

Build Better Products with AI

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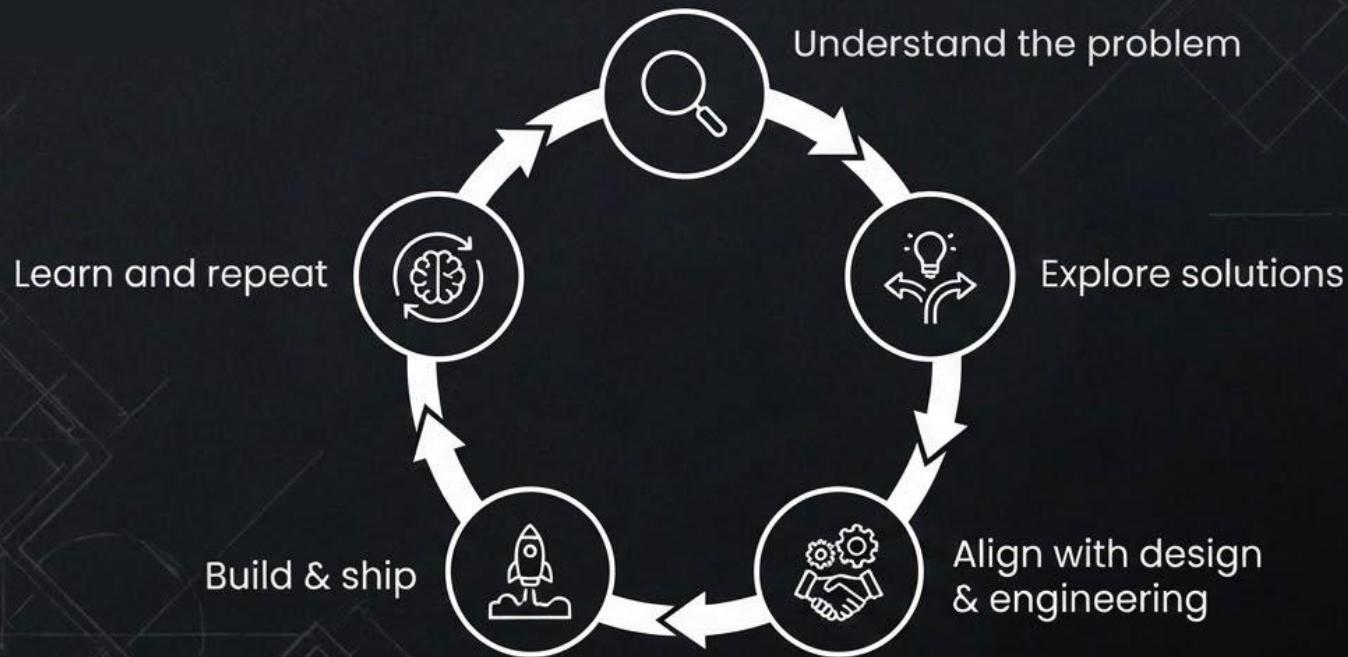
Google

“AI Week” at Amplitude



Traditional PM → AI PM

The cycle of building products



The pressure we are facing...



Ship faster... With fewer resources



More ideas than bandwidth



Less engineering and design support



Higher expectations from leadership

AI: THE NEW HERO.



Become an AI-Accelerated PM



How I Used AI to Build a New AI Feature

Customers wanted faster ways to create experiment variants.



Slow Iteration

“Small changes take too long”



Limited Resources

“No engineering bandwidth”



Delayed Insights

“Slows down experimentation”

I knew AI could help... I just didn't know how.



**Vast AI
Solution Space**

Complex & Overwhelming

**Need to Explore
& Understand**

Navigating Possibilities

**Targeted AI Feature for
Experiment Variants**

Enabling User Autonomy

ChatGPT helped me get from a vague idea to an actual real direction.



