



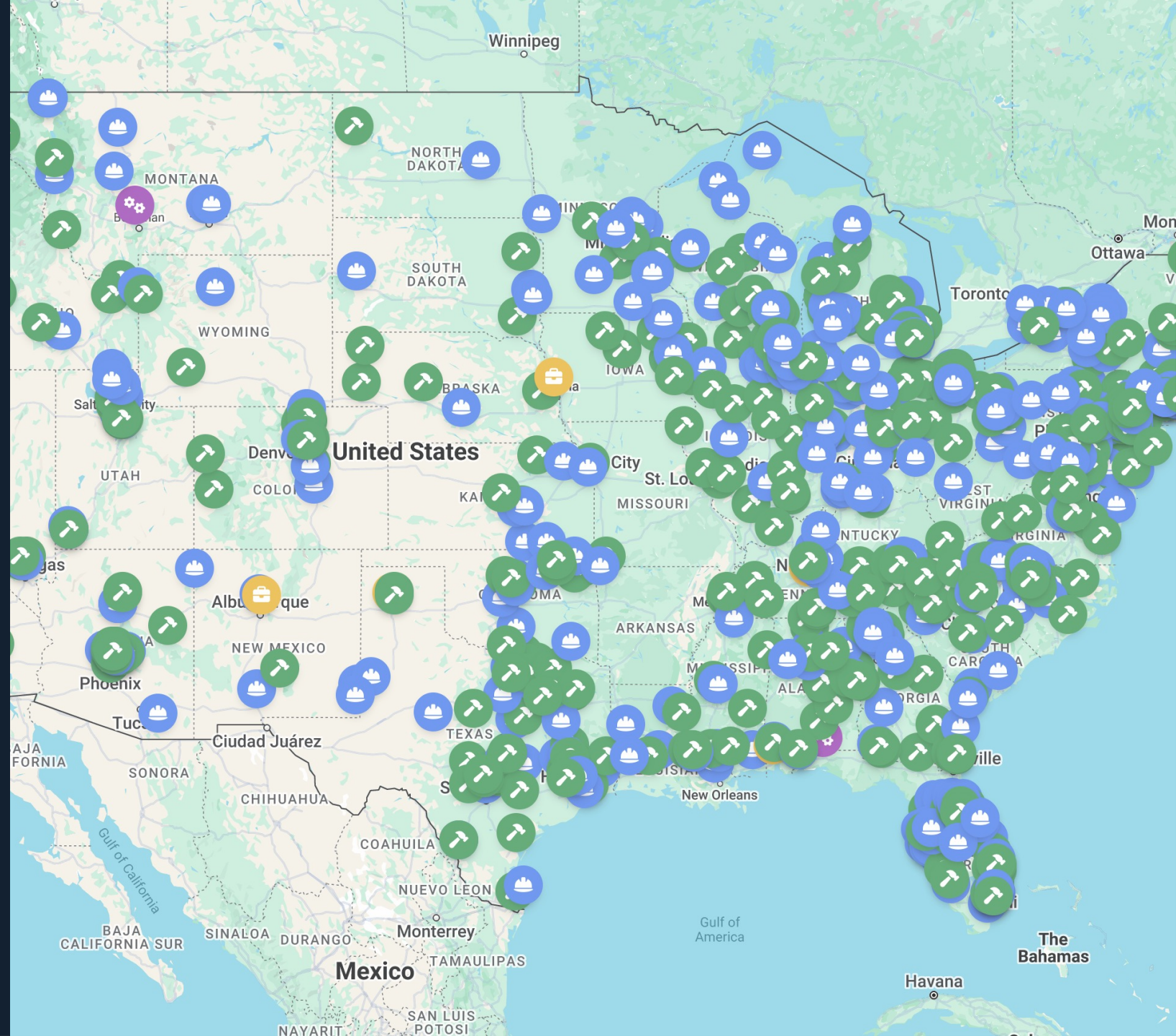
StructuredLayer

SELECTED IMPLEMENTATION WORK

Construction Data, Workflow and AI Systems

Multiple redacted examples showing how StructuredLayer connected opportunities, companies, locations, contacts, validation and controlled action.

Completed work | Client identities withheld





The work existed, but the context was scattered.

Teams were repeatedly searching, copying, comparing and rebuilding the same business context across disconnected sources.

