Instally AI Case Study — DuPont Tedlar Sales Lead Generation Prototype

1. Project Overview — Outcomes at a Glance

1. **Automation:** Fully automated extraction of companies from industry events/associations into a clean, de-duplicated list.
2. **Intelligence:** Enrichment via Apollo; size/revenue filters; stakeholder identification mapped to defined personas, with validation/fallbacks.
3. **Personalization:** Persona-specific outreach drafts with event context and value props, surfaced in a dashboard where sales can **review → edit → send** in one click.

2. AI Agent Workflow

1. **Data Sourcing:** The agent begins by scanning industry events and trade associations related to large-format printing, digital signage, and architectural films using **SerpAPI** and **FirecrawlAPI**. These APIs identify company names, websites, and exhibitor lists from public sources.
2. **Company Enrichment:** Extracted company data is passed into the **Apollo API**, which retrieves essential details such as revenue, employee count, and key contact roles. The system filters out companies below a defined threshold (e.g., fewer than 50 employees or <$5M revenue) to prioritize meaningful prospects.
3. **Stakeholder Identification:** Using Apollo's organizational data, the agent locates individuals holding relevant decision-making titles such as procurement heads, product development leads, and brand or innovation directors.
4. **Persona Classification:** Each stakeholder is mapped into one of three predefined personas: **Business Operations**, **Technical Innovation**, or **Brand & Marketing**, which determine the tone and content focus of the outreach.
5. **Personalized Outreach Generation:** The **OpenAI API** dynamically constructs a short, human-sounding outreach message incorporating contextual details: company name, stakeholder title, event reference, and a clear Tedlar value proposition. Each message is tailored to resonate with the stakeholder's priorities (cost efficiency, technical performance, or brand differentiation).
6. **Validation and Fallbacks:** If Apollo returns incomplete data, the workflow flags a "false match" and triggers secondary lookups through alternative APIs such as LinkedIn, Clay, or Hunter. In future iterations, the system will also analyze bounced or auto-reply emails to automatically re-target alternate contacts.
7. **Output and Review:** Qualified leads are summarized in a structured dashboard that presents: Event or source, Company details (size, relevance), Stakeholder identified, Rationale for qualification, and Generated outreach draft. The sales team can review and send directly, ensuring a one-click finalization process.

```
        Events/Associations → SerpAPI/Firecrawl → Apollo (enrich + filter) → Stakeholders
→ OpenAI (persona email) → Dashboard (review • edit • send) → CRM sync + Scheduler + Dialer + Analytics
    [cache/dedupe]          [fallbacks: LinkedIn/Hunter/Clay]              [A/B tests • reply parsing]
```

3. Data Processing Logic

- **Deduplication & Cleaning:** Company names and URLs are standardized and cross-checked to prevent redundant enrichment requests. Persistent storage ensures that previously processed firms are skipped in subsequent runs.

- **Filtering & Qualification:** Only mid-to-large-scale companies in the signage and materials segment are retained. Qualification also considers whether a company participates in high-value trade expos or publishes content aligned with surface protection and durable film materials.
- **Error Handling:** Missing records are logged for review. The system can retry enrichment after a time delay or query a secondary API. This lays the groundwork for robust scaling and minimizes LLM call waste.
- **Prompt Engineering for Outreach:** A structured template feeds the LLM with placeholders such as `{name}`, `{company}`, `{event}`, and `{persona focus}`. This ensures consistent personalization while preventing repetitive phrasing or hallucinated claims.
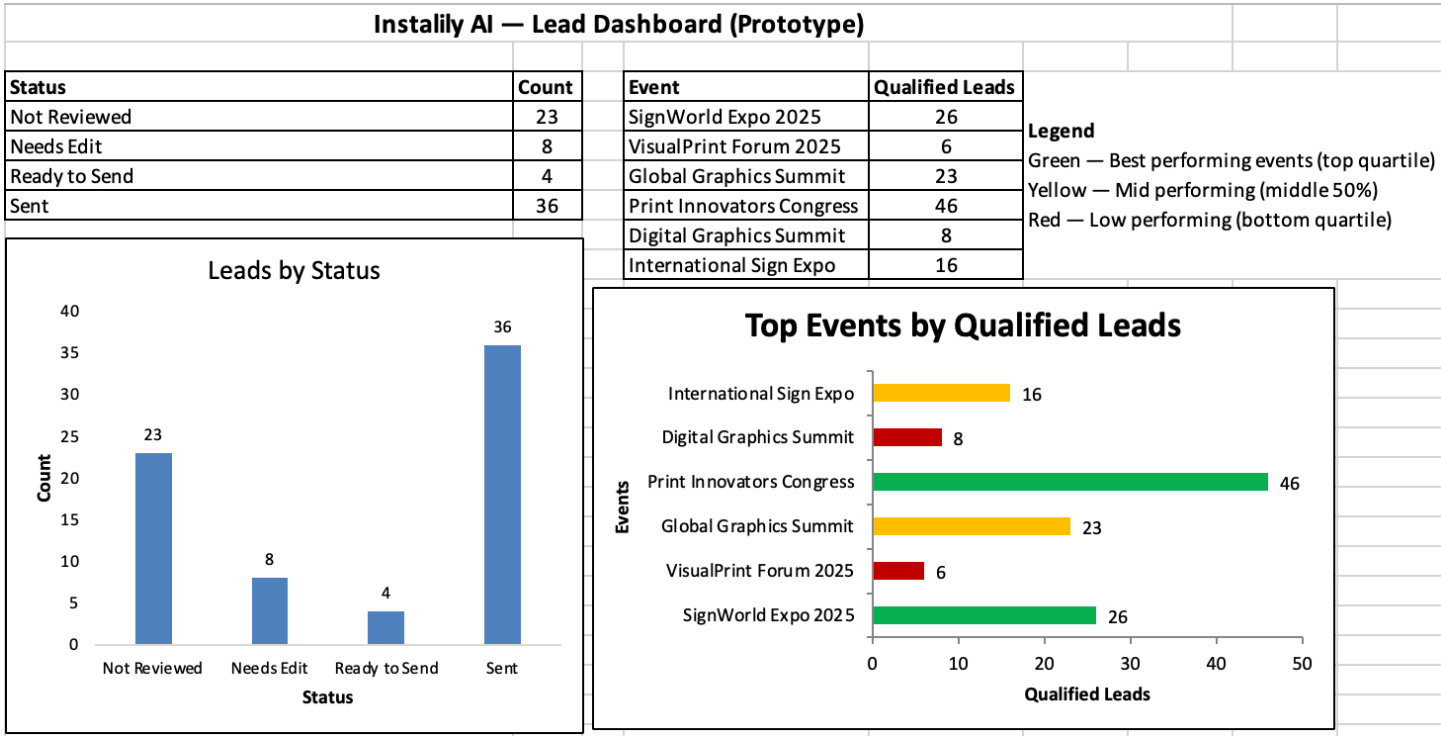
4. Implementation Results

