

Project title : AI Powered Automation Workflow Agent

Project Overview

This automation workflow uses **n8n** (an open-source automation tool) to fetch the latest **drone-related news**, summarize it using **ChatGPT (OpenAI API)**, generate **social media captions**, and automatically post them to **LinkedIn/Twitter** every day.

The goal is to build a fully automated AI agent that handles content discovery, summarization, and posting — without manual effort.

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Workflow Summary

Step	Node Name	Function
1	Schedule Trigger	Runs the workflow automatically every day at 9:00 AM IST.
2	RSS Feed Read	Fetches the 3–5 latest drone-related news articles from Google News RSS feed.
3	OpenAI (Summarizer)	Uses GPT model to summarize each article in 2–3 short paragraphs and extract keywords/hashtags.
4	OpenAI (Caption Generator)	Formats the summary into a social-media-ready caption with hashtags and a link.
5	HTTP Request / Twitter Node	Posts the final caption to LinkedIn or Twitter using their respective APIs.
6	Email / Telegram Node (optional)	Sends a daily summary report of posted articles to the admin.

APIs & Keys Used

Service	Purpose	Required Key
OpenAI API	Text summarization and caption generation	OpenAI API Key
Twitter API	Auto-post to Twitter (X)	Developer API Key + Access Token
LinkedIn API	Auto-post to LinkedIn	Access Token + Profile ID
Email/Telegram (optional)	Send daily report	SMTP or Bot Token

