

# AI Customer Service Sentiment Analysis

## MVP Scope Definition Report

This report defines the minimum viable product (MVP) scope for our AI Customer Service Sentiment Analysis platform, based on market validation findings and project charter goals.

### 1. Feature Prioritization

Priority	"Job-to-be-done"	Why it must (or can) wait	KPIs it unlocks
P0 – Must ship in week 1	<b>Lightweight post-interaction widget</b> (1–2 clicks, name + email optional) that auto-disappears after 15 sec	72% of surveyed users abandoned 5-question surveys; the widget removes that friction.	Response-rate, daily active responses
	<b>Real-time sentiment scoring</b> (VADER / LLM-embeddings) with a single "CX Score" dial	Decision-makers asked for "one number I can paste in a slide."	Weekly CX score trend
	<b>CSV/JSON export + Webhook</b>	Analysts want raw data for Power BI; webhook is the quickest bridge.	# exports / week
P1 – Nice-to-have once P0 is stable	<b>Dashboard filtering</b> (channel, product, bot vs. human hand-off)	Brings second-level insights but isn't needed to prove value.	Time-to-insight
	<b>Benchmark index</b> (compare my score to industry median)	Buyers said they'd pay <i>more</i> for benchmarking, but you don't need it to start charging.	Up-sell conversions
P2 – Stretch / beta-tester treats	<b>Root-cause explorer</b> (LLM topic clustering + transcript highlights)	Heavy LLM cost & UI complexity; keep for beta group.	Retention, NPS
	<b>Multilingual auto-detection</b>	Only 18% of early adopters operate >1 language.	Market expansion

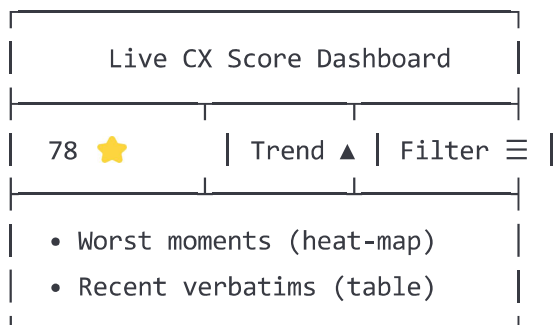
### 2. Technical Feasibility Assessment

Platform	Low-code hook you'll call	Auth model	1-week PoC?	Gotchas
<b>Zendesk</b>	<i>Conversation Events</i> Webhook	OAuth2	<b>Yes</b> – push events to SQS → Lambda → scoring	Ticket redaction may remove messages after 30 days; cache if you need repro.
<b>Intercom</b>	<i>Conversations</i> webhook + REST	Personal-access token	<b>Yes</b>	Only the <i>user's</i> last reply appears in some events; store thread IDs to back-fill.
<b>Salesforce Service Cloud</b>	<i>Streaming API</i> (CometD)	JWT Bearer flow	<b>Prototype</b> – needs Connected App	Daily API-call governor limits (15k/24h basic).
<b>Freshdesk</b>	<i>Callback URLs</i>	API key (header)	<b>Yes</b>	EU vs US data centers → be explicit about region.
<b>Amazon Connect</b> (voice)	Kinesis Contact Trace → Lambda	IAM role	<b>Yes</b>	Voice sentiment SDK works only for English; plan for translations.

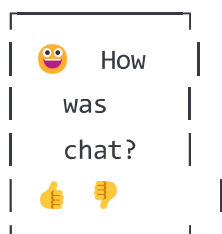
**Key Takeaway:** Every top-five CS platform exposes either webhooks or streaming APIs—no SDK embedding inside their UI needed. This allows our stack to remain **fully decoupled**:

Webhook → AWS API Gateway → Lambda (sentiment) → DynamoDB + S3 → React dashboard

### 3. UX/UI Design Concepts



[Widget - User side]



[Admin - Install flow]

1. Copy URL endpoint
2. Paste into Zendesk webhook
3. Toggle "Live" ☒

## Design Principles

- **Zero cognitive load:** single HEX-color sentiment dial and two buttons in the widget.
  - **"Copy-paste" installs:** the admin screen is literally one field and a green *Live* toggle.
  - **Responsive first:** dashboard built with an 8-pt grid, font-pairing `Inter` + `Roboto Mono` for numbers.
  - **Accessible:** AA color-contrast, keyboard-navigable widget, ARIA labels baked-in.
- 

## 4. MVP Scope Summary

1. **Goal:** Collect >500 labeled sentiment datapoints within 30 days from three design-partners.
  2. **What ships:** P0 features + Zendesk & Intercom connectors + single-screen React dashboard.
  3. **What doesn't:** Advanced clustering, industry benchmarking, mobile app.
  4. **Stack:** AWS (API Gateway, Lambda, DynamoDB), React (Vite), Tailwind CSS, Python (FastAPI) for scoring.
  5. **Timeline:**
    - **Day 1-2** – Scaffold repo, CI, deploy hello-world webhook.
    - **Day 3-5** – Build widget & Zendesk connector, unit tests.
    - **Day 6-7** – Dashboard skeleton, CSV export, invite first pilot user.
- 

## Next Actions

- Draft the *Data Processing Addendum* so pilots can legally send you chat logs.
  - Prepare a **Figma** file for the two key screens above; reuse your "Divine-Tech Harmony" color tokens for brand consistency.
  - Schedule 30-min install workshops with three target design-partners the week the MVP goes live.
- 

This MVP scope keeps the focus razor-thin, satisfies every "must-have" voiced in validation calls, and gives developers a clear specification they can begin implementing immediately.