01

Find opportunities

Search project listings
Review dates and scope
Copy details into sheets

02

Research companies

Visit websites
Classify services
Locate public contacts

03

Match the market

Search by geography
Check trade relevance
Remove duplicates

04

Prepare action

Create outreach records
Export approved data
Repeat for every project

The commercial risk

Projects, companies and contacts could not be reliably traced through one operating path - making scale dependent on more manual effort.



The operating layer separated records, rules and action.

The system was designed so AI-assisted research could support the work without becoming the source of truth.

DATA LAYER

Projects | Companies | Contacts | Locations | Matches | Processing events

WORKFLOW LAYER

Ingest | Normalize | Match | Enrich | Validate | Review | Export

CONTROLLED OUTPUTS

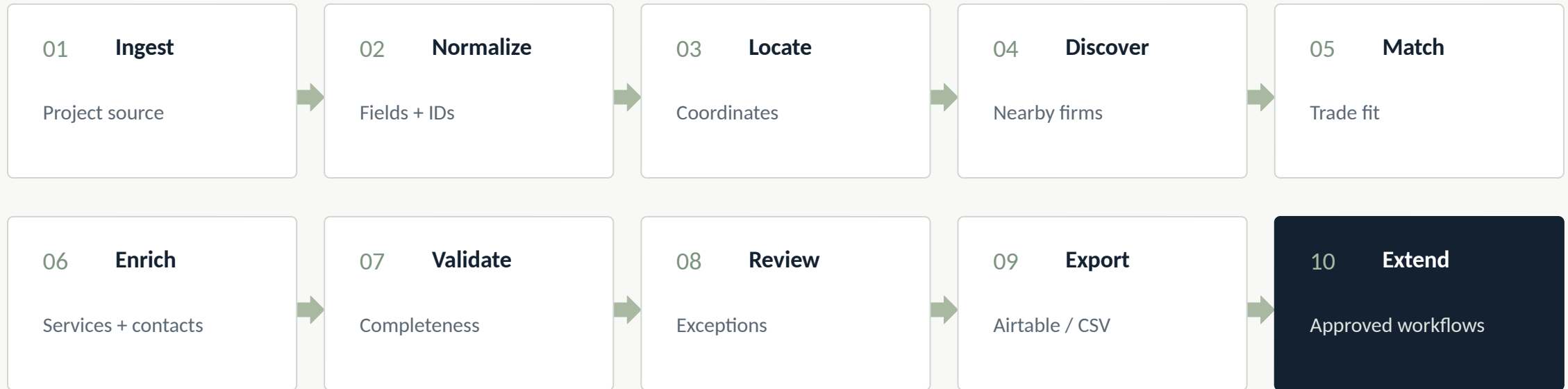
Searchable dashboard | Maps | Airtable | CSV | Review queue | Approved outreach records

Unique IDs and source links kept every record traceable as it moved between layers.



Ten controlled stages replaced repeated one-off research.

Every stage created or updated a record; uncertain results moved to review instead of being treated as complete.



Human decision boundary

The system could collect, classify and prepare information. A person remained responsible for exceptions, sensitive decisions and any external action.



The database made future workflows reusable.

The implementation was not only a dashboard. It created durable records that another tool, team or provider could continue using.

PROJECT

- Project ID
- Name + status
- Location + coordinates
- Bid date + value
- Trades + CSI codes
- Source + updated date

COMPANY

- Company ID
- Name + address
- Website + phone
- Business type
- Services + service area
- Research status

CONTACT

- Contact ID
- Company ID
- Name + role
- Business email
- Public profile
- Verification status

MATCH

- Project ID
- Company ID
- Distance
- Trade relevance
- Match reason
- Review status

PROCESSING

- Source
- Run date
- Status
- Missing fields
- Error category
- Review decision

Project ID + Company ID + Contact ID

These identifiers allowed every output to trace back to its source, owner and review state.



The evidence shows an operating system built for volume.

These figures describe visible records and processing runs. They are not presented as audited revenue or guaranteed daily output.

