

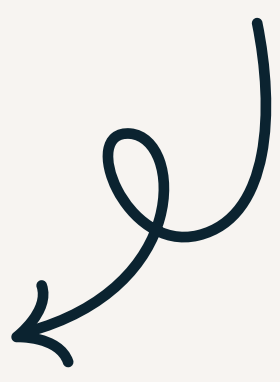


Sprig

## Practical Applications of AI for Product Managers

How to integrate AI into roadmapping, user research, and everyday tasks.

# Table of Contents



Introduction	01
What is AI?	02
The Difference Between Strong and Weak AI	03
The Importance of Generative AI and the Emergence of Synthesis	05
How does AI apply to product development?	07
ChatGPT prompts for improved research	10
Automate user research with AI analysis	12
Enhance roadmapping processes with AI	15
Consider maintenance with AI integration	18
Conclusion	21

# Introduction ✨

The term “AI” is everywhere in the tech industry right now. From conversations with your product team to subject lines in your inbox – the topic of AI ubiquitous.

The focus on AI has been so intense lately that leaders have been critiqued for their hyper-focus, and some would say, misplaced focus on applying the technology everywhere.<sup>1</sup>

But product experts at the leading companies are investing in the technology – whether that’s building products using AI and ML (machine learning) or using ChatGPT for daily activities.

So if you're a product manager at a platform or product-focused company, you’re probably wondering: how do I actually use AI in a practical way? Beyond all the hype, what are the actual applications for product teams?

In this guide, we will distill down some of the practical applications of AI for product managers and their product teams.

Let’s get started!

---

<sup>1</sup> "Google Employees Mock Execs Over AI." Futurism, 28 September 2021, <https://futurism.com/the-byte/google-employees-mock-execs-ai>

# What is AI?

Artificial Intelligence refers to the development of computer systems capable of performing tasks that typically require human intelligence. It involves the creation of intelligent machines that can learn, reason, problem-solve, and adapt to new situations.

AI systems are designed to simulate human cognitive abilities, including perception, learning, language processing, and decision-making.

## The Difference Between Strong and Weak AI

Weak AI, or narrow AI, refers to AI systems designed to perform specific tasks within a limited domain. These AI systems are focused and specialized, excelling in specific applications but lacking broader general intelligence. Weak AI operates by employing algorithms, rules, and pre-defined data patterns to accomplish its designated task. Examples of weak AI include voice assistants like Siri or Alexa, recommendation systems, and image recognition tools.<sup>2</sup>

---

<sup>2</sup> "Strong AI." IBM, Accessed on 27 June 2023, <https://www.ibm.com/topics/strong-ai>

# The Difference Between Strong and Weak AI (cont'd)

On the other hand, strong AI, or general AI, refers to AI systems that possess human-level intelligence across various domains and can understand, learn, and perform any intellectual task a human can. Strong AI aims to replicate not only specific tasks but also the comprehensive cognitive abilities and adaptive reasoning of a human mind.

The distinction between weak AI and strong AI lies in the breadth and depth of their capabilities. While weak AI focuses on specific tasks and operates within defined boundaries, strong AI aspires to mimic human intelligence and operate autonomously across multiple domains.<sup>3</sup>



Weak AI	Strong AI
It is a narrow application with a limited scope.	It is a wider application with a more vast scope.
This application is good at specific tasks	This application has incredible human-level intelligence
It uses supervised and unsupervised learning to process data.	It uses clustering and association to process data.
Example: Siri, Alexa.	Example: Advanced Robotics

<sup>3</sup> "Strong AI." IBM, Accessed on 27 June 2023, <https://www.ibm.com/topics/strong-ai>

# The Importance of Generative AI and the Emergence of Synthesis

Generative AI focuses on the creation of new and original content using algorithms and machine learning techniques. It enables machines to learn from vast amounts of data and generate outputs that resemble human creativity. Generative AI algorithms employ deep learning, neural networks, and probabilistic modeling to understand patterns and generate novel content.

## Applications of Generative AI:

- **Art and Design:** Generative AI is used to create unique artwork, music compositions, and design elements that push the boundaries of human creativity.
- **Content Generation:** AI-powered systems can generate realistic images, video content, and written articles, reducing production time and assisting content creators.
- **Personalization:** Generative AI enables personalized recommendations, advertisements, and user experiences by understanding individual preferences and generating tailored content.
- **Game Development:** Generative AI is employed to create lifelike characters, procedural game content, and dynamic virtual environments, enhancing the gaming experience.

