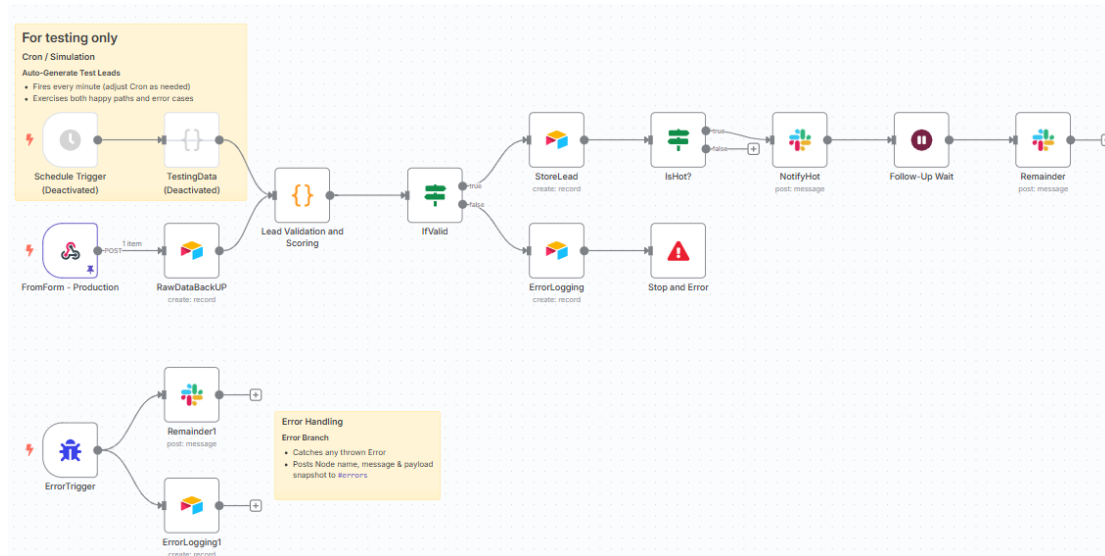


## ⚙️ Lead Scoring & Notification Bot (n8n)

This automation makes sure your sales team never misses a high-value lead—by instantly scoring, storing, and notifying reps, all with built-in fail-safes.



### 🚀 What It Does Best

- **Accepts Real or Simulated Leads:**  
Handles live form submissions via webhook (/lead-submit) or auto-generates test leads to stress-test every logic branch.
- **Scores with Precision:**  
Calculates a 0–100 score using:
  - Budget (up to 40 pts)
  - Interest Level (up to 30 pts)
  - Company Size (up to 20 pts)
  - **Bonus:** +5 pts if the email domain is *not* a consumer domain (gmail.com, yahoo.com, etc.), +5 pts if a phone number is provided
- **Categorises automatically:**
  - **Hot ( $\geq 70$ )** → Instant Slack DM to rep + follow-up ping after 2 mins
  - **Warm (50–69)** → Logged and visible for later
  - **Cold ( $< 50$ )** → Archived, but not lost
- **Stores Everything Reliably:**

- Raw JSON archived immediately in Airtable
  - Scored leads upserted cleanly with deduplication and timestamps
- 

## Robustness & Error Handling

- **Failsafe Input Guardrails:**  
Validates key fields: full\_name, email, budget, interest\_level  
→ If anything's off, it gracefully exits with a clear error object.
- **Dual-Level Backup:**
  - Raw data goes to Airtable before processing
  - Scored lead goes to a second base with breakdown + metadata
- **Smart Error Triage:**
  - Logs every error in Airtable with node name, message, and full payload
  - Posts real-time alerts to #errors Slack channel so issues don't go unnoticed
- **Self-Healing Behavior:**  
Nodes retry failed executions, parse types carefully, and fallback between test vs. production sources automatically.  
Even malformed inputs won't break the workflow.
- **Auto-Termination:**  
5-minute timeout prevents runaways or infinite loops.

## Extras

### Simulated Testing System

- A cron-triggered node that auto-generates 8 test variants (including error edge cases).
- Toggling between test and production with clear instructions.

### Raw Payload Archival

- Immediate backup of every incoming payload *before* processing, stored in Airtable.

### Multi-Layer Validation

- Checks for required fields and gracefully returns structured error objects.

- Differentiates between validation errors and runtime exceptions.

### Detailed Scoring Breakdown

- Each score component (budget, interest, size, bonuses) is stored as a breakdown for transparency and debugging.

### Slack Follow-Up Reminder

- A timed reminder message sent 2 minutes after a Hot lead alert to ensure the sales rep doesn't forget.

### Full Error Handling Stack

- Global ErrorTrigger to catch runtime issues.
- Logs error messages, node names, and raw data into Airtable.
- Sends real-time Slack alerts with pretty-printed JSON payloads.

### Idempotent Data Storage

- Airtable “upsert” logic keyed on email to avoid duplicate entries when re-running the workflow.

### Timeout Control

- Workflow auto-terminates after 5 minutes to avoid loops or zombie executions.

### Sticky Notes for Node-Level Documentation

- Embedded visual notes in the n8n canvas explaining each cluster of logic— aka the "instruction manual for adults."

### Retry Logic

- Configured retries on Slack/Airtable/API nodes for transient failures (because life is unreliable, like Wi-Fi).

### Extendability Suggestions

- Ideas for enrichment via external APIs (Clearbit, LinkedIn), nurture flows, and reporting extensions.

Timestamp	full_name	Email	Phone	company_size	budget	Lead Category	Interest Level	Lead Sc...
7/3/2025 17:00	Bad Budget	badbudget@example.com	+1234567890	large	0.0	Warm	High	60.0
7/3/2025 17:32	Bob Test	bob@example.com	+1234567890	medium	1,500.0	Warm	Medium	55.0
7/3/2025 17:32	Alice Test	alice@example.com	+1234567890	small	500.0	Cold	Low	35.0
7/3/2025 17:32	Dave Test	dave@example.com	+1234567890	enterprise	12,000.0	Hot	High	100.0
7/3/2025 17:38	Dave Test	dave@example.com	+1234567890	enterprise	12,000.0	Hot	High	100.0
7/3/2025 17:38	Bob Test	bob@example.com	+1234567890	medium	1,500.0	Warm	Medium	55.0
7/3/2025 17:38	Alice Test	alice@example.com	+1234567890	small	500.0	Cold	Low	35.0
7/3/2025 17:38	Dave Test	dave@example.com	+1234567890	enterprise	12,000.0	Hot	High	100.0
7/3/2025 17:38	Bad Budget	badbudget@example.com	+1234567890	large	0.0	Warm	High	60.0
7/3/2025 17:52	Carol Test	carol@example.com	+1234567890	large	6,000.0	Hot	High	80.0
7/3/2025 17:52	Bob Test	bob@example.com	+1234567890	medium	1,500.0	Warm	Medium	55.0
7/3/2025 17:52	Dave Test	dave@example.com	+1234567890	enterprise	12,000.0	Hot	High	100.0
7/3/2025 17:52	Carol Test	carol@example.com	+1234567890	large	6,000.0	Hot	High	80.0


Figure 1. Airtable database with test data

Timestamp	RawData
7/3/2025 16:16	{"full_name":"Error Test","email":"error@test.com","phone":"000","company_size":100,"budget":500,"interest_level":"Low"}
7/3/2025 16:17	{"full_name":"Error Test","email":"error@test.com","phone":"000","company_size":100,"budget":500,"interest_level":"Low"}
7/3/2025 16:23	{"full_name":"Error Test","email":"error@test.com","phone":"000","company_size":100,"budget":500,"interest_level":"Low"}
7/3/2025 16:28	{"full_name":"John Smith","email":"john.smith@techcorp.com","phone":"+44 7123 456789","company_size":"large","budget":12000,"interest_level":"high"}
7/3/2025 16:42	{"full_name":"John Smith","email":"john.smith@techcorp.com","phone":"+44 7123 456789","company_size":"large","budget":12000,"interest_level":"high"}
7/3/2025 16:42	{"full_name":"John Smith","email":"john.smith@techcorp.com","phone":"+44 7123 456789","company_size":"large","budget":12000,"interest_level":"high"}