24,318

construction-related business records

16,162

construction opportunity records

1,180

locations in a documented scan

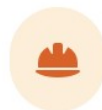
1,000

records supported in a working batch



Map View

Find businesses by location and radius



Construction Sites

View and manage construction site records



AI Assistant

Get help with research and analysis



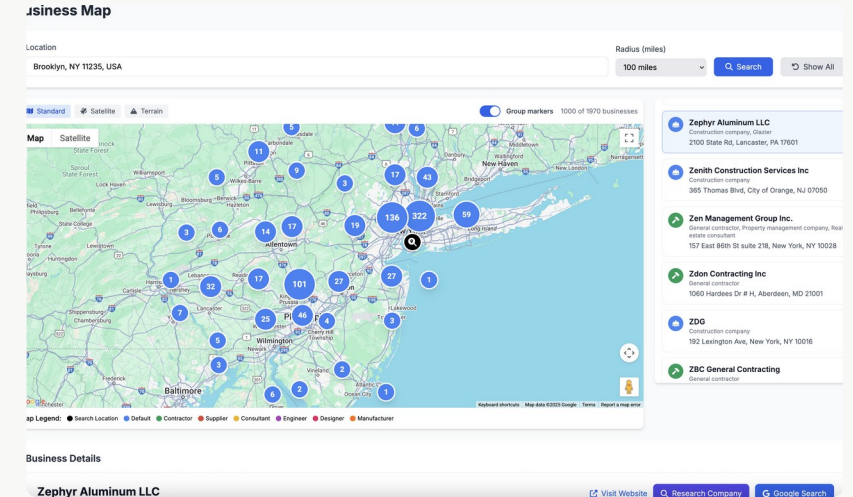
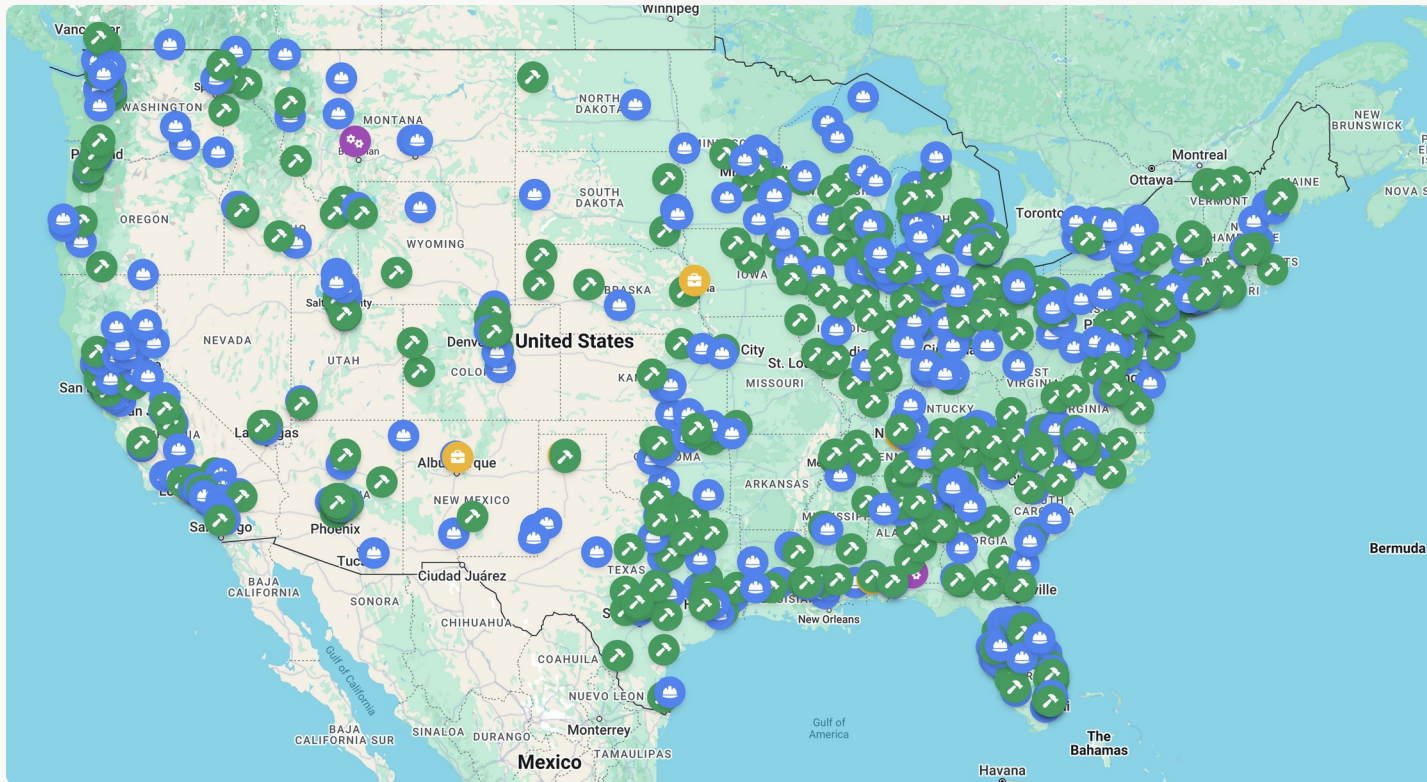
Airtable Integration

Manage Airtable exports and settings



Project locations became searchable contractor markets.

