SOLEDAD DATA SOLUTIONS

INTELLIGENCE AT SCALE

CASE STUDY

The Cost of Skipping Qualitative Validation

A retrospective on a missing engineering safeguard, and the principles it now informs.

CLIENT
Ad-Buying Platform (Unnamed)

INDUSTRY
Digital Advertising / DSP

ENGAGEMENT TYPE
Full-Stack Engineering Services

CLASSIFICATION
Retrospective / Lessons-Learned

RETROSPECTIVE

EXECUTIVE SUMMARY

Some of Soledad Data Solutions' clearest principles were not learned in a project that worked. They were learned in a project where one missing layer of validation — qualitative review of the actual content being shipped — proved fatal to the client we were serving. This retrospective documents that gap, the cost of it, and the engineering posture we have carried with us into every engagement since.

THE ENGAGEMENT

Engineering for an Ad-Buying Operation

Soledad's engineers were embedded inside an ad-buying organisation whose business depended on placing creative campaigns into auction across Facebook, Google, and a handful of adjacent networks. Two priorities dominated the product roadmap. The first was reducing the friction of iterating on live ad deployments: buyers needed to spin up, modify, and retire creative variants quickly enough to keep pace with changing inventory. The second was a bid-range recommender — surfacing the price ranges most likely to win exposure on the digital-marketing real estate the client cared about most.

We built both. The iteration surface was a full-stack application that gave ad buyers the ability to insert text and image content in-app and push it directly to the integrated ad networks. The workflow was deliberately collaborative — developers worked shoulder-to-shoulder with end users — so that the tooling matched the operational reality of a buying desk rather than a sanitised specification. Iteration speed went up. Bid efficiency improved. By the engineering metrics we had agreed to, the engagement was successful.

CLIENT TYPE	PRIMARY CHANNELS	ENGAGEMENT MODEL
Demand-Side Platform	**Facebook · Google · Adjacent**	**Embedded full-stack**

WHAT WAS VALIDATED

Quantitative Guardrails, As Specified

Output validation in the application enforced the quantitative envelope each downstream ad network publishes. Character counts on headlines and body text were bounded. Image dimensions and file sizes were checked against the constraints of the destination placement. Required fields were required. Disallowed fields were rejected. In short, the application would not let a buyer submit creative that violated the shape constraints of the target network.

This was the validation the specification asked for. The buyer could not, for example, submit a 320×50 banner where a 728×90 was required, or send a 60-character headline into a slot that tolerated 40. Those classes of mistake were eliminated at the point of input. The engineering team treated this as the natural scope of "output validation" — and so did the product brief.

WHAT WAS NOT VALIDATED

Qualitative Compliance Was Out of Scope

There was no review layer for the *content* of the creative itself. No image analysis pass to compare a submitted asset against the platform-specific acceptable-content standards published by Facebook, Google, and the rest. No NLP review of body text against the same standards. No retrieval step that surfaced applicable policy language in-context as the buyer was composing the ad. The application would happily accept a perfectly-sized, perfectly-lettered image whose imagery or copy crossed a published policy line — and dispatch it to the network for review.

Mis-steps were not malicious. They were a function of speed, the breadth of platform policies, and the absence of automated counsel at the moment of submission. Once those mis-steps accumulated, platform enforcement followed: warnings, throttling, and ultimately bans from the networks that represented the client's primary distribution. The cascade of bans cut off the inventory the business depended on. The organisation did not recover. The company will remain unnamed. RIP.

WHAT GETS COUNTED IS NOT THE SAME AS WHAT MATTERS

The validation we built guaranteed the wrong kind of guarantee. Character counts and pixel dimensions are easy to test, and so they were tested. The harder, more consequential guarantee — that the content being shipped would not get the client banned from its primary distribution networks — required image analysis and NLP review of the actual content against published platform policy. That layer was not in the specification, and so it was not in the product.

We are responsible for that gap. Naming what we did not build is part of how we make sure we do not skip that layer again.

THE LESSON

Soledad's Forward Engineering Posture

Experiences like this one have shaped how Soledad's product and engineering leadership now scope, review, and ship new work. Qualitative compliance is not an enrichment. It is part of the definition of done. The principles below are the explicit guardrails that now travel with every engagement we accept — especially those touching generative AI, third-party platform integrations, regulated data, and PII.

QUALITATIVE VALIDATION IS IN-SCOPE BY DEFAULT

Where the output of a system is content that lands on a third-party platform, qualitative review against that platform's published policy is part of the validation layer. It is not a stretch goal and it does not get traded for velocity.

GENERATIVE AI SHIPS WITH GUARDRAILS

Any generative system Soledad builds ships with a content-policy evaluation step — image, text, and where relevant audio — applied before the output reaches a destination the customer can be held accountable for.

THIRD-PARTY PLATFORMS ARE GOVERNANCE SURFACES

Integrations with platforms whose rules can shut a customer down are designed with the rules themselves as a first-class input — policy versions tracked, surfaces updated when the policies change, and operators warned before submission, not after.

PII AND HIGH-RISK DATA CARRY THEIR OWN CONTRACT

Engagements involving PII, financial, health, or biometric data carry an explicit data-handling contract that names the validation and review steps that apply. Those steps are not negotiated away to make a deadline.

CLOSING NOTE

An Engagement Worth Remembering

Naming a project we shipped — and the way in which it failed the people who hired us — is uncomfortable. It is also necessary. Engineering organisations that do not metabolise their mistakes ship them again. We choose to keep this retrospective in the open set of case studies, alongside the engagements we are proud of, because the discipline it taught us shows up in every specification we now write.

Soledad Data Solutions is built around the conviction that applied AI engineering is a craft — and craft includes the unflattering lessons as much as the successful ones. This case study, however unhappy its ending, is part of the body of work that informs how our teams scope, review, and ship.

> **CONFIDENTIALITY NOTICE**
>
> The client organisation is intentionally not named in this document. Operational details, platform-specific outcomes, and any directly identifying information have been withheld. Specific architecture and product details have been generalised. This document is intended for illustrative and didactic purposes — and is shared in order that the engineering lesson at its centre be visible.