Brainstormed possible AI workflows



Pressure-tested ideas
(what eng/design would push back on)



Drafted my early PRD and problem statement

Product Requirements Document – AI Styler

1. Problem

Background:

- Our customer segmentation strategy is based around user activity, categorizing users into three distinct groups based on their behavior.
- These segments are used for marketing, product development, and user retention.
- However, our current segmentation system is not accurate enough to support our needs.
- We want to improve our segmentation system to better identify users and provide more personalized experiences.

Definition of Success:

- Achieve 90% accuracy in segmenting new users with known profiles, transitioning to a more advanced model.
- Provide users with more personalized experiences based on their behavior.

2. Target Users

Market:

- New, existing, and potential users.
- Individuals who have been active for at least one year.

Demographics:

- Demographic data such as age, gender, location, and education level.

3. Goals & Success Metrics

Market Segmentation:

- Identify three distinct user segments based on their behavior.
- Provide users with personalized experiences based on their segment.

Success Metrics:

- Accuracy: 90%.
- Retention: 12 months.
- Engagement: 50%.
- Conversion: 10%.

AI Styler – Product Requirements Document (PRD)

1. Overview

AI Styler is a web-based platform designed to assist users in creating and managing product requirements. It features a user-friendly interface and integrates with various tools and databases to facilitate efficient collaboration and tracking of requirements.

2. Problem Statement

The current segmentation system is not accurate enough to support our needs. We want to improve our segmentation system to better identify users and provide more personalized experiences.

3. Goals & Success Metrics

- Accuracy: 90%.
- Retention: 12 months.
- Engagement: 50%.
- Conversion: 10%.

Claude helped me turn the idea into something the team could react to.



Generated rough wireframes



Visualized the user flow



Made design & eng conversations much faster

The shipped feature: AI Stylizer

The screenshot shows the Amplitude AI Stylizer interface, which allows users to apply different visual styles to their dashboards. The interface features a dark background with four distinct plan cards arranged horizontally.

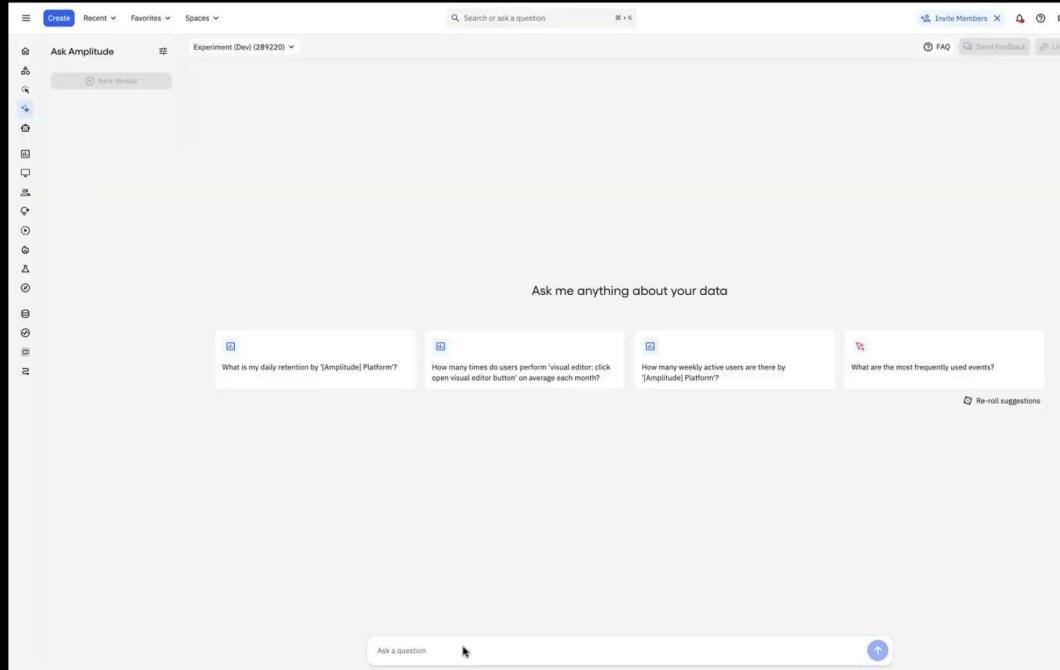
- Starter**: For individuals and explorers getting started. **Free**.
Start for free
- Plus**: For small teams finding product-market fit. **\$49/mo** (Pay annually).
Estimate bill
- Growth**: For businesses looking to scale. **Custom**.
Contact sales
- Enterprise**: For larger enterprises with complex requirements. **Custom**.
Contact sales

Below the plans, there is a "Compare plans" button. At the bottom of the interface, there is a navigation bar with icons for "control", "treatment", and "Apply & Exit".

After you ship, AI helps you answer the real question: *Did it work?*



AI analyzed engagement in seconds



AI analyzed engagement in seconds

The image displays two side-by-side screenshots of the Amplitude user interface, illustrating how AI analyzes user engagement data.

Left Screenshot: This screenshot shows a detailed analysis of a feature named "styler". The analysis includes:

- Strong Initial Engagement:** Summary statistics: 442 popover opens and 210 prompt clicks.
- Conversion Funnel Analysis:** Summary statistics: 100 prompt submissions from 442 popover opens (23% conversion rate), 100 stop clicks, and 100 submissions (50% completion rate).
- Key Insights:**
 - Discovery is working well - High popover open numbers show the feature is visible and attracting user attention.
 - Engagement challenges - The steep drop-off from discovery to actual usage suggests users may find the interface confusing or the feature not meeting their expectations.
 - User experience concerns - Equal numbers of submissions and stop clicks (100 each) indicate users are having mixed experiences.
- Recommendations:**
 - Investigate the user journey between popover opening and prompt submission to identify friction points.
 - Consider A/B testing different onboarding flows or UI improvements.
 - Analyze user feedback or conduct usability studies to understand why users are clicking "stop".
 - Monitor the feature over a longer time period to see if usage patterns improve as users become more familiar.

Right Screenshot: This screenshot shows a broader view of the AI-generated analysis, likely a dashboard or a summary report. It includes:

- Analytics-Based Methods:**
 - Funnel Analysis with Time Delays:**
 - Measure time between each step (popover open → prompt click → submission)
 - Long delays often indicate confusion or hesitation
 - Set up conversion windows to see where users drop off most frequently
 - Cohort Analysis:**
 - Segment users by characteristics (new vs. returning, device type, browser)
 - Compare conversion rates across different user groups
 - Identify if certain user types struggle more than others
 - Session Replay Analysis:**
 - Watch actual user sessions to see where they get stuck
 - Observe mouse movements, clicks, and scrolling patterns
 - Identify UI elements that cause confusion or multiple clicks
- User Research Methods:**
 - User Journey Mapping:**
 - Conduct user interviews about their experience with the feature
 - Ask users to walk through their thought process at each step
 - Identify emotional pain points and moments of confusion
 - Usability Testing:**
 - Run moderated sessions with think-aloud protocols
 - Give users specific tasks and observe where they struggle
 - Test with both new and experienced users
 - Exit Surveys:**
 - Trigger micro-surveys when users click "stop" or abandon the flow
 - Ask simple questions: "What prevented you from completing this?"

AI helped with “why” and next steps

The screenshot shows the Amplitude AI Agents interface. At the top, there's a navigation bar with 'Create', 'Recent', 'Favorites', 'Spaces', a search bar, and 'Agents Settings'. Below the navigation is a banner for 'Amplitude AI Agents' with a 'Learn More' button. The main area is titled 'Create New Agent' and features several agent templates:

