Leveraging AI to Enhance Design Research [WIP]

Overview

Research is a core part of product design at Crunchbase, especially as we evaluate new features and experiments. As UXR responsibilities have shifted into design, there is increasing pressure to generate high-quality insights within tighter timelines.

To support this, I've integrated AI into my workflow as a lightweight support layer across research and design.

In practice, I primarily use AI in three ways:

- **Synthesis:** Summarizing user calls, feedback, and brainstorms into clear themes and insights
- **Iteration:** Acting as a thought partner to quickly explore design questions and refine ideas
- **Simulation:** Running lightweight persona-based testing to pressure-test concepts early

This enables faster iteration, more continuous insight generation, and stronger alignment between research insight and design decisions.

The Problem

As research responsibilities have shifted into design, the scope of work has expanded without a proportional increase in time or resources.

In practice, this creates a few consistent challenges:

- **Synthesis bottlenecks:** User calls, feedback, and experiment results are time-consuming to process and consolidate
- **Limited iteration cycles:** Exploring multiple design directions quickly is difficult within tight timelines
- **Gaps between research efforts:** Insights are often generated at specific moments (tests, calls) rather than continuously

As a result, research can slow down decision-making and it's harder to fully explore or validate potential solutions.

How I Use AI in Practice

I primarily use AI in three areas of my workflow: synthesizing, iterating, and user testing.

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1. Synthesis: Calls, Feedback, and Brainstorms

Goal: Reduce time spent processing raw inputs and improve insight clarity

How I use AI:

- Summarize user calls and extract key themes, pain points, and signals
- Synthesize brainstorm artifacts into structured ideas
- Consolidate feedback across multiple sources

Examples:

- **User calls → insights → next steps**

After a set of enterprise research calls, I input raw notes and use AI to identify themes and generate next steps.

Example prompt:

> "Summarize these user research notes. Identify key pain points, recurring themes, and any feature requests. Then suggest 3–5 actionable next steps for design."

- **Brainstorm artifacts → structured outputs**

  After a team brainstorm, I upload screenshots (FigJam/whiteboard) and convert them into organized outputs.

  Example prompt:

> "Summarize the ideas from this brainstorm. Group them into themes and suggest clear action items or next steps for each cluster."

Impact:

- Faster turnaround from research → insights → action
- More consistent pattern recognition
- Reduced manual effort

Example: A group design activity where screenshots of the brainstorm sticky notes transformed into notes with the help of ChatGPT

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2. Iteration: Design Thinking Partner

Goal: Increase speed and quality of design exploration

How I use AI:

- Ask basic design questions to validate decisions (as I would with someone on the design team)
- Explore alternative approaches or comparable patterns
- Pressure-test flows, assumptions, and trade-offs

Examples:

- **Finding comparable patterns across products**

  When exploring a design direction, I use AI to quickly identify how other products solve similar problems.

  Example prompt:

  > "Find examples of websites with homepages that have both enterprise and self-serve CTAs closely together. How do they structure messaging and hierarchy?"

  This helps ground decisions in existing patterns without needing extensive manual research.

- **Evaluating multiple design variations**

  When exploring multiple UI variations, I use AI to quickly compare options and identify strengths, weaknesses, and patterns.

  I used AI to review multiple design variations and help identify which ones struck the best balance between simplicity, clarity, and completeness.

  Example prompt:

  > "Review these buy flow designs. Which versions are the clearest and most concise? Where can the language be simplified without losing important or required information?"

  How it fits into the workflow:

  AI helped me quickly compare options and narrow down to the top 2–3 directions. I then brought those into review with Legal for final validation.

  Impact:

  - Faster alignment on design direction
  - More focused conversations with Legal
  - Better balance between usability and required content early on

Example: https://www.figma.com/board/A3E7f6aUJ96QMeBt6o1rzD/Q1-2026--Upsell-Modal-Redesign?node-id=0-1&p=f&t=f3BQ15YyDuegGjKz-0

- **Accessibility checks**

  I use AI as a quick pass to identify potential accessibility issues before formal review.

  Example prompt:

  > "Review this design for accessibility issues. Are there concerns with contrast, hierarchy, labeling, or interaction patterns?"

  This helps catch obvious gaps early, especially around clarity and usability.

Impact:

- Faster iteration cycles
- More informed design decisions based on existing patterns
- Early identification of usability and accessibility issues

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3. Simulation: Persona-Based Testing

As part of a buyflow optimization project, I was testing multiple design directions, including the current experience, a redesigned buy page, and a new payment modal.

Running full A/B tests across all variations would have required multiple experiments and significantly extended the timeline. To reduce scope early, I used AI to simulate how different user personas might respond to each design.

Example prompt:

> We want to test a buy page design (attached).
>
> Can you simulate a user test with 3 users groups to match our personas and have each group consist of 5 users each?
>
> We want to ask these questions:

> 1. Rating scale task out of 5 from strongly disagree to strongly agree: "This buy page feels easy to use."
> 2. Rating scale task out of 5 from strongly disagree to strongly agree: "This buy page makes me feel interested in starting a trial."
> 3. Rating scale task out of 5 from strongly disagree to strongly agree: "This buy page feels trustworthy."

How it helped:

AI provided early directional feedback on clarity, trust, and usability across variations. This allowed me to quickly identify weaker options and narrow the set of designs from three down to two before moving into formal testing.

