

Insightflow — Building Materials Inventory Tracker

Type a sale in plain English and it becomes a clean, reportable record.

BUILT WITH

Next.js

TypeScript

Google Gemini

Supabase

PostgreSQL

Power BI

Conversational UI

~90%

of common formats covered by the fallback parser

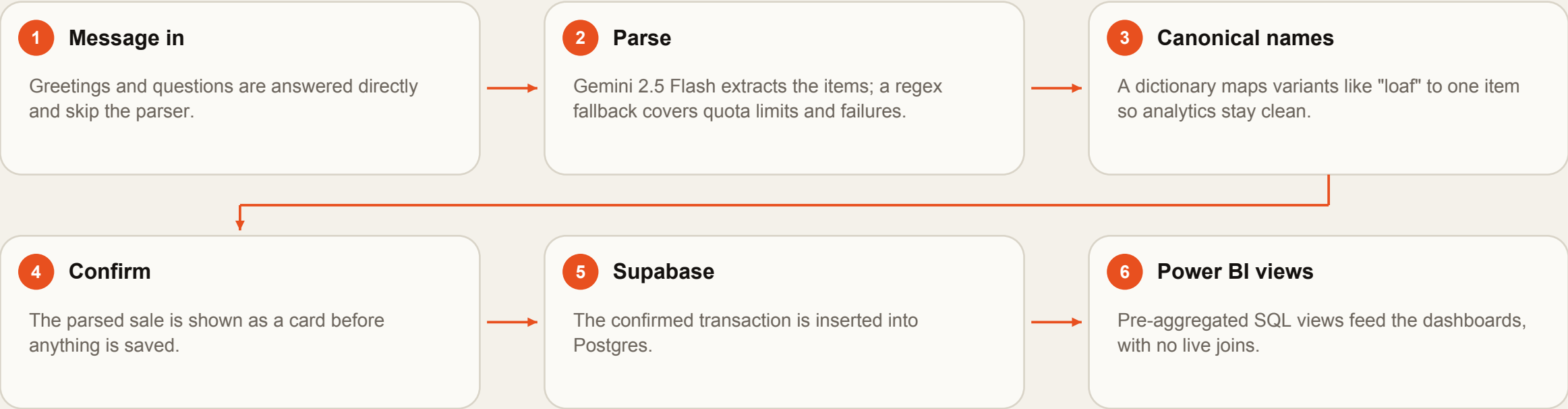
3

pre-built SQL views for Power BI

2

parsers: Gemini first, regex as backup

How it works



WHAT EACH PART DOES

Chat interface	Takes messages like "10 cement at 5000, 50 iron rods for 75000".
Parser	Gemini 2.5 Flash extracts the items; a regex fallback covers outages and quota limits.
Item mapping	A dictionary turns variants such as "loaf" into one canonical name.
Confirmation card	Shows the parsed sale and grand total before anything is saved.
Database and views	Supabase Postgres, with daily summary, category performance and top-items views for Power BI.

Key decisions

01

A fallback parser, because AI can fail

Gemini has quota limits. The regex fallback handles three common patterns so data entry never stops.

02

Chat is detected before parsing

Early versions threw errors on "hi" or "help". Greetings and questions are now answered directly and skip the parser.

03

Canonical item names

"Bread", "bread" and "loaf" map to one item, so reports are not split across spellings.

04

Confirm before saving

The parsed result is shown back as a card, so an AI misread is caught before it becomes a bad record.



Stack, status and what is next

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