AI ANSWERS PANEL

Requires an AI subscription

You can open this panel by clicking the corresponding tab lower down on the right-hand side of the app.

What you can do here: Ask questions about your data in plain English and get AI-powered answers. Type questions like "What are the main barriers to education?" and the AI will search through your currently selected sources to provide relevant answers with supporting quotes. Perfect for exploring themes and getting quick insights from large amounts of text.
Main Features:

- **Query input** - Type your questions in plain English
- **Context (optional)** - Briefly describe what your sources are about (used to guide expansions and answers)
- **Expand Question (optional)** - Generate and edit expanded search phrases before asking
- **Automatic chunking** - Sources split into searchable pieces when needed
- **Similarity slider** - Control search precision (0.1-0.9)
- **Max Chunks slider** - Maximum number of the most relevant chunks to send to the AI
- **Prompt history** - Navigate previous questions with prev/next buttons. See these tips

Search Modes

AI Answers offers two search modes, automatically optimized based on your data size:

Full Sources Mode

Searches the complete text of your sources (documents/interviews).

How it works:

1. Type a question about the text of the currently selected sources
2. System automatically chunks sources into searchable segments (if not already done)
3. Searches through document chunks using AI embeddings and semantic similarity
4. Most relevant chunks are sent to AI for analysis
5. AI generates answers with supporting quotes from your sources

Question expansion and HyDE (Hypothetical Document Embeddings)

This is now **optional**:

- If you fill **Context**, it is included in both the expansion prompt and the final answer prompt (to reduce generic expansions/answers).
- If you click **Expand Question**, the app calls genAI to generate expansion phrases and shows them in an editable textbox (one per line). You can edit them, or use **Clear expansions** to hide/remove them.
- If you click **Ask** directly, the app **skips expansion** and searches using only your original question.

When expansions are provided, we match each phrase against chunks and sum scores per chunk, then select the top (n) by the max_chunks slider.

So for example if the user asks what is the connection between money and happiness, the AI produces question variants like:

- having money, being joyful
- being wealthy
- being happy
- connection between money and happiness

And answer variants like:

- financial security enables emotional wellbeing
- wealth contributes to life satisfaction
- economic resources support positive mental health outcomes

Best for: Exploratory questions about raw text, finding themes not yet coded, discovering new patterns.

Link Contexts Mode

Searches only through your coded causal links and their surrounding context (the quote + 3 sentences before/after).

How it works:

1. Gets filtered links from your current filter pipeline (respects Sources dropdown and all Source Groups filters)
2. For each link, extracts the selected quote plus surrounding context
3. Organizes contexts by source, with source metadata (title, custom columns)
4. For ≤500 links: Sends all contexts directly to AI

5. For >500 links: Uses backend semantic search to find most relevant contexts
6. Embeddings generated server-side (via `find-relevant-contexts` edge function)
7. Also uses question expansion (see above)
8. Similarity calculation done server-side using cosine similarity
9. Only relevant context indices returned to frontend
10. No memory/computation overhead in browser
11. AI analyzes contexts showing cause → effect relationships
12. AI uses the cause/effect labels in its narrative (ignoring any original labels if links were recoded)

Context format sent to AI:

```
'## Source: Interview with Participant 001
ID: ABC-123
custom_Country: Kenya | custom_Gender: Female | custom_Age: 34

Links from this source:

[ABC-123-1] Lack of resources → Poor school performance
Context: "We don't have enough books or supplies. The children struggle because..."

[ABC-123-2] Teacher training → Better outcomes
Context: "When teachers receive proper training, we see improvements in..."
```

Best for: Questions about causal relationships you've already coded, comparing patterns across sources, analyzing specific demographic groups using Source Groups filters.

Key advantages of Link Contexts mode:

- Uses your coded causal structure, not just raw text
- Respects all your filters (Sources dropdown + Source Groups)
- Includes source metadata in AI context (country, demographics, etc.)
- More focused and structured than full text search
- Automatically scales to large datasets (>500 links) using backend semantic search

etc etc