This reduced the need for multiple A/B tests and enabled the team to focus on a single, more targeted experiment.

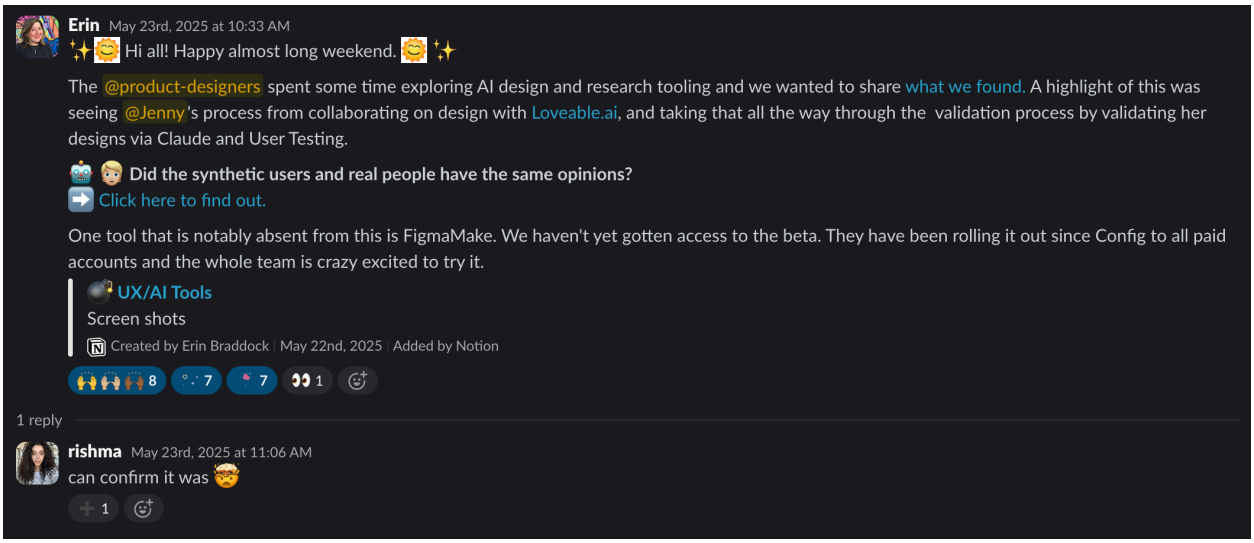
Impact:

- Cut down overall experiment time by more than half
- Reduced the number of A/B tests needed
- Faster path to statistical significance (3 weeks)
- Contributed to a design that drove $180K+ in ARR

Example: https://www.figma.com/board/BTHDh3zFhEBT4lEyLybGa7/Buy-Page-Comparison-A-B-Testing?node-id=148-1382&t=qTTH5oi8G2bRrT92-4

Across all three areas, AI acts as a support layer: helping move faster, explore more broadly, and make better-informed decisions without replacing direct user input.

Note: I've been exploring AI in design and research workflows over the past year, including early experiments comparing AI-simulated feedback with real user testing results.



Early explorations from 2025: https://www.figma.com/board/KXG6tpsdHL4USZRFOkjENM/Jenny-Lin--AI-Project?node-id=0-1&p=f&t=g8dK2MfmF59lGvBp-0

Key Takeaways

Across these workflows, AI primarily acts as a support layer that improves speed, coverage, and iteration.

- **Faster synthesis:** Less time spent processing calls, feedback, and brainstorms
- **More iteration:** Easier to explore multiple directions and refine designs quickly
- **Earlier signal:** Ability to catch issues before formal research or testing
- **Better focus:** More prepared designs going into user testing, reviews, and experiments

Guidelines for Using AI in Product Design

These are patterns that have worked well in practice when using AI for research and design.

1. Start with raw inputs, not summaries

Use AI on **raw materials** (call notes, brainstorm boards, feedback exports), not already-processed summaries. This leads to better and less biased outputs.

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2. Always ask for outputs you can use

Don’t stop at summaries, ask AI to convert outputs into:

- themes → **next steps**
- feedback → **design opportunities**
- ideas → **prioritized directions**

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3. Treat AI like a quick second opinion

Use it the same way you’d use a teammate:

- sanity-check a flow
- ask “what am I missing?”
- get a second take before review

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4. Use it to narrow, not decide

AI is most useful for reducing options (5 ideas → top 2–3), not making final decisions. Final calls should still come from product and user validation.

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5. Simulate early, test later

Use AI to pressure-test ideas **before** investing in user testing. This helps catch obvious issues so research can focus on deeper questions.

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6. Be explicit about the user context

Include details like:

- user type (enterprise, self-serve, new user)
- goal (what they’re trying to do)
- constraints (time, knowledge, data)

This significantly improves output quality!

7. Use AI to find patterns faster, not replace research

AI is great at spotting patterns across inputs, but those patterns should still be validated with real users and data.

8. Keep it inside your existing workflow

The most effective use cases are lightweight:

- right after a user call
- after a brainstorm
- while designing a flow

If it feels like a separate step, it’s less likely to stick.

Closing

AI has been most effective when used as a lightweight layer across research and design that helps reduce manual effort, speed up iteration, and improve how quickly insights turn into decisions.