- Dashboard Agent**: Analyze dashboards to surface trends, identify root causes, and generate hypotheses. This agent will:
 - Auto-generate insights from any dashboard
 - Deep dive into interesting trends and anomalies
 - Schedule proactive and automated monitoring[Create Agent](#)
- Session Replay Agent**: Specify an event or funnel to analyze large samples of session replays to identify user interactions, drop-offs, and common navigational patterns. This agent will:
 - Continuously scan and explore new sessions replays
 - Identify exactly where and why users struggle or abandon
 - Create playlists that back insight with evidence[Create Agent](#)
- Website Conversion Agent** (Experimental): Monitor your conversion funnel to spot issues, understand what's causing drop-offs, and run experiments to improve performance. This agent will:
 - Audit any public web pages for conversion opportunities
 - Get data-backed experiment ideas tailored to your specific funnel
 - Output ready-to-test experiments, survey scripts, and tactical guides[Create Agent](#)
- Internal Agents (Amplitude only)**: Your agents are only visible to you. Share links with your team when you're ready.
- Deep Research**: Use Moda's "Deep Research" mode to understand a subject in depth.[Create Agent](#)
- Create NCT -> Implementation Flow**: Orchestrates the creation of Narrative, Commitments, and Tasks (NCT) documents by coordinating multiple phase-specific agents.[Create Agent](#)
- Create PRO -> Prototype Flow**: Orchestrates the creation of Product Requirements Documents by coordinating multiple phase-specific agents.[Create Agent](#)
- Analytics Agent**: A general analytics agent that combines taxonomy knowledge, the ability to create/modify charts, and search capabilities. Use this sub-agent when you need any of:
 - Event discovery & selection from natural language
 - Event properties & identification
- Chart Agent**: Chart Agent for creating, editing, analyzing, and exporting Amplitude charts. This agent handles four primary scenarios:
 1. Create a new chart: Discover events/properties from natural language and create event segmentation, funnel, retention, or dataTableV2 charts
 2. Edit an existing chart: Returns valid definitions for the chart type and allows for modification
- Moda - Ask Anything**: Get answers to your questions about the product, the company, the industry, internal documents, KPIs, support tickets, etc.

AI helped with “why” and next steps

Analysis Complete ✓

I've analysed 100 sessions from the ai-style-widget experiment and identified **three critical friction points** preventing users from submitting prompts:

Key Findings

- 1. Form Validation Rejection Loops (5% of sessions)** Users get stuck in 50-73 refocus cycles, spending 7+ minutes trying to complete the form. Validation errors aren't being communicated clearly, so users repeatedly re-enter data without knowing what's wrong.
- 2. Unresponsive Submit Button (15% of sessions)** The submit button appears unresponsive, causing users to rage click up to 90+ times in quick succession. This is the most common friction signal across all sessions.
- 3. Unclear Field Requirements (3% of sessions)** Users delete and re-enter text with deliberate pauses, indicating confusion about what each field expects. They're guessing at the correct format.

What's Next?

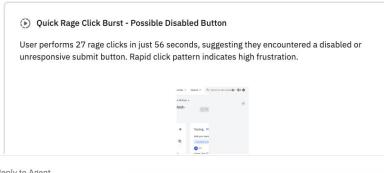
I can help you:

- Dive deeper into specific pages — Analyze which experiment variants have the worst friction
- Compare successful vs. failed submissions — See what users who completed the flow did differently
- Investigate navigation patterns — Understand where users go after abandoning the form
- Test UI improvements — Create a variant with better validation feedback and measure impact

Which direction interests you?

Quick Rage Click Burst - Possible Disabled Button

User performs 27 rage clicks in just 56 seconds, suggesting they encountered a disabled or unresponsive submit button. Rapid click pattern indicates high frustration.



Reply to Agent

AI can make mistakes; always verify

Perfect! Now let me create a detailed testing guide document:

UI Improvement Testing Framework

I've created a comprehensive testing plan to measure the impact of validation improvements. Here's what you need to do:

Baseline Metrics (Current State)

Metric	Current	Target	Improvement
Popover → Submit Conversion	60% (15/25)	>75%	+15 percentage points
Sessions with Rage Clicks	15%	<5%	-10 percentage points
Sessions with Refocus Loops	5%	<2%	-3 percentage points
Avg Session Duration	7 minutes	<2 minutes	-5 minutes
Overall Funnel Completion	24%	40%+	+16 percentage points

Experiment Design

VARIANT A (CONTROL) — CURRENT IMPLEMENTATION

- Minimal validation feedback
- No inline error messages
- No character count display
- Submit button always enabled

VARIANT B (TREATMENT) — IMPROVED VALIDATION

- Inline error messages below input field
- Real-time character count ("5 / 10 characters minimum")
- Green checkmark when field passes validation
- Disabled submit button until all fields valid
- Tooltip on disabled button: "Complete all required fields"

Reply to Agent

AI can make mistakes; always verify

AI saved me WEEKS of time!

Time = Money

Amplitude AI Agents & Case Studies

AMPLITUDE FOR PRODUCT TEAMS



HOW TO

Use AI Agents in Amplitude



#1: Conversion Rate Optimization

CRO Agent

AI helped us spot a simple fix

What the agent noticed



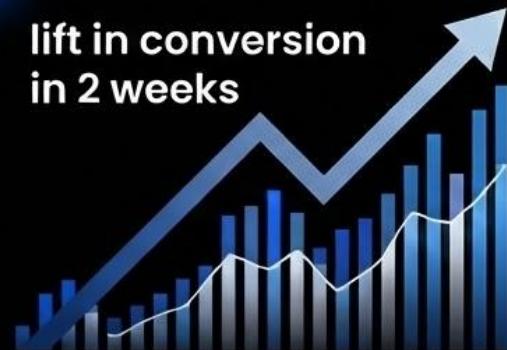
What we changed



Results

20%

lift in conversion
in 2 weeks



- People dropping off at field 4
- The form was more complex than it needed to be
- Cut the form down to 3 fields
- Fixed the edge case blocking users

#2: Onboarding Flow Friction

Session Replay Agent

AI showed us where users were getting stuck

What the agent noticed



- Users staring at a blank prompt
- ~45 seconds of hesitation
- ~30% leaving without doing anything

What we changed



- Added starter prompts
- Made the first step clearer

The Results

46%
reduction in 1st time to action



#3: Optimizing Campaign Spend

MCP + Analytics Agent

AI caught a bad campaign

What the agent spotted

- ⬆️ Big spike in paid search
- ⬇️ Followed by a sharp drop in real users
- 🤖 Bot traffic eating through spend

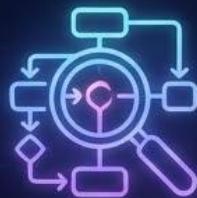
What we did

- 📣 Flagged it to the marketing team
- ⏸️ Paused the campaign the same day

\$27K

in wasted spend avoided
from getting worse

What all these stories have in common



Identifying the Friction

- ↗ AI found the friction
- ↗ We made the decision



Faster Learning & Results

- ↗ Results came faster
- ↗ Less time hunting for answers



Maximizing Impact

- ↗ More time spent on the right problems
- ↗ Fewer dead ends
- ↗ Faster learning loops



AI = speed boost to every step

Closing Thoughts

Tips & tricks for using AI



Human in the loop.

AI will hallucinate, verify outputs.



Treat like a junior assistant.

Give it context and iterate.



Small, direct prompts.

Don't overwhelm, give focused tasks and feedback.



