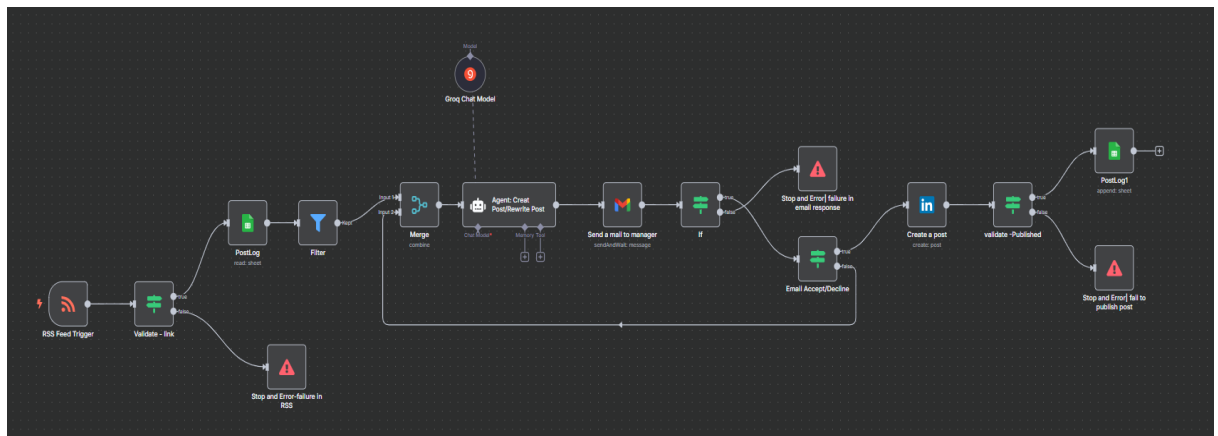
- Email screenshot sends to manager for approve/decline:

Hi Manager,

A new LinkedIn post draft is ready for your approval.

Draft Content:
Are you tired of feeling lost in the world of Shopify SEO?

In our latest video, "Shopify SEO Optimization for Beginners [2025 Tips and Tricks]", we're breaking down the most effective strategies to help you dominate the Shopify search engine and drive more sales to your store.

Watch as we share actionable tips and tricks to improve your Shopify store's visibility, boost conversions, and outrank the competition. Whether you're a seasoned e-commerce expert or just starting out, this video is packed with valuable insights to help you succeed in the ever-changing world of e-commerce.

Watch now and take your Shopify store to the next level!
#ShopifySEO #EcommerceMarketing #DigitalMarketing #OnlineBusiness

📺 Watch here: https://www.youtube.com/watch?v=Cq7HHK9sAXA

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Select an option ...   ⌄

Notes
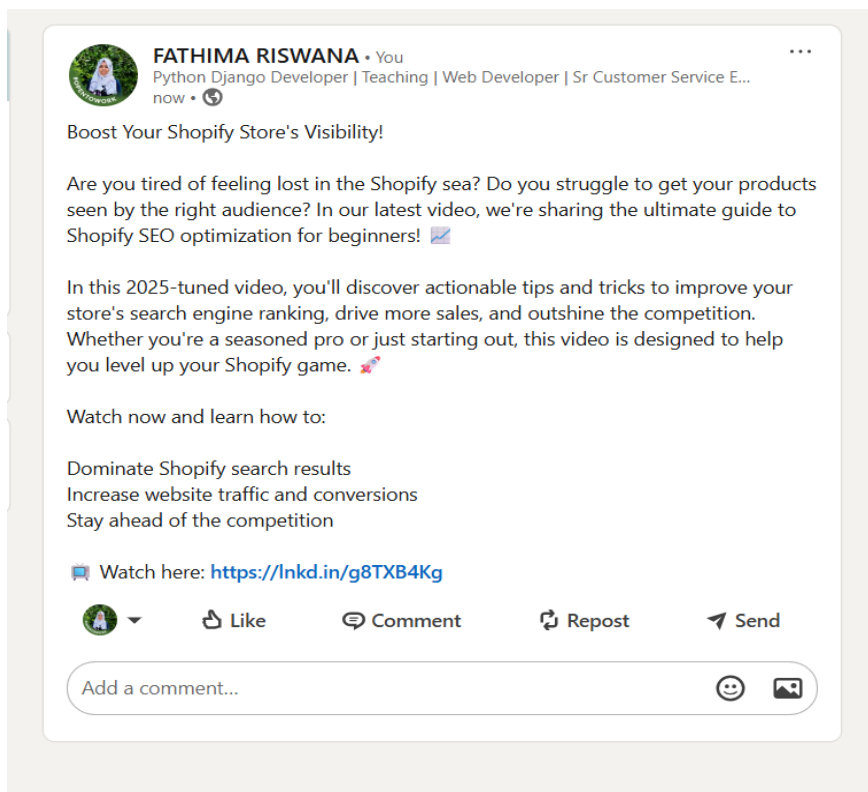
Add notes here (required if declined)

Submit

- Screenshot of linkedin post:

- Global error handler: