

Aaron, we're taking this one careful step at a time, just like when we refined permit ingestion at CM—breaking it down so nothing gets missed, and building confidence as we go. With Jeff in Boca guiding the AI scraping for those Utah County agendas (narrowing our initial focus there per your note—cities like Provo, Orem, Spanish Fork, etc., where development's steady with rezones and entitlements), we'll validate delivery to 25-50 local GCs/excavators at \$99/mo before broadening to full Wasatch or Clark. This keeps us lean, proves the model in a busy pocket (Utah County's got hundreds of those 4,377 excavators statewide), and scales systematically. Competitors like BuildCentral added 2026 agenda snippets to their planning tools, per recent reviews, but they're aggregated, not AI-summarized like ours—we'll improve by emphasizing our tags (doors/acres/stages) in outreach.

I'll address your points directly, nurturing you through with more granular steps—no assumptions on extrapolation. Think of me as that coach walking you through drills: Clear, patient, focused on success. For point 1: Yes, Jeff preps the API keys (he's our tech lead at \$120k-160k, vesting to 30%), but I'll detail how you coordinate. Point 2: Lags show in error messages or delays—I'll explain observation. Points 3-4: Expanded paragraphs with sub-steps, like Stripe setup from scratch. All ties to our milestone, with n8n automating 80%+ for humanless scale except your in-person pitches at local UCA events or lender meets.

1. Clarifying "Jeff links them via API keys in n8n (from our self-hosted setup)"

Yes, this requires Jeff's prep—he's the expert handling the backend (from his Boca setup), but you don't need to wait passively; coordinate via email/Slack to keep momentum. What happens: Jeff generates/obtains API keys from each tool (secure strings like "sk-abc123" for OpenAI), then inputs them into n8n's credential manager so workflows can "talk" to those services without exposing keys. This secures integrations and enables automation (e.g., n8n pulls leads from Apollo via key).

- Sub-Step A: Email Jeff with list: "Jeff, for n8n integrations, please generate/link API keys for Apollo, HubSpot, SendGrid, OpenAI, Typeform. Self-hosted VM is ready at [IP]:5678—log in with admin creds." (Why: Keeps you in loop; he preps in 1-2 hours.)
- Sub-Step B: Jeff replies with confirmation—test by running a dummy workflow (e.g., "Send test email via SendGrid node"). If issues, he debugs remotely.
- Tip: Schedule a 15-min Zoom if needed—avoids CM-like delays from miscommunications.

2. Clarifying "Tip: Start with Gmail if SendGrid setup lags—keeps momentum."

You'll observe lags via error alerts in n8n/SendGrid dashboard (e.g., "API key invalid" or "Domain verification pending"—shows as red flags or failed test runs). SendGrid setup can lag 24–48 hours for domain verification (they email confirmations). If so, switch to Gmail node in n8n (built-in, no lag) for initial tests.

- Sub-Step A: In SendGrid signup, if "Verification Pending" appears after domain add, note the lag.
- Sub-Step B: In n8n, swap to Gmail node (add it, auth with your Google account)—test send immediately.
- Tip: Check SendGrid status daily via their app; upgrade to paid if lags persist (rare, but CM blasts taught us backups keep flow).

3. Expanded "Build and Test the First n8n Workflow: Lead Ingestion (3-5 Days, \$0)"

This foundational workflow ingests your Dodge CSV (Utah County-focused, e.g., Provo-area GCs), filters irrelevants (e.g., non-excavators), and outputs clean data—no cost, as it's local processing. Jeff assists remotely; you observe/test.

