



TECHFORWARD CONFERENCE

How American Humane Society Turns Farm Audit Data into Better Animal Welfare Decisions

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AN OVERVIEW

Who we are

Founded in 1877 as the first national humane organization in the U.S., American Humane Society has spent nearly 150 years rescuing, caring for and protecting animals — wherever and whenever they're in need.



1.7B+

animals protected & cared for



6,000+

locations audited to standard



95

countries reached

What we do

Rescue & Protect

- Sanctuary
- Disaster Response
- Cruelty & Neglect
- Wildlife Protection

Care for Our Heroes

- Pups4Patriots™
- Military Working Dog Reunifications

Certify Humane Treatment

- Companion Animal Welfare
- Ecotourism
- Farms
- No Animals Were Harmed®
- Zoos & Aquariums

Champion Animals

- Hero Dog Awards®
- Kiessling Prize
- Escape from Extinction series



THE FARM PROGRAM

American Humane Certified™ Farm Animals

Launched in 2000 — the first and largest independent farm animal welfare certification program in the U.S., verified by third-party audits.



1 Billion+

farm animals protected



4,931

farms certified



200+

certified producers



Audits check space, air & water quality, nutrition, health care and natural behaviors — done annually, sometimes unannounced.



Standards are science-based, set by our Farm Scientific Advisory Committee and fully public.

~90% of cage-free eggs sold in the U.S. carry the American Humane Certified label.

Before: a one-way pipe

Data flowed in one direction — out of the audit, into a file, and no further.



Behind the scenes: exports like the audit data dump and checklist flat files needed their relational structure mapped by hand



Three bottlenecks blocking audit intelligence



Row limits and performance

Some checklist and custom-field exports exceeded Excel's row limit, and analyzing the large files required powerful computing resources.



Disconnected schemas

Audit data lived across multiple flat files with relationships that had to be reconstructed by hand.



No Self Serve

There was no self-serve path; every question was routed through IT.

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What if we didn't have to know what to look for?

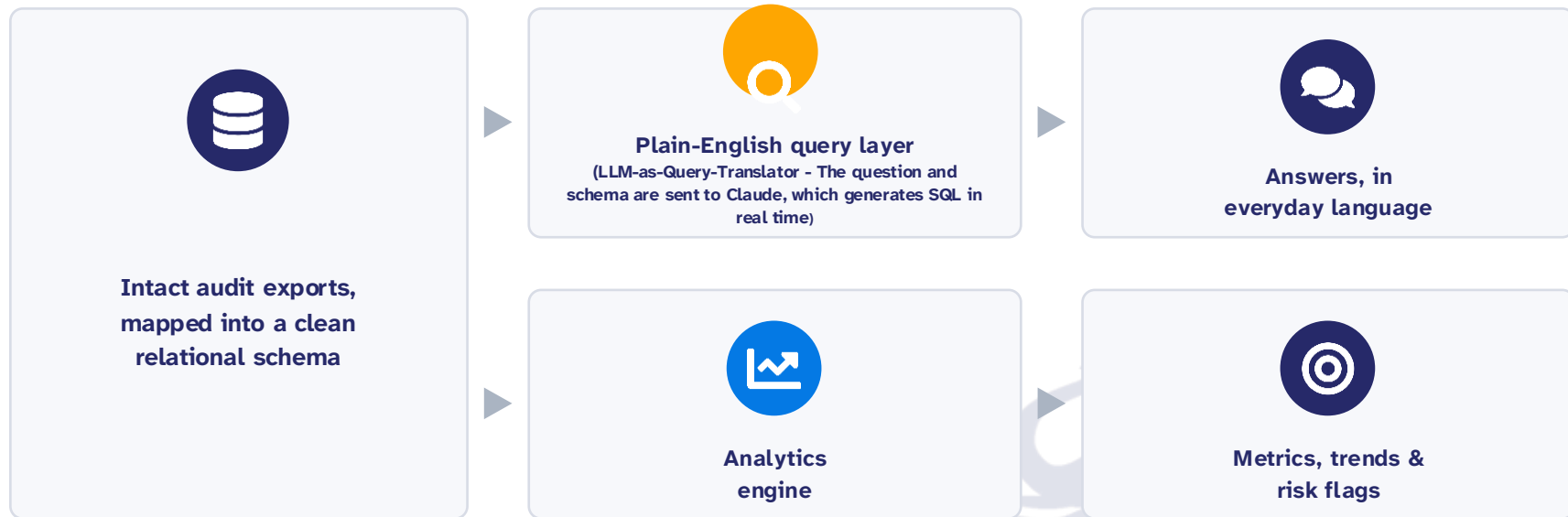
Ask a plain-English question and get an answer. Or let the patterns, risks and trends surface from many thousands of checklist responses.

That idea became a proof of concept: the Farm Audit Portal.



How it works, end to end

ZO COMPUTER



The analytics engine uses Claude to generate SQL queries and executes them in DuckDB. Query limits and timeouts apply, and it displays results in Summaries and Dashboards.

What actually moved, year over year

Two actual views from the working prototype — auto-generated insights, and the services that moved the most.

Year-over-Year Trends

Compare audit quality, failure patterns, and score movement across years.

Traceability improved the most among services, while Laying Hens - Pasture weakened the most.