The system connected project coordinates to nearby companies, then preserved the match reason and distance for review.



What the match retained

Project ID | Company ID | distance | trade
relevance | review status



Failed sources became exceptions, not fabricated answers.

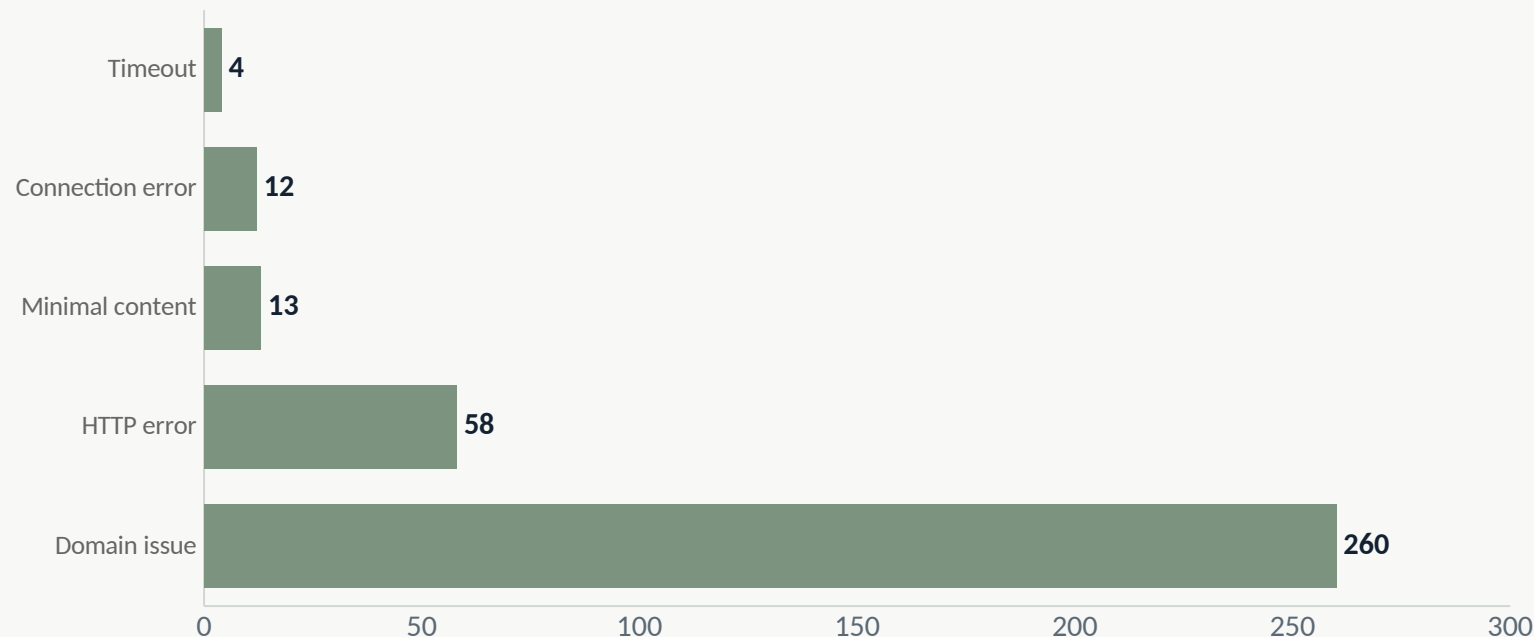
A representative 1,000-website run separated successful processing from domain, content and connection failures.

653

successfully processed

347

routed to exception
categories



Control rule: preserve missing fields, record the exception, and escalate only the records that require human attention.



The project record carried context beyond a title and URL.

Structured fields made the opportunity searchable, comparable and available to downstream matching and review workflows.

