

TikTok Organic Post Scraper (Handover Manual & Walkthrough)

1. System Overview

This system automates the process of scraping TikTok organic posts, extracting post content and comments, enriching the data with AI analysis, and storing everything in Airtable for structured access. It is designed for marketing research, competitor tracking, and campaign analysis.

The system is built using **n8n workflows**, **Apify actors**, and **Airtable** as the database and User Interface.

2. Core Components

- **Airtable Base**
 - Tables: **Search Requests**, **Scraped Content**, **Scraped Comments**
 - Acts as both the input (search requests) and storage (scraped results, enriched insights).
- **Apify Actors**
 - TikTok Scraper: Scrapes posts and metadata.
 - TikTok Comment Scraper: Collects comments on selected posts.
- **n8n Workflow**
 - Orchestrates the scraping, enrichment, and storage.
 - Runs periodically or on demand.
- **AI Modules**

- Content summarization.
 - Strengths & weaknesses detection.
 - Comment analysis & clustering.
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3. Workflow Flowchart

1. Airtable **Search Requests** flagged for run →
 2. n8n picks request →
 3. Apify Scraper fetches posts →
 4. Posts stored in **Scraped Content** →
 5. Comments scraped & stored in **Scraped Comments** →
 6. AI analysis enriches both posts & comments →
 7. Results available in Airtable for review.
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4. Airtable Tables

4.1 Search Requests (**tblmQMJURqN6bDDI4**)

- Fields: Search Type, Keyword/Account, Country, Date Range, Max Results, Run flag, etc.
- Role: Queue of requests to be processed.

4.2 Scraped Content (**tblBs1ptBwdfKEMF1**)

- Stores TikTok post metadata, captions, engagement stats, and enrichment analysis.

- Linked to [Scraped Comments](#).

4.3 Scraped Comments

- Stores comment text, author, likes, and AI-driven sentiment/cluster tags.
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5. API & Authentication

- Airtable API: REST + JSON.
 - Auth: Bearer Token.
 - Rate limits: 5 requests/sec per base.
 - Standard HTTP codes for error handling.
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6. Error Handling

- **2xx** → Success.
 - **4xx** → User errors (invalid request, missing fields).
 - **5xx** → Server errors (retry logic in n8n recommended).
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7. Scoring Formula

The scoring formula ranks TikTok posts by a custom **Virality Score**, calculated in Airtable.

Formula inputs:

- Followers of the creator (tiered brackets).

- Engagement rate (likes + comments + shares ÷ views).
- Recency (boost for posts within last 7 days).

Example structure (pseudo):

$\text{ViralityScore} = (\text{EngagementRate} * 0.6) + (\text{FollowerTierScore} * 0.3) + (\text{RecencyBoost} * 0.1)$

This ensures fairness across small and large accounts.

8. AI Prompts (for OpenAI or Similar LLM)

Post Analysis Prompt

“You are given a TikTok caption, engagement stats, and transcript. Summarize the main theme, identify key strengths and weaknesses, and suggest why it may have gone viral.”

Comment Analysis Prompt

“You are given up to 20 comments from a TikTok post. Cluster them into themes (e.g., humor, criticism, product interest). Highlight dominant sentiment and potential insights.”

9. n8n Workflow Structure

- **Trigger Node** → Webhooks.
 - **Airtable Nodes** → Fetch search requests, update status, save results.
 - **Apify Nodes** → Run TikTok Scraper + Comment Scraper.
 - **OpenAI Nodes** → Post analysis + Comment analysis.
 - **Gemini Node** → Analyze Video content.
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10. Maintenance Checklist

- Rotate Airtable tokens every 90 days.
 - Monitor Apify actor changes (API updates may break scrapers).
 - Review n8n logs weekly for failed runs.
 - Clear old requests from [Search Requests](#) monthly.
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11. Troubleshooting

- **No posts scraped?** → Check if TikTok account is private or if Apify actor quota expired.
 - **Comments missing?** → Verify Apify Comment Scraper still supports the post format. Check if the post has more than 20 comments to analyze
 - **Rate limit errors?** → Add a Wait node in n8n between Airtable writes.
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12. Future Improvements

- Integrate with **dashboard tools** (e.g., Google Data Studio).
 - Expand comment scraping beyond 20 (with batching).
 - Add **auto-tagging** of posts by content theme.
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13. Appendix

- **n8n Workflow JSON** (full export).