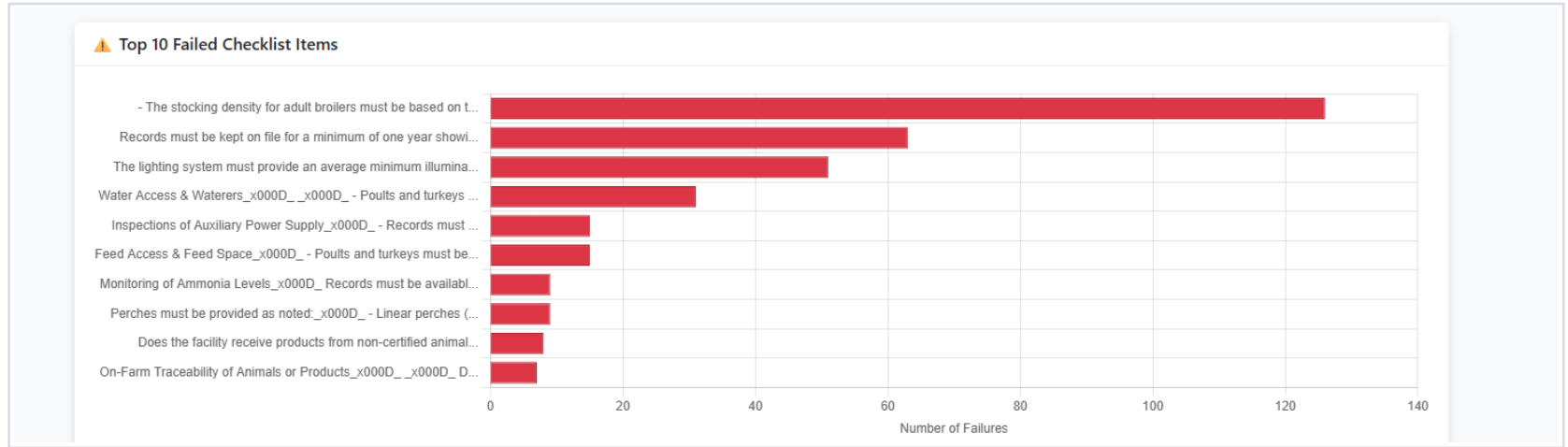
E18 had the biggest change in failures year over year.

Top movers

Item	Type	Δ Score
Traceability	service	+32.36
Laying Hens - Pasture	service	-13.40
Laying Hens - Free Range	service	-2.22
Swine	service	+1.63
Laying Hens - Cage Free	service	-0.10

The most-failed items, in the real portal

Another actual screenshot — the checklist items farms fail most often, ranked across every audit on file.



Stocking density for adult broilers is the single most-failed item — more than double the next most-common failure.

What we learned – the not-so-fancy path to adoption



Start with your actual export, not the ideal schema

Most data integration projects fail because they architect for clean data (like we did!) We later discovered the source is messier than expected. .



Map relationships before you build anything fancy

The unglamorous schema-mapping work is what makes a natural-language layer work reliably.



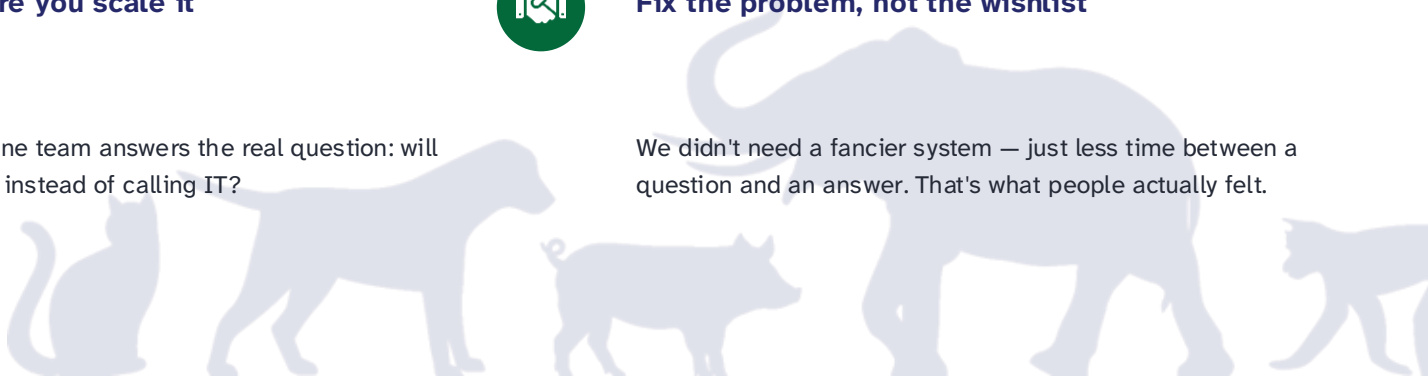
Prove it small before you scale it

A proof of concept for one team answers the real question: will people actually use this instead of calling IT?



Fix the problem, not the wishlist

We didn't need a fancier system — just less time between a question and an answer. That's what people actually felt.



Where this goes next



Expand beyond the pilot

Extend plain-English access from the Farm Program pilot to other certification programs (zoos & aquariums, ecotourism etc.)



One-page audit summary sheets

Before a visit, AI drafts a one-page summary of a farm's history — past results and auditor notes — for the auditor to review.



Deeper AI assistance

Move from answering questions to surfacing the ones worth asking — proactive pattern and risk detection.



Every AI-answered question consumes usage units — something we're actively monitoring as adoption scales.



Thank You!

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