Disaster Restoration and Water Clean Up Services

ID: 6763501

Status: Sub-Bidding

Type: Commercial

Construction: Service, Maintenance & Supply

Sectors: Public – State/Provincial, Public – All

Contracting: Bidding as Prime

Companies: Clemson University

Location: Multiple Locations, Clemson, SC

29631 (Pickens County)

Greenville-Anderson-Mauldin, SC

Coordinates: [34.6834](#), [-82.8374](#)

Value: Not Available

Updated: 12/19/2024

Bid Date: 12/18/2029

Start Date: 1/15/2030

Documents: Project details only

Trades:

General Requirements

Heating Ventilating and Air Conditioning (HVAC)

Openings Closeout Submittals

Decentralized HVAC Equipment +7 more

CSI Codes:

014000 Quality Requirements

014100 Regulatory Requirements 014119 Rules

017000 Execution and Closeout Requirements

017800 Closeout Submittals +7 more

Sub-Categories:

Educational--College, University

Description:

Clemson University desires to establish a fixed price (i.e. Not to Exceed) contract with multiple vendors to provide disaster restoration and water clean-up services. The work shall include mitigation required due to any loss or subsequent cleaning required to restore facilities to at least a pre-loss condition on the Clemson University campus or any other University facilities located throughout the state of South Carolina.

CORE CONTEXT

Project ID
Status and type
Contracting route
Location and coordinates
Bid and start dates

SCOPE CONTEXT

Construction category
Trades
CSI codes
Description
Source and update date

Why this matters

- A company can be matched to the opportunity for a stated reason.
- An exception can identify exactly which field or source failed.



Automation accelerated work without removing accountability.

The operating layer defined what could run automatically, what required review and what remained outside the system.

- | | | |
|----|--------------------------|---|
| 01 | Source control | Use authorized or public sources and retain provenance. |
| 02 | Missing data | Keep the field empty or mark it for review; do not silently invent it. |
| 03 | Duplicate control | Match identifiers and locations before creating another company record. |
| 04 | Human approval | Require review for exceptions, sensitive decisions and external action. |
| 05 | Portability | Export approved records to client-controlled Airtable or CSV. |

AI-assisted research supported the workflow. The structured records remained the operational source of truth.



The measurable change was capacity and visibility.

The evidence supports a transition from repeated individual lookup to a connected, searchable and batch-capable workflow.

1

One searchable view

Projects, companies and contacts in one operating environment.

2

Geographic matching

Project locations connected to nearby relevant businesses.

3

Batch processing

Large record sets processed without mandatory one-by-one research.

4

Visible exceptions

Missing and unsuccessful results separated from accepted records.

5

Reusable foundation

Approved data prepared for reporting, outreach and future automation.

Evidence boundary

No public claim is made about revenue, conversion rate or hours saved unless those results are separately verified from client records.



Different problems required different operating layers.

The same method - connected records, controlled workflows and reviewable action - supported several construction-data use cases.

01

Opportunity and contractor intelligence

Connect projects, locations, companies, trade relevance and validation into one searchable workflow.

02

Company-data enrichment and classification

Turn incomplete company lists into structured service, market, location and quality records.

03

Contact research and outreach preparation

Connect approved companies to decision-makers, verification states, message drafts and CRM-ready outputs.

Business data



Connected records



Controlled workflows



Reviewable action

The business had names, addresses and websites, but lacked consistent services, project types, operating areas and research status.

Accepted, incomplete and exception states



Research became a repeatable enrichment pipeline.

The workflow separated retrieval, classification and validation so an inaccessible website did not become an invented company description.



COMPANY OUTPUT

Company ID | canonical name | website status | business type | project types | service area | source links | research status



The output included both useful data and visible failure rates.

Quality evidence matters because a polished row is not trustworthy unless the business can see how it was sourced and whether it passed validation.

1,000

company websites in the representative run

653

successfully processed websites

347

documented exceptions

5

explicit exception categories

http://www.americangeneralconstruction.net	Yes	Yes	No	Yes	No	Americangeneralconstruction provides Kitchen R...	Western Region General Contractor, Prefabricat...
http://agconstructionfl.com	No	Yes	Yes	Yes	No	Agconstructionfl provides Bathroom Renovation,...	Agconstructionfl is a professional home buildi...

Construction Company Services Distribution

Kitchen Renovation	40.0%
Bathroom Renovation	45.0%

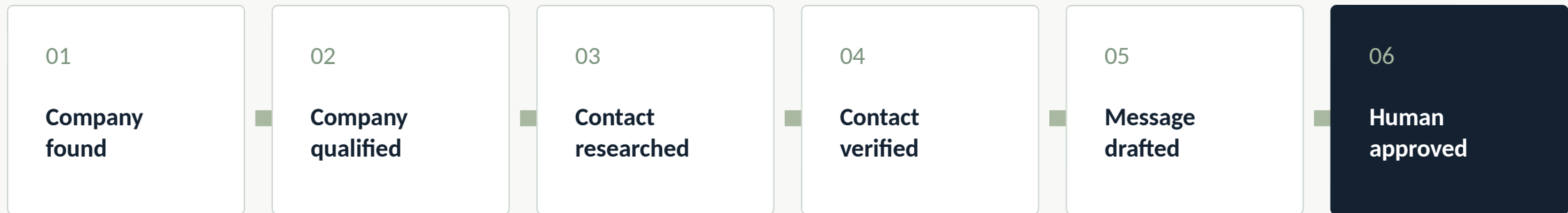
Evidence retained

- Source accessibility
- Detected service categories
- Missing-field and error status
- Processing date and review state



A company record was not automatically a ready lead.