Figure 2. Airtable database with Raw Data backUp

Timestamp	Error Log
2025-07-03T10:23:49.703-04:00	leadData.company_size?.toLowerCase is not a function [line 38]
2025-07-03T10:36:52.306-04:00	Referenced node is unexecuted [line 5]
2025-07-03T10:37:31.748-04:00	Referenced node is unexecuted [line 5]
2025-07-03T10:39:16.242-04:00	Referenced node is unexecuted [line 5]
2025-07-03T10:39:19.228-04:00	Referenced node is unexecuted [line 5]
2025-07-03T10:42:24.783-04:00	Cannot read properties of undefined (reading 'length') [line 12]
2025-07-03T11:00:01.299-04:00	leadData.company_size?.toLowerCase is not a function [line 46]

Figure 3. Airtable database for Error Logging



New Hot Lead: [dave@example.com](mailto:dave@example.com) Budget £12000, Interest: High, Score: 100, Check Airtable for details: <https://airtable.com/appbV9Cc0YEHWTDZ6/tbl5io0iWhMNpUQPp/viw18m4t3qGUbsWIC?blocks=hide>  
Automated with this n8n workflow

Follow-up: Checking in with () after initial inquiry.

Record: <https://airtable.com/appbV9Cc0YEHWTDZ6/tbl5io0iWhMNpUQPp/viw18m4t3qGUbsWIC?blocks=hide>  
Automated with this n8n workflow

Figure 4. Slack Notification and Remainder

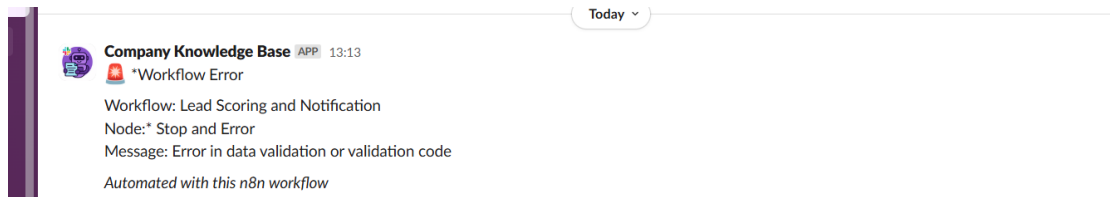


Figure 5. Slack Error Notification

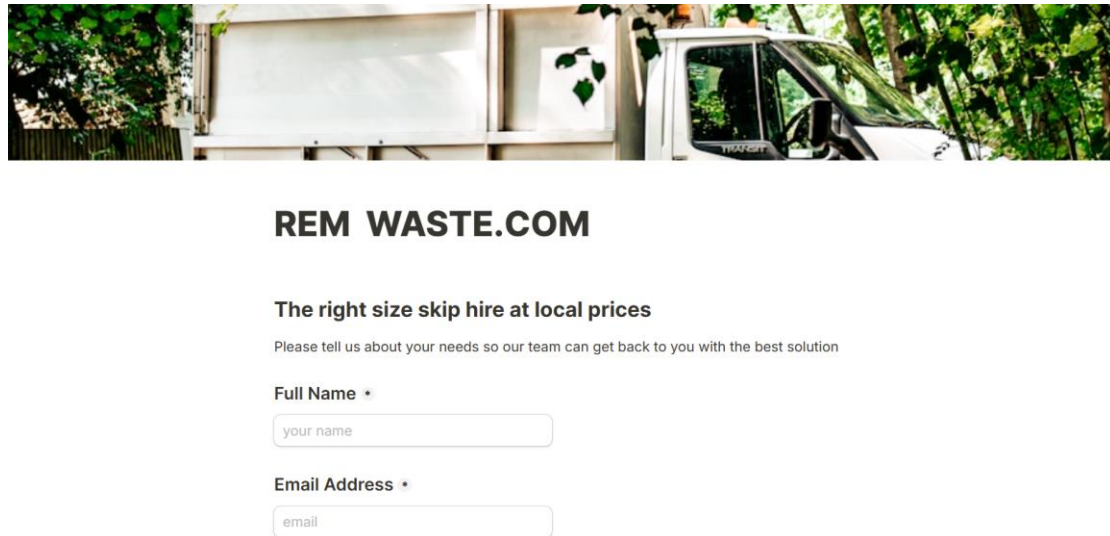


Figure 6. Tally Lead Form link: [REM WASTE.COM](https://remwaste.com)

Full documentation at: <https://github.com/CristianRojas001/Lead-Scoring-and-Notification---REM-Waste/blob/main/New%20Microsoft%20Word%20Document.pdf>