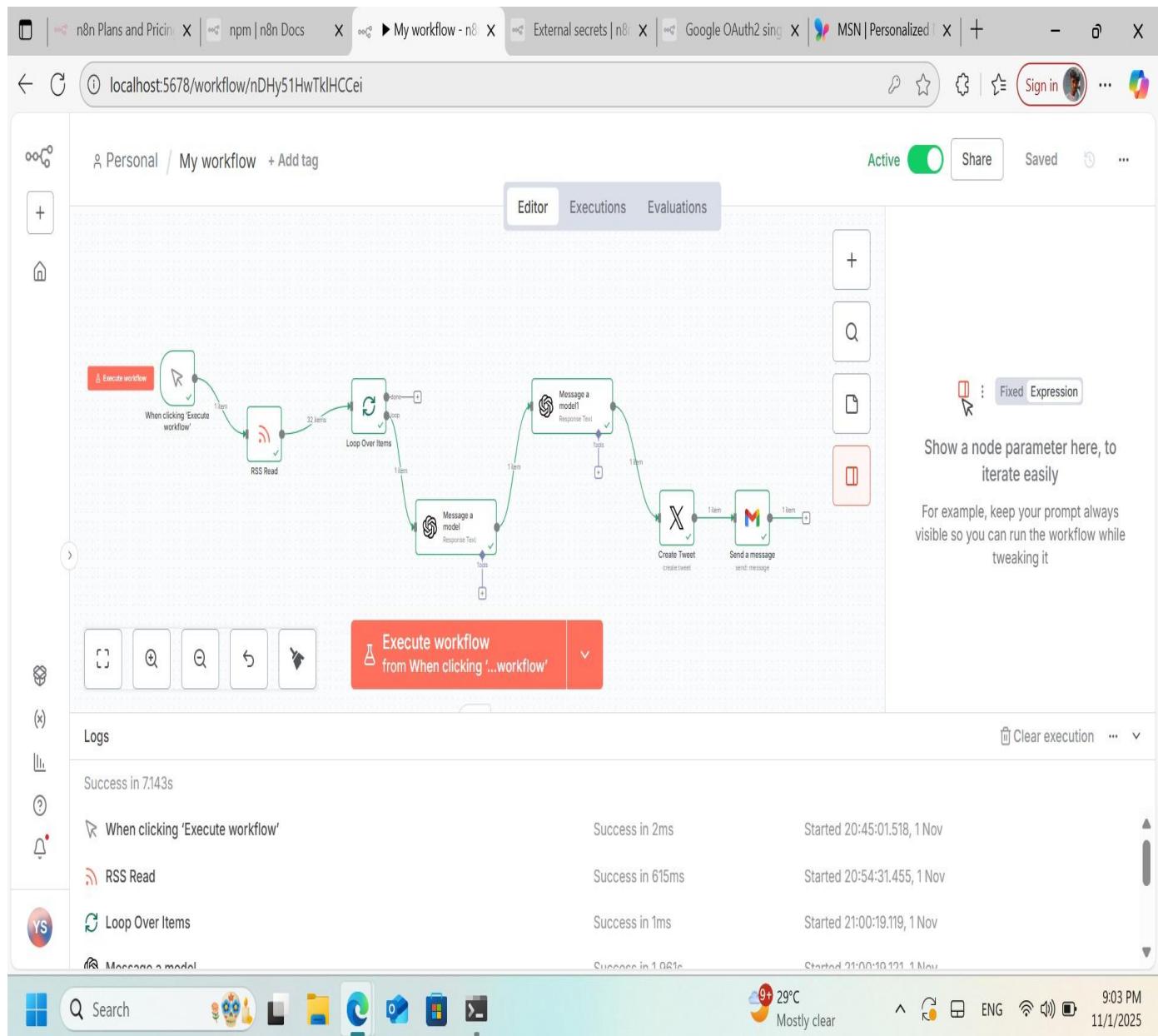
Automation Schedule

- Trigger: **Every day at 9:00 AM IST**
- Runs automatically — no manual start required.
- Posts 3–5 summarized drone news updates daily.

Documentation Screenshots

Include the following:

1. Full n8n Workflow Canvas view (showing all connected nodes).



2. Output logs from summarization and caption nodes.

The screenshot shows the n8n interface with a workflow step named "RSS Read". The input section shows a single item from the URL <https://feeds.bbci.co.uk/news/rss.xml>. The output section displays 32 items, each representing a news article from BBC News. The first item's content is partially visible:

```

{
  "title": "Andrew should answer Epstein questions in US, Democrats say",
  "link": "https://www.bbc.com/news/articles/c3dnnpvjkjvoat_medium=RSS&at_campaign=rss",
  "pubDate": "Sat, 01 Nov 2025 10:49:44 GMT",
  "content": "Members of a panel investigating late sex offender Jeffrey Epstein say the former prince should \"come clean\".",
  "contentSnippet": "Members of a panel investigating late sex offender Jeffrey Epstein say the former prince should \"come clean\".",
  "guid": "https://www.bbc.com/news/articles/c3dnnpvjkjvo#0",
  "isoDate": "2025-11-01T10:49:44.000Z"
}

```

Loop Output

The screenshot shows the n8n interface with a workflow step named "Loop Over Items". The input section shows the 32 items from the previous RSS Read node. The output section shows the "Loop Branch (1 item)" containing the same single news article as the previous screenshot. The first item's content is identical to the one above:

```

{
  "title": "Andrew should answer Epstein questions in US, Democrats say",
  "link": "https://www.bbc.com/news/articles/c3dnnpvjkjvoat_medium=RSS&at_campaign=rss",
  "pubDate": "Sat, 01 Nov 2025 10:49:44 GMT",
  "content": "Members of a panel investigating late sex offender Jeffrey Epstein say the former prince should \"come clean\".",
  "contentSnippet": "Members of a panel investigating late sex offender Jeffrey Epstein say the former prince should \"come clean\".",
  "guid": "https://www.bbc.com/news/articles/c3dnnpvjkjvo#0",
  "isoDate": "2025-11-01T10:49:44.000Z"
}

```

Message model Model 1 output

The screenshot shows the n8n workflow editor with a node titled "Message a model".

INPUT:

- Loop Over Items (1 item)
- Content (JSON):


```
[
        {
          "title": "Andrew should answer Epstein questions in US, Democrats say",
          "link": "https://www.bbc.com/news/articles/c3dnnpvjkjvoat_medium=RSS&at_campaign=rss",
          "pubDate": "Sat, 01 Nov 2025 10:49:44 GMT",
          "content": "Members of a panel investigating late sex offender Jeffrey Epstein say the former prince should \"come clean\".",
          "contentsnippet": "Members of a panel investigating late sex offender Jeffrey Epstein say the former prince should \"come clean\".",
          "guid": "https://www.bbc.com/news/articles/c3dnnpvjkjvo#0",
          "isoDate": "2025-11-01T10:49:44.000Z"
        }
      ]
```

Parameters:

- Credential to connect with: OpenAi account 2
- Resource: Text
- Operation: Message a Model
- Model: From list / GPT-4.1-MINI
- Messages:
 - Type: Text
 - Role: Tools

OUTPUT:

- 1 item
- Content (JSON):


```
{
        "output": [
          {
            "id": "msg_0b42071e6717fe4100690626a7a7fc8192b9b55ba64e53f994",
            "type": "message",
            "status": "completed",
            "content": [
              {
                "type": "output_text",
                "annotations": [],
                "logprobs": [],
                "text": "It looks like the article summary and hashtags are missing. Could you please provide those so I can create the LinkedIn post for you?"
              }
            ]
          }
        ]
      }
```

I wish this node would... <https://www.bbc.com/news/articles/c3dnnpvjkjvo>

Message model 2 output

The screenshot shows the n8n workflow editor with a node titled "Message a model1".