- **Screenshots of Airtable schema** (tables, fields).
- **Prompt library** for all AI modules.
- **Sample cURL/JS snippets** for Airtable API interaction.

n8n workflow: <https://dgtlbase.app.n8n.cloud/workflow/2M1sbDdMVAf468TA>

Airtable schema: <https://airtable.com/appVkCnLBmEWYndLj/api/docs>

Prompts: section 8 + n8n workflow

JS snippets for webhook automation within Airtable:

```
let table = base.getTable("Search Requests");
let record = await table.selectRecordAsync(recordId);

await
fetch("https://dgtlbase.app.n8n.cloud/webhook/b2cb3eef-c6c3-47e9-81bf-08f14e2bdcc3", {
  method: "POST",
  headers: { "Content-Type": "application/json" },
  body: JSON.stringify(record)
});

console.log("Sent to n8n:", record);
```

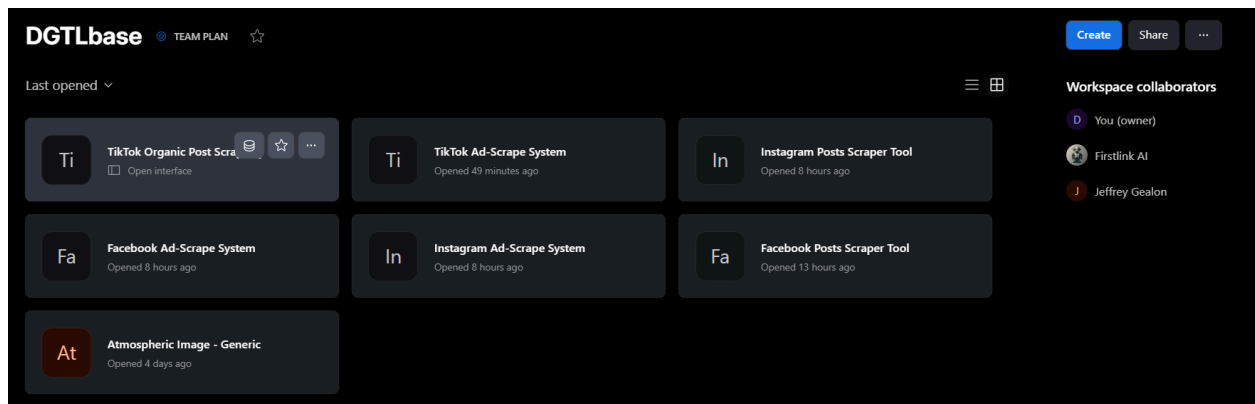
End of Handover manual

User Guide - Detailed Walkthrough

This walkthrough gives an operational, illustrated-style guide for team members.

A - Access and roles

- Who needs access: 1) Marketing editors (Airtable Editor), 2) Ops engineer (n8n access), 3) Data reviewer (Airtable Viewer+comments).
- Confirm access before running searches.



"Airtable permissions - ensure required access levels are set."

B - Create a Keyword Search (step-by-step)

1. Open the **Search Requests** table or the Search Request form in Airtable.
2. Populate fields:
 - Search Type = **Keyword Search**
 - Keywords = "Nike"
 - Country Code = "Netherlands"
 - Date Range = Last 24 Hours
 - Max Results = 50
 - Run = TRUE
3. Save record.

The screenshot shows the 'TikTok Organic Post Scrape System' interface. On the left is a sidebar with navigation options: 'TikTok Post Search Requests' (highlighted), 'Search History', 'Scraped Content', 'Comment Analysis', 'Video Analysis', and 'Post Copy Review'. The main area contains search configuration fields:

- Search Description:** A text field with the placeholder 'What are you searching? E.g. "Alex Hormozi videos" (For internal use only)' and the value 'Nike Netherlands'.
- Search Type:** A dropdown menu with the option 'Keyword Search' selected.
- Keyword:** A text field with the value 'Nike'.
- Max Results (min. 10):** A text field with the value '10'.
- Country:** A dropdown menu with the option 'Netherlands' selected.
- Date Range:** A dropdown menu with the option 'Last 24 Hrs' selected.
- Run (Check if no search active):** A checkbox that is currently unchecked.

"Create a Keyword Search request."

Tips:

- Avoid trailing spaces in keyword fields.
- Use short keyword lists to reduce noise; run multiple targeted searches for variants.