The business needed to distinguish an identified company from a verified decision-maker, an approved opportunity and a message ready for human review.



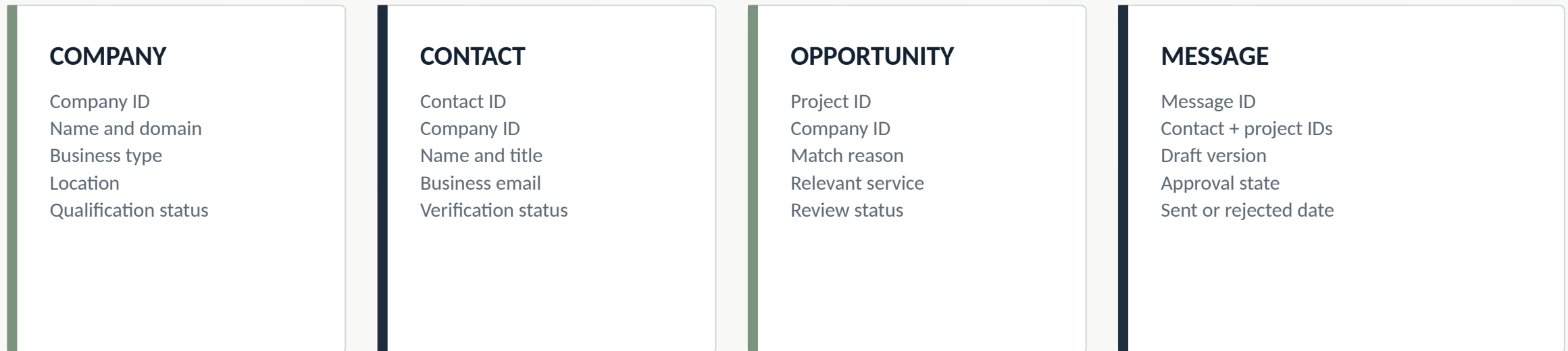
The control that mattered

A missing email, uncertain title or weak company match remained visible. External outreach could be prepared, but it did not have to be sent automatically.



Connected IDs kept people and messages in context.

The workflow used separate records so contact verification, opportunity relevance and message approval could change independently.



Result

The team could tell who was found, why the company was relevant, what was verified, which message was approved and what happened next.



The working view exposed progress, gaps and next actions.

This recreated view protects personal data while demonstrating the operating logic present in the implementation evidence.

APPROVED COMPANY RESEARCH QUEUE

85 businesses identified

Company	Company status	Contact status	Opportunity	Message	Next action
Company A	Qualified	Verified	Matched	Draft ready	Review
Company B	Qualified	Missing email	Matched	Not created	Research
Company C	Review needed	Not started	Possible match	Not created	Validate
Company D	Rejected	Not retained	No match	Not created	Close

No credentials or unrestricted access displayed | Personal details redacted | External action remains approval-controlled



Businesses can begin with one dataset or workflow.

A business does not need to replace every tool at once. The first scope should create a usable foundation and a visible operational result.

01

Structure existing data

Clean, match and connect historical records, documents or company lists.

02

Connect recurring sources

Ingest portals, exports, inboxes, APIs or approved browser workflows.

03

Implement one workflow

Build a controlled path such as RFQ intake, matching, enrichment or reporting.

04

Build the operating layer

Connect multiple workflows, dashboards, permissions and approved AI actions.

Recommended first step: describe the workflow costing your team the most.



HANDOVER AND NEXT STEP

The system should remain useful after the engagement ends.

The operating layer can be handed over through client-owned records, documentation, access controls, known limitations and team training.

Data dictionary

Record relationship map

Source register

Validation rules

Operating guide

Ownership and maintenance plan

Could this pattern fit your business?

Start with one workflow. StructuredLayer will review the sources, records, handoffs, controls and outcomes needed before recommending implementation.

START HERE

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