INPUT:

- Message a model (1 item)
- Content (JSON):


```
[
        {
          "output": [
            {
              "id": "msg_0ae3fcf0f2b4876600690626dcadac8196a3efd",
              "type": "message",
              "status": "completed",
              "content": [
                {
                  "type": "output_text",
                  "annotations": [],
                  "logprobs": [],
                  "text": "Ready to unlock the future of digital innovation? Explore how groundbreaking technologies are driving growth in industries and driving success in business. #DigitalInnovation #TechFuture #IndustryGrowth"
                }
              ]
            }
          ]
        }
      ]
```

Parameters:

- Credential to connect with: OpenAi account 2
- Resource: Text
- Operation: Message a Model
- Model: From list / GPT-4.1-MINI
- Messages:
 - Type: Text
 - Role: Tools

OUTPUT:

- 1 item
- Content (JSON):


```
{
        "output": [
          {
            "id": "msg_09d5b678d5a2d17600690626df60688196bb3a3a5b27c84528",
            "type": "message",
            "status": "completed",
            "content": [
              {
                "type": "output_text",
                "annotations": [],
                "logprobs": [],
                "text": "Unlock the future of digital innovation today! Groundbreaking technologies are revolutionizing industries and fueling extraordinary growth in business. #DigitalInnovation #TechFuture #IndustryGrowth"
              }
            ]
          }
        ]
      }
```

I wish this node would... [https://www.bbc.com/news/articles/c3dnnpvjkjvo](#)

3.Post success log (showing "Execution Successful" or API response).

Tweet output

localhost:5678/workflow/nDHy51HwTkHCcei/ff6458

Create Tweet

Parameters

Credential to connect with: X account

Resource: Tweet

Operation: Create

Text:

```
fx "Automated update #n8n #AI " + {{now}}
```

"Automated update #n8n #AI " + 2025-11-01T11:28...

No properties

OUTPUT

```
[{"edit_history_tweet_ids": ["1984643683900346738"], "text": "\\"Automated update #n8n #AI " + 2025-11-01T11:28:36.220-04:00", "id": "1984643683900346738"}]
```

I wish this node would...

Email node outputs:

Send a message

Parameters

To: shnee2505@gmail.com

Subject: Daily Workflow Report

Email Type: HTML

Message:

```
<h3>Hello!</h3><p>This is a test email sent from r
```

Options

Sender Name: n8n Report Summary

OUTPUT

```
[{"id": "19a3ffea8872738e", "threadId": "19a3ffea8872738e", "labelIds": [{"labelId": "labelId[0]", "value": "UNREAD"}, {"labelId": "labelId[1]", "value": "SENT"}, {"labelId": "labelId[2]", "value": "INBOX"}]}
```

I wish this node would...

localhost:5678/workflow/nDHy51HwTkIHCCei/a2c979

Send a message

Parameters

To: shnee2505@gmail.com

Subject: Daily Workflow Report

Email Type: HTML

Message: <h3>Hello!</h3><p>This is a test email sent from r

Options: Sender Name: n8n Report Summary

OUTPUT

id	threadId	labelIds
19a3ffea8872738e	19a3ffea8872738e	0 : UNREAD 1 : SENT 2 : INBOX

I wish this node would...

INPUT

Create Tweet

text	id	edit_history_tweet_ids
"Automated update #n8n #AI " + 2025-11-01T11:17:38.968-04:00	1984640927361876006	0 : 1984640927361876006

Send a message

threadId: "19a3ffea8872738e"
labelIds: ["unread", "sent", "inbox"]

Search 29°C Mostly clear ENG 11/1/2025

localhost:5678/workflow/nDHy51HwTkIHCCei/a2c979

Send a message

Parameters

To: shnee2505@gmail.com

Subject: Daily Workflow Report

Email Type: HTML

Message: <h3>Hello!</h3><p>This is a test email sent from r

Options: Sender Name: n8n Report Summary

OUTPUT

id	threadId	labelIds
19a3ffea8872738e	19a3ffea8872738e	0 : UNREAD 1 : SENT 2 : INBOX

I wish this node would...

INPUT

Create Tweet

text	id	edit_history_tweet_ids
"Automated update #n8n #AI " + 2025-11-01T11:17:38.968-04:00", "id": "1984640927361876006", "edit_history_tweet_ids": ["1984640927361876006"]		

Send a message

threadId: "19a3ffea8872738e"
labelIds: ["unread", "sent", "inbox"]

Search 29°C Mostly clear ENG 11/1/2025

Expected Output Example

Generated Caption Example:

 India's drone sector continues to expand with new DGCA policies promoting local innovation.

The latest guidelines are expected to boost commercial drone adoption.

#DroneNews #DGCA #Aviation #Innovation #TechTrends

Read more  [news link]

Conclusion

This workflow demonstrates the use of AI + Automation for smart content curation.

It showcases:

- Integration of AI models with real-time data
- Automated social media content generation
- End-to-end posting without manual steps