C - Create an Account Search (step-by-step)

1. Choose **Account Search** in Search Type.
2. Enter the exact TikTok username in **TikTok Accounts** (no display names).
3. Set Max Results and Run = TRUE.

TikTok Organic Post Scrape System ▾

TikTok Post Search Requests

Search History

Scraped Content

Comment Analysis

Video Analysis

Post Copy Review

Search Description

What are you searching? E.g. "Alex Hormozi videos" (For internal use only)

Puma UK

Search Type

Select to search by keyword, or account profile

Account Search

TikTok Accounts

Enter TikTok username without @ symbol (e.g., ahormozi)

puma.uk

Max Results (min. 10)

10

Country

United Kingdom

Date Range

Last 30 Days

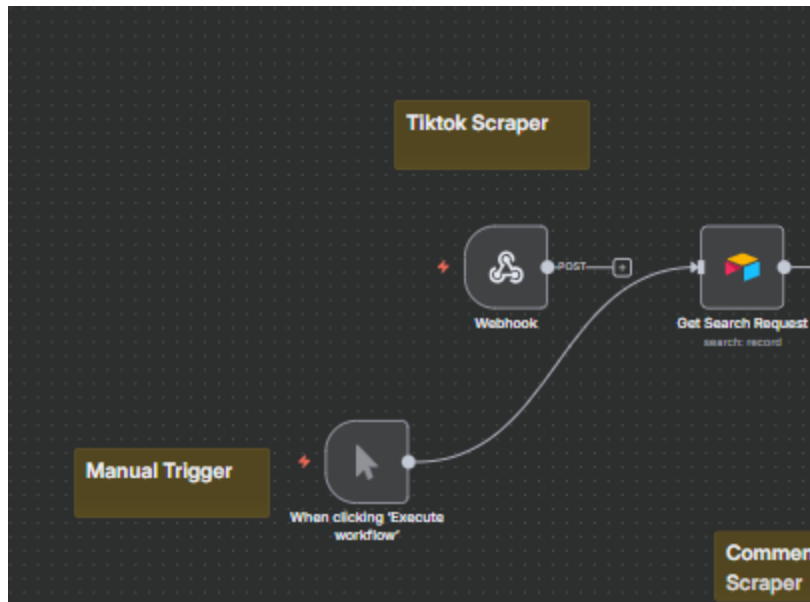
Run (Check if no search active)

☒

: "Account Search - enter exact username."

D - Run the Workflow (manual)

1. If you want to force a run, open n8n and select **Tiktok Posts Scraper - V2**.
2. Click **Execute Workflow** or trigger the webhook (if configured).
3. Observe the execution status in n8n.



"Manually execute the workflow in n8n for immediate runs."

Personal / Scrapers Pack / Tiktok Posts Scraper - V2 + Add tag Active Share Saved 133,719

Editor Executions Evaluations

Executions No active executions

Auto refresh

Aug 30, 00:33:27 Succeeded in 25ms

Aug 30, 00:33:27 Succeeded in 1.598s

Aug 30, 00:29:07 Succeeded in 14.98s

Aug 30, 00:28:48 Succeeded in 471ms

Aug 30, 00:28:45 Succeeded in 20.231s

Aug 30, 00:26:37 Succeeded in 46ms

Aug 30, 00:33:27 Succeeded in 25ms | ID#6044

Copy to editor

Tiktok Scraper

Comments Scraper

Video Analyzer

"Check the execution log for node outputs and errors."

E - Monitor Apify (optional)

- In Apify console, use the run ID to inspect raw dataset output, subtitles, or errors.

TikTok Scraper

clockworks/tiktok-scraper

★ 4.7 (28)

📄 718

👤 64K

👤 12K

Crafted by

clockworks

Maintained by Apify

▶ Start

📄 Create task

API ▾

⋮

Extract data from TikTok videos, hashtags, and users. Use URLs or search queries to scrape TikTok profiles, hashtags, posts, URLs, shares, followers, hearts, names, video, and music-related data. Export scraped data, run the scraper via API, schedule and monitor runs or integrate with other tools.

Input

Information

Runs 183

Builds 35

Integrations 0

Monitoring

Issues 1

Saved tasks 0

Reviews

🔍 pdPVPAlbFMiEb7Jdg

×

1 recent run

<input type="checkbox"/>	Status ▾	Task	Results	Usage	Started ↓	Finished	Duration	Build	Origin ▾	Memory
<input type="checkbox"/>	✓ Scraped 1/1 hashtags		10	\$0.05	2025-08-29 23:56:59	2025-08-29 23:57:45	46 s	0.0.408	API	4 GB

Items per page: 20 ▾

Go to page: Go < 1 >

🔔 Looking for older runs? Some runs were deleted possibly due to your data retention.