- A pilot run on a small set of industry events produced an automatically generated list of **qualified prospects** that matched DuPont Tedlar's ICP for the signage segment. Each lead included verified company attributes and one or more decision-makers with valid LinkedIn profiles. The generated outreach messages achieved strong contextual relevance and required minimal human editing.
- Sample summarized result:

Event	Company	EmployeeCount	RevenueUSD	DecisionMakerName	DecisionMakerTitle	Persona	Rationale
PRINTING United Alliance	3M (Commercial Solutions Division)	61500	20B+	Woonsik (Woon) Shim	Chief Procurement Officer (CPO)	Business / Decision-Maker Persona	global presence with approximately 60000+ employees and an estimated 20B+ annual revenue

Continued...

OutreachBody	Status	Reviewer	LastUpdated	Notes	Actions
Subject: Extending 3M's signage durability & reducing maintenance costs Hi Woonsik, I came across 3M's work with PRINTING United and wanted to connect given your leadership in the Commercial Solutions Division. Across the signage and graphics space, teams are turning to DuPont Tedlar films to cut down on maintenance, avoid costly replacements, and ensure consistent brand presence despite UV exposure and harsh weather. These solutions help leaders maximize ROI while protecting visual assets long-term. Would you be open to a short call next week to explore how this could benefit upcoming projects at 3M? Best, DuPont Tedlar — Graphics & Signage Team	Not Reviewed	Liz	2025-10-05	Waiting	🔍 Review ✏️ Edit 📩 Send

This page shows one representative lead card for demonstration. A larger set of qualified leads, with full company details, decision-makers, rationale, and ready-to-send outreach drafts, is included in the attached Excel dashboard.

Instalily AI — Lead Dashboard (Prototype)

Status	Count
Not Reviewed	23
Needs Edit	8
Ready to Send	4
Sent	36

Event	Qualified Leads
SignWorld Expo 2025	26
VisualPrint Forum 2025	6
Global Graphics Summit	23
Print Innovators Congress	46
Digital Graphics Summit	8
International Sign Expo	16

Legend
Green — Best performing events (top quartile)
Yellow — Mid performing (middle 50%)
Red — Low performing (bottom quartile)

Leads by Status

(Bar chart — Count by Status: Not Reviewed 23, Needs Edit 8, Ready to Send 4, Sent 36)

Top Events by Qualified Leads

(Horizontal bar chart — International Sign Expo 16, Digital Graphics Summit 8, Print Innovators Congress 46, Global Graphics Summit 23, VisualPrint Forum 2025 6, SignWorld Expo 2025 26)

5. Scalability and Future Extensions

- **Reusable Architecture:** The workflow is modular; the same pipeline can target other Tedlar divisions (e.g., solar or aviation) by altering prompts, event sources, and qualification filters. This allows Tedlar's marketing teams to reuse the structure without having to rebuild the logic.
- **CRM and Outreach Integrations:** Future integration with HubSpot or Salesforce will allow automatic lead logging. APIs like **HowieAI** (for meeting scheduling) and **PowerDialer** (for automated calls) can plug in seamlessly once replies begin.
- **Continuous Learning:** The system can track which outreach versions yield the highest engagement and use that data to fine-tune future message prompts. Over time, the agent evolves from static automation to adaptive, insight-driven lead management.

6. Assumptions & Constraints

- Publicly available exhibitor data from trade events is accurate and up to date.
- Apollo provides reliable revenue and employee information for most firms.
- A cost ceiling of **$200** in LLM calls guides prompt efficiency and batching logic.
- All collected data is used strictly for demonstration and complies with privacy and fair-use standards.

7. Summary

This project showcases how an AI-agent-powered workflow can transform the manual, repetitive task of lead generation into a scalable, intelligent system. By combining multi-source scraping, structured enrichment, persona-based reasoning, and adaptive outreach, the prototype delivers a credible foundation for DuPont Tedlar's Graphics & Signage sales team, reducing hours of research to minutes of automated, review-ready output. The architecture is lightweight, modular, and future-proof, designed to expand effortlessly across industries and product lines while maintaining clean, validated, and personalized engagement at scale.