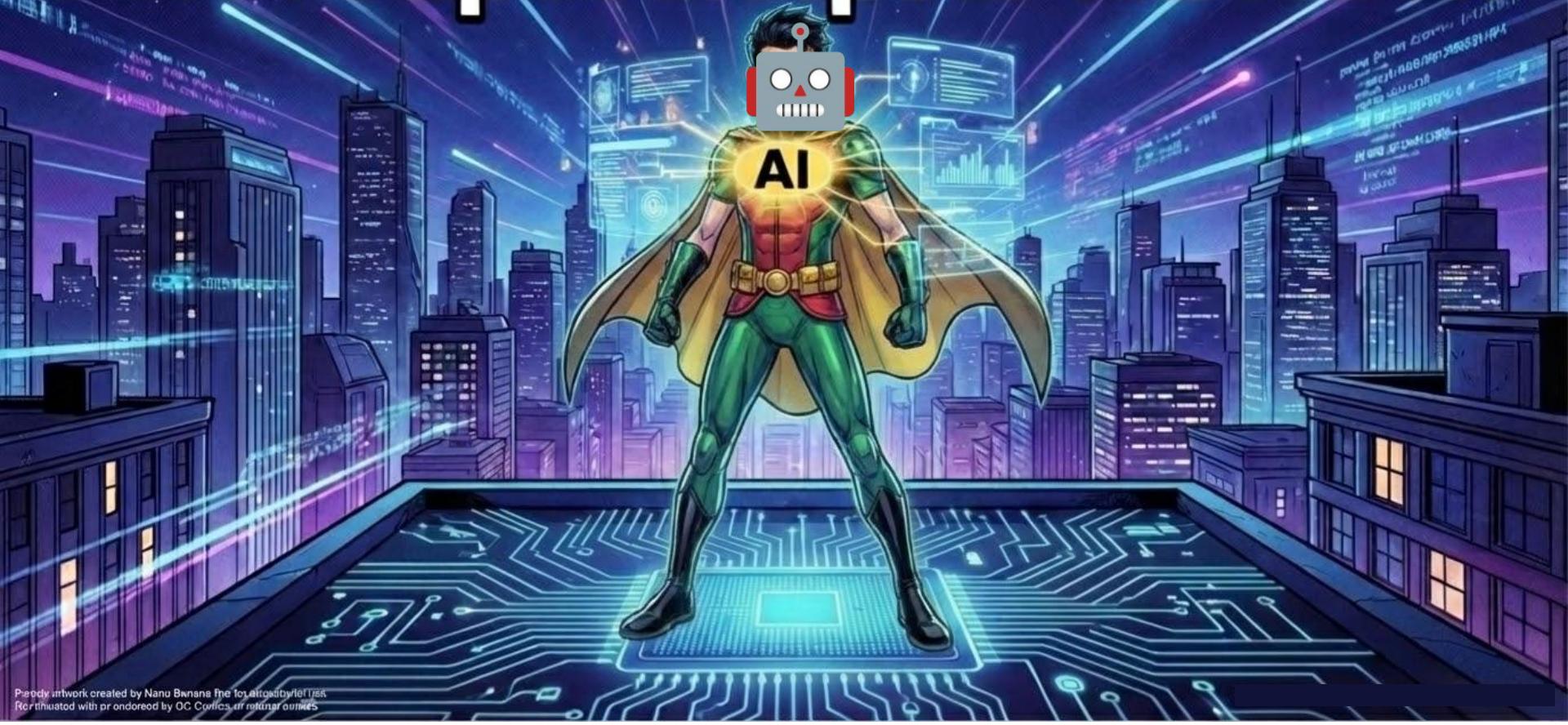
Don't give up.

AI learns and improves with practice and patience.

AI: THE NEW HERO.



AI: A super helpful sidekick



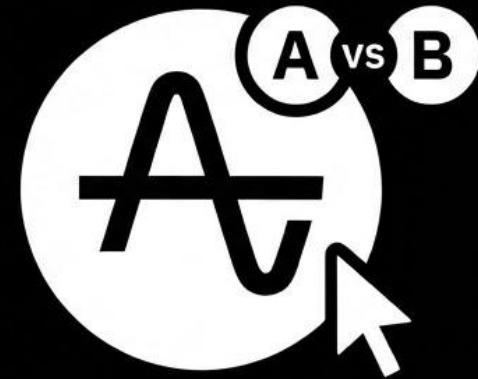
✨ Try using AI tomorrow ✨



Ideas to ChatGPT



PRD to Claude



Experiment with
Amplitude



Thank you!

Let's connect on
LinkedIn