"Apify run details and dataset - verify returned items."

F - Review Scraped Content

1. Open **Scraped Content** view in **Airtable**.
2. Open a record and confirm: Caption, Views, Likes, Comments, Shares, Duration etc.
3. Look for **analyze_video** and **analyze_comments** toggles.

TikTok Organic Post Scrape System - Scraped Content										Group	Filter	Sort 1	Q	⋮
SNo	ID	Keyword	User	Followers	Publish Date		Virality Score ↓	Views	Likes	Comments				
47	7533428015733230903	Tesla	realisticaivids	262,000	2025-08-19	8:48am	68	758	1,900,000	521				
50	74917117573180718	Tesla	alpscars	83,800	2025-08-19	8:48am	67	76	1,300,000	2,502				
52	7112785065356037382	Tesla	teslashop_minsk	30,900	2025-08-19	8:48am	67	1,796	1,200,000	1,008				
53	7535906894376996126	Tesla	caitylynneier	109,200	2025-08-19	8:48am	67	1,568	1,500,000	389				
56	7536956606693543198	oreo	shred_and_bread	56,100	2025-08-19	8:48am	65	1,836	854,200	21				

"Scraped Content table - use views to filter new items."

TikTok Organic Post Scrape System > Scraped Content					
SNo	ID	Keyword	User		
45	7427132447164255521	Tesla	moe_visuals		
46	7533428015733230903	Tesla	realisticaivids		
47	7533428015733230903	Tesla	realisticaivids		
50	7491711757573180718	Tesla	alpscars		
52	7112785065356037382	Tesla	teslashop_mins		
53	7535906894376996126	Tesla	caitlynneier		

moe_visuals	
Keyword	Tesla
User	moe_visuals
Followers	32,500
Publish Date	2025-08-19 8:48am
Virality Score	68
Views	4,759
Likes	1,000,000
Comments	10,900
Shares	173,500
Bookmarks	68,300
Caption	The Tesla RoboVan prototype has hit UK roads... 🤖 🚗 ⚡ #whatsnext #elonmusk #tesla #robovan #teslarobot #robotax #cgi #vfx #london @Tesla Tok #cybertruck
Video URL	https://www.tiktok.com/@moe_visuals/video/7427132447164255521






"Record detail - verify User, Followers and Virality metrics etc"

Reviewer tips:

- If any field is blank, check if data were available for that post.
- If field output look missing or odd, compare to source post in Apify dataset.

G - Request Analysis (video/comments)

1. Toggle **analyze_video** or **analyze_comments** to TRUE on the record to request analysis.
2. For comments analysis: ensure the record has at least 20 comments (threshold).
3. Monitor n8n runs for AI processing completion.

Group Filter Sort 1				
Video URL	Cover Image	Duration	analyze_comments	analyze_video
				
https://www.tiktok.com/@...		0:13	✓	✓
https://www.tiktok.com/@...		0:10	✓	✓
https://www.tiktok.com/@...		0:10	✓	✓
https://www.tiktok.com/@...		0:18	✓	✓

"Toggle analysis flags to trigger LLM enrichment."

Timing guidance: LLM jobs may queue - expect variable completion times depending on provider load.

H - Interpret AI Outputs and Take Action

Key fields produced by AI:

- **Virality Score** - use to prioritize content
- **Key Insights** - summary of post's value
- **Visual Hook** - what stops a viewer
- **Undeniable Proof** - credible elements
- **Comments_Sentiment / Comments_Summary**

TikTok Organic Post Scrape System		Video Analysis			
ID	Keyword	User	Virality...	Video URL	
7539072551792676118	Tesla	borakeditors	72	https://www.tiktok.com/@7539072551792676118	
7541070400290131232	-	sneakerask	35	https://www.tiktok.com/@7541070400290131232	
7538341986860846368	-	oreo_netherla...	26	https://www.tiktok.com/@7538341986860846368	
7055112605869919494	montblanc p...	elguedelosp...	51	https://www.tiktok.com/@7055112605869919494	
7523192473796021524	-	damasjewellery	47	https://www.tiktok.com/@7523192473796021524	
7540451582354214164	-	cocacola_flow	43	https://www.tiktok.com/@7540451582354214164	