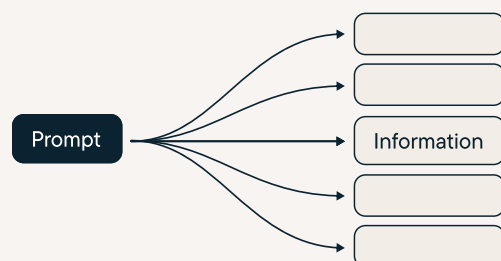
# The Importance of Generative AI and the Emergence of Synthesis (cont'd)

**Emergence of AI for Data Synthesis:** According to Zeya Yang and Kristina Shen with Andreessen Horowitz, there will be an emergence of AI for synthesis over creation. They argue that while GenAI created new information or new content, the synthesis AI emergence will bring about technologies that synthesize information - making it easier to understand and act on tons of data. Ultimately, this will help people make better decisions.

“The real value of SynthAI in the future will be in helping humans make better decisions, faster. We are envisioning almost the opposite of the ChatGPT user interface: Instead of writing long-form responses based on a concise prompt, what if we could reverse engineer from massive amounts of data the concise prompt that summarizes it?”<sup>4</sup>

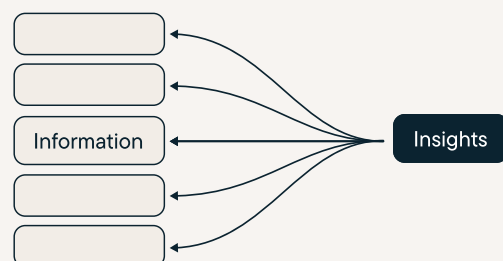
## Wave 1: Generative (GenAI)

From prompts to long-form responses




## Wave 2: Synthesis (SynthAI)

From vast volumes of information to insights



<sup>4</sup> "Exploring the Potential of B2B Generative AI and SynthAI." Andreessen Horowitz, 30 March 2023, <https://a16z.com/2023/03/30/b2b-generative-ai-synthai/>

# How does AI apply to product development?



As the “it” technology right now, leaders in every space are trying to figure out how to use AI.

Marilyn Nika, computer scientist and an AI Product Leader at Meta’s reality labs, says that there is value in considering how to use AI – even in just day-to-day activities.

On the product-focused show Lenny’s Podcast, Nika talks about how she uses AI for routine tasks like creating a mission statement. “It’s just crucial part and it’s where the core begins. You want to get people excited, you want to get people inspired. There is nothing I can write that’s going to be as good as what ChatGPT looks like.”<sup>5</sup>

But AI and product development goes far beyond day-to-day tasks. Leaders in the space are using AI to transform the products that are conceptualized, designed, and built. Here are just a few ways that AI is changing product development:

- **Ideation and Concept Generation:** AI algorithms can analyze vast amounts of data, including market trends, consumer preferences, and competitor analysis, to generate valuable insights for ideation and concept generation. By understanding patterns and correlations, AI-powered tools assist in identifying emerging market needs, predicting consumer demand, and generating innovative ideas for new products.

5 “AI and Product Management: An Interview with Marilyn Nika.” Lenny’s Newsletter, Accessed on 27 June 2023, <https://www.lennysnewsletter.com/p/ai-and-product-management-marilyn>



# How does AI apply to product development? (cont'd)

- **Design Optimization and Simulation:** AI plays a crucial role in optimizing product designs. Through techniques such as generative design, AI algorithms can explore a wide range of design possibilities based on specified constraints and objectives.
- **Personalization and Customization:** AI enables personalized product experiences by analyzing customer data, preferences, and behavior. By leveraging machine learning algorithms, businesses can develop personalized recommendations, tailored marketing campaigns, and customized product variations.

And according to Nika, PMs need to get used to AI, specifically with research insights. “Product managers also need to get comfortable with the additional research that will come from AI and ML. I think it's that you will need to get comfortable with having a partner that's a research scientist and you will need to understand that these people can produce a smart model,” she said.

Nika added that all product managers should get used to the idea that more AI means increased research and that this increased research might change the consistency of launch schedules.<sup>6</sup>

So, if you're a product manager, how do you prepare for the future where AI is a constant? We've provided these detailed, practical applications from product experts to get you started:

---

<sup>6</sup> "AI and Product Management: An Interview with Marily Nika." Lenny's Newsletter, Accessed on 27 June 2023, <https://www.lennysnewsletter.com/p/ai-and-product-management-marily>

# Roadmapping

A product roadmap is a shared document that outlines: product vision, future direction, priorities and progress of a product over time. It illustrates the short and long-term goals for the product for all stakeholders.<sup>7</sup>

The process to build a roadmap includes several cross-functional activities (brainstorming, planning, influencing stakeholders, etc.) that can be improved or facilitated by AI.

Using AI for these tasks enables product managers to cut out certain tasks and really get into the “flow state,” according to Scott Belsky, Adobe’s Chief Strategy Officer and EVP of Design and Emerging Products.

“I think that that's what AI kind of does, is it gets us from workflow to flow. It gets us into this flow state where any idea in your mind's eye, you can start to develop it.”<sup>8</sup>

In this section, we will focus on how ChatGPT can help with two key parts of roadmapping - brainstorming and influencing stakeholders - to help product leaders move from workflow to flow state.

---

<sup>7</sup> “Product Roadmaps.” Atlassian, Accessed on 17 November, <https://www.atlassian.com/agile/product-management/product-roadmaps>

<sup>8</sup> “Lessons on Building Product Sense, Navigating AI, Optimizing the First Mile, and Making It Through the Messy Middle: Scott Belsky, Adobe/Behance.” Lenny's Podcast, Accessed on 27 June 2023, <https://www.lennyspodcast.com/lessons-on-building-product-sense-navigating-ai-optimizing-the-first-mile-and-making-it-through-the-messy-middle-scott-belsky-adobe-behance>

## Roadmapping (cont'd)

**Brainstorming:** ChatGPT can enhance brainstorming through prompt expansion and scoping risks.

If you have a specific idea or concept, but you're looking for ways to expand or explore it further, ChatGPT can help. Simply provide the initial idea to Chat GPT, and it can generate additional details, potential use cases, variations, or combinations to broaden your thinking.

ChatGPT can provide quick feedback on the feasibility or viability of certain ideas. By discussing your ideas with ChatGPT, you can receive prompt insights, potential risks, or suggestions for improvement.

**Influencing Stakeholders:** When it comes to product roadmapping, effectively communicating and influencing stakeholders is crucial for gaining buy-in and aligning the team towards a shared vision. ChatGPT can be a powerful tool to help influence stakeholders during this process.

By leveraging ChatGPT, you can simulate conversations with stakeholders, presenting different roadmap options and their potential impacts. Through these virtual interactions, you can articulate the rationale behind your decisions, address concerns, and provide persuasive arguments supported by data and insights.

## Roadmapping (cont'd)

Additionally, ChatGPT can assist in generating presentations or reports that effectively communicate the roadmap's value proposition, highlighting the benefits, market opportunities, and anticipated outcomes.

## User Feedback

A key insight into a roadmapping and product strategy is the feedback of users. User feedback informs what features you should build and which ones you should deprioritize.

In the past, the analysis of feedback could take hours or even days because product teams would have to take feedback, put it into spreadsheets, and then manually review the data. That type of manual analysis can be incredibly inefficient, according to Kevin Mandich, Head of AI and ML at Sprig.<sup>9</sup>

**"AI has the potential to enhance the power of user feedback. Through AI analysis, product teams can collect and analyze qualitative feedback in seconds," says Mandich.**



<sup>9</sup> "How AI Powers Sprig's Product Experience Platform." Sprig, Accessed on 27 June 2023, <https://sprig.com/blog/how-ai-powers-sprigs-product-experience-platform>

## User Feedback (cont'd)

Mandich added that AI analysis tools, such as Sprig AI, are a game changer for product teams.

“Sprig AI eliminates the need to spend hours entering feedback into excel sheets and then reviewing the data to get themes and product insights.”

“It literally does all of the work for you. Customer feedback is analyzed in real-time and Sprig AI organizes all the issues and feedback for you into themes. Sprig AI also provides product and feature recommendations based on survey feedback.”<sup>10</sup>

Ultimately, Sprig AI helps product teams to uncover the drivers behind user behavior through themes and recommendations and then prioritize features in the product roadmap.

Let's take a look into how Sprig AI works and how businesses are taking advantage of it.

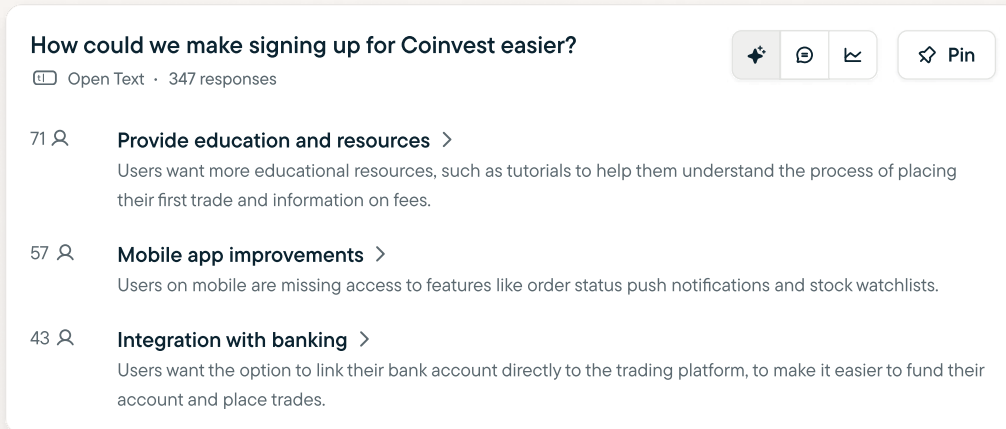
### An In-Depth Look into Sprig AI:

Sprig AI Analysis, which is powered by GPT 4, takes open text qualitative feedback and turns it into actionable product recommendations.

---

<sup>10</sup> "How AI Powers Sprig's Product Experience Platform." Sprig, Accessed on 27 June 2023, <https://sprig.com/blog/how-ai-powers-sprigs-product-experience-platform>

# User Feedback (cont'd)



This capability empowers product teams to understand the why behind product data by analyzing product data alongside product recommendations.

It also enables product teams to see issues before they turn to trends that impact numbers. Sprig AI actually uncovers emerging trends in your users' behavior before they have a chance to impact metrics.



# User Feedback (cont'd)



## Case Study: How Novo Used AI to Better Understand Customers

Named to the Forbes Fintech 50 in 2022 and 2023, Novo is a small business platform that couples a checking account with an ecosystem of financial and business applications. Their product team is focused on empowering small businesses to do what they love and spend less time managing their finances.

### Challenges:

- Small product team performing multiple tasks. They needed a way to reach customers at scale.
- Needed a tool to quickly summarize the massive amount of potential feedback.

### Solution:

Using Sprig AI, the product team was able to analyze thousands of open-text responses to understand what their users thought about Novo's platform. The product team was able to see in real-time that users wanted improvements with processing times, bank integrations, and ease of use.

**Tips to Use Chat GPT for User Insights:** While we recommend using a user insights tool powered by AI, there are also a few ways to use ChatGPT to summarize user insights.

You can ask ChatGPT to summarize and provide actionable takeaways of survey data. You can also ask it to recommend next steps for research. All that's needed is a short introduction and a clear, descriptive and accurate set of tasks for ChatGPT to complete:

## User Feedback (cont'd)

Sprig Head of AI and ML Kevin Mandich put together the following tasks and prompts:

A group of people were asked a series of questions as part of a survey. I am going to provide you with a dataset that contains their answers to these questions. Your 3 tasks are:

1. Summarize the survey.
2. Generate actionable takeaways from the open-text responses.
3. Provide recommendations for follow-up questions based on these responses.

Of course, using ChatGPT without an insights tool still requires regular inputs and product teams will not benefit from real-time insights.

To jumpstart your user insights, get started with Sprig AI today at [sprig.com](https://sprig.com).

## Conduct Market Research

Product managers are all familiar with the idea of “product market fit” or how well your product meets the needs of the key audience. Simply put, does the key audience need or want your product.



# Conduct Market Research (cont'd)

Market research is key to understanding product-market fit. It gives you insights into your market position, audience and competitors that you'll need to worry about.<sup>11</sup> You can use ChatGPT to scan resources online and do this research for you with simple prompts like:

`"Below is a list of G2 profiles of productivity tools. Give me a summary of the top 5 product features that are mentioned most frequently in their product reviews."12`

You can then refine the prompt with constraints:



`Adhere to the following rules when completing your task:`

- `• Present your findings in a manner that is useful to a product manager conducting market research.`
- `• Provide each summary in 2-3 short sentences.`
- `• List each summary in order of most requested to less frequently requested.`

These types of prompts will save you hours of time often spent scouring websites and then analyzing research yourself.

<sup>11</sup> "What is product market fit," Accessed July 24, 2023, <https://www.aha.io/roadmapping/guide/product-strategy/what-is-product-market-fit>.

<sup>12</sup> "What is product market fit," Accessed July 24, 2023, <https://www.aha.io/roadmapping/guide/product-strategy/what-is-product-market-fit>.

# Challenges to Consider

The use of AI does not come without challenges. AI has some limitations in its accuracy, and there are some unknowns with the technology.

“You're putting a black box in your workflow. And sometimes that black box's behavior changes or produces slight variations in output.

As your product evolves, your input is also going to change, your distribution of data is going to change.” says AI and product expert Jonas Lavoie.<sup>13</sup>

## Top Considerations and Challenges:

- **Consider the integrity of the technology:** If you are an Open AI user and a moderation endpoint goes down, you're now exposing yourself to a lot of potential risk that could happen.
- **Consider the updates to the AI tech:** If you're using GPT 4 and you've optimized for 4, and then the technology gets an update to 4.1, then engineering will need to scramble and make adjustments.
- **Consider the accuracy of the data:** ChatGPT does experience what AI experts call "hallucinations" or the creation of untruths. These hallucinations can be controlled by ensuring that all inputs or prompts have accurate data.

---