- Sub-Step A: Log into n8n dashboard (browser: [http://\[your VM IP\]:5678](http://[your VM IP]:5678), use admin login from setup).
- Sub-Step B: Click "New Workflow" > Name "Lead Ingestion - Utah County."
- Sub-Step C: Add "Schedule" node (left panel search)—set to "Daily at 8 AM" (why: Refreshes leads automatically).
- Sub-Step D: Connect to "Read Binary File" node (for CSV)—input path: Upload "utah_county_leads.csv" to VM via SSH (Jeff guides: "scp file.csv ec2-user@[IP]:~") or n8n's file upload.
- Sub-Step E: Add "CSV" node to parse file—set delimiter ","; test run (green play button) to see data.
- Sub-Step F: Add "Filter" node—rules: Keep if "City" contains "Provo" or "Orem," exclude if "Type" != "GC" or "Excavation."
- Sub-Step G: Add "Set" node to clean (e.g., format phones).
- Sub-Step H: Test full: Click execute—output should show 200-500 filtered leads in console. Fix errors (e.g., "No file" = re-upload).
- Sub-Step I: Save; run daily test for 2 days to confirm stability.
- Tip: Screenshot errors for Jeff—builds iteratively, like CM permit tests.

4. Expanded Paragraphs 5, 6, & 7 (More Steps for Outreach, Traffic Handling, Conversion/Onboarding)

These build on ingestion—outreach sparks interest, traffic qualifies, conversion seals \$99/mo subs. All n8n-automated; focus Utah County for start.

Paragraph 5: Launch Outreach Sequences (Days 9-10, \$10/mo SendGrid Upgrade if Needed)

- Sub-Step A: In n8n > New Workflow "Outreach Sequences - Utah County."
- Sub-Step B: Add "Trigger" on ingestion output (link workflows via webhook).
- Sub-Step C: Add OpenAI node—prompt: "Personalize email: Dear [Name], Spot this Provo rezoning? Free map teaser for your bids. [Agenda summary]." Set API key (Jeff prepped).
- Sub-Step D: Add HubSpot/SendGrid node—input personalized text; set sequence: Email 1 (teaser CTA to site), wait 2 days, Email 2 (follow-up with param example).
- Sub-Step E: Add filter for high-scores only (from Step 4).
- Sub-Step F: Test on 10 leads—check sent emails in your inbox.
- Sub-Step G: If volume >100/day, upgrade SendGrid (\$10/mo for 40k emails).
- Tip: Monitor HubSpot analytics for opens—tweak if <15%.

Paragraph 6: Handle Traffic and Qualify in n8n (Days 11-12, \$0)

- Sub-Step A: In n8n > New Workflow "Traffic Qualification."
- Sub-Step B: Add "Webhook" node—get URL, add to site (contract dev integrates via code: <script>post to webhook on visit/form</script>).
- Sub-Step C: On trigger, add Typeform node—link your questionnaire (pre-made: Questions like "Regions? Min units?").
- Sub-Step D: Add OpenAI chatbot node—prompt: "Respond to query: Set 10-unit param? Score intent 1-10."
- Sub-Step E: Add branch: High-score > Slack alert to you ("Hot lead: Provo GC"); Low > Nurture email.
- Sub-Step F: Test: Simulate visit (curl webhook URL with dummy data)—check qualification in logs.
- Tip: If site not ready, use temp landing page (e.g., Carrd.co, \$19/yr).

Paragraph 7: Set Up Conversion and Onboarding (Days 13-14, \$0 + Stripe Fees)

- Sub-Step A: Go to stripe.com > Sign up business account (use Agenda Insider details; verify ID/bank).
- Sub-Step B: In Stripe dashboard > "Payments" > Create product "\$99/mo Utah County Subscription" (recurring, card only). Get API keys.
- Sub-Step C: Add to site: Dev integrates checkout button (Stripe.js code: <form> with publishable key).
- Sub-Step D: In n8n "Conversion Workflow" > Trigger on qualification > Stripe node (input keys from Jeff prep)—create session, email link if needed.
- Sub-Step E: On payment success (webhook from Stripe) > Trigger onboarding: Send welcome email via SendGrid (e.g., "Access dashboard, set filters").
- Sub-Step F: Add nurture: For non-converts, schedule re-engagement (e.g., "Missed our map? Try free week").
- Sub-Step G: Test: Fake payment in Stripe test mode—confirm flow end-to-end.
- Tip: Fees 2.9% + \$0.30/tx—budget \$50/mo start; watch for fraud alerts.

This gets our Utah County flow live—next, monitor for 25 trials. Let's schedule Jeff call to confirm preps—your word.