7539072551792676118

Video Analysis

User	borakeditors
Virality Score	72
Video URL	https://www.tiktok.com/@borakeditors/video/7539072551792676118
Visual Hook	The initial close-up of a man comically gently closing the trunk of a Tesla Cybertruck immediately piques viewer curiosity by showing an unexpected and exaggerated "car test" action.
Undeniable Proof	The scene where a woman carelessly exits and then re-enters the Fiat, leaving her bag and paper on the ground before driving off with the car completely unaffected, provides compelling, real-world evidence of the vehicle's robust and user-friendly design.
Theme	Quality Beyond Hype

"AI-enriched record - Virality Score and Key Insights."

Suggested next steps based on outputs:

- High Virality + positive insights: add to replication pipeline or creative brief.
- Negative sentiment: route immediately to product or support for review.
- High number of questions: collect into FAQ or customer content plan.

I - Exporting / Sharing

- Create an Airtable view (e.g., **Top posts this week**) and use **Share view** or **Download CSV**.

TikTok Organic Post Scrape System

Search RequestsScraped ContentScraped CommentsAdd or import

Comments Analysis

BaseAll records

View10 records

Share TikTok Organic Post Scrape System

This base is shared with 3 collaborators.

Ti

Base

All records

Sharing is restricted for all bases in this workspace. Manage settings

Email inviteShare publicly

Invite by email...

Creator

Invite

☒ Notify people

☐ Invite to DGTlbase workspace

Get user groups on the Business plan

Upgrade to the Business plan to create and manage groups of users with which you can easily share bases, workspaces, and interfaces.

Manage access

GroupSortColorShare and sync

Comments_Sentiment	Comments_Questions	Comments_P
1. Is this Tesla test real, stag...	1. Unclear auther	
1. Komt er een raffle? 2. Ho...	1. Unclear stock s	
positive, with mixed...	1. Where can I buy these O...	1. Unclear produ
positive with mixed ...	1. How long do Montblanc ...	1. Uncertainty ab
stantly positive ad...	1. Where can I buy or purc...	1. Unclear produ
verall, with strong ...	1. Will there be a full video ...	1. Videos are sho
stantly positive, wit...	1. Where can I buy these N...	1. Limited availat
1. How much will it cost? 2...	1. Lack of official	

Comment Analysis		7539072551792676118	
User	Video URL	Keyword	Tesla
borakeditors	https://www.tiktok.com/@borakeditors/video/7539072551792676118	User	borakeditors
sneakerask	https://www.tiktok.com/@sneakerask/video/7539072551792676118	Video URL	https://www.tiktok.com/@borakeditors/video/7539072551792676118
oreo_netherla...	https://www.tiktok.com/@oreo_netherla.../video/7539072551792676118	Key Insights	The video humorously contrasts the often over-the-top and destructive "car tests" performed by content creators on various vehicles (Cybertruck, Lamborghini, Ferrari, Chevrolet) with the meticulous, almost comically cautious "testing" of a Fiat by engineers. This juxtaposition sets up an ironic narrative that suggests while other cars endure staged abuse, the Fiat's inherent quality is demonstrated by its effortless resilience to even casual, clumsy real-world handling by its owner.
elgueydelosp...	https://www.tiktok.com/@elgueydelosp.../video/7539072551792676118	Comments_Summary	Viewers are engaged but divided, mixing humor with skepticism while comparing borakeditors' Tesla test to previous videos and other creators. Many question the test's authenticity and editing, discuss performance and features, and point out branding inconsistencies, while some praise surprising capabilities and creative production.
damasjewellery	https://www.tiktok.com/@damasjewellery/video/7539072551792676118	Comments_Questions	1. Is this Tesla test real, staged, or edited? 2. How does this test compare to the last one?
cocacola_flow	https://www.tiktok.com/@cocacola_flow/video/7539072551792676118		

"Export a view or create a read-only link to share with stakeholders."

J - Reviewer QA Checklist (short)

Add or use a **QA Complete** checkbox field in Airtable and follow this checklist before republishing or repurposing content:

- Key Insights accurate to transcript and visuals.
- Any factual claims supported by **Undeniable Proof**.
- Comments sentiment consistent with a sample of 20 comments.
- Mark **QA Complete**.

End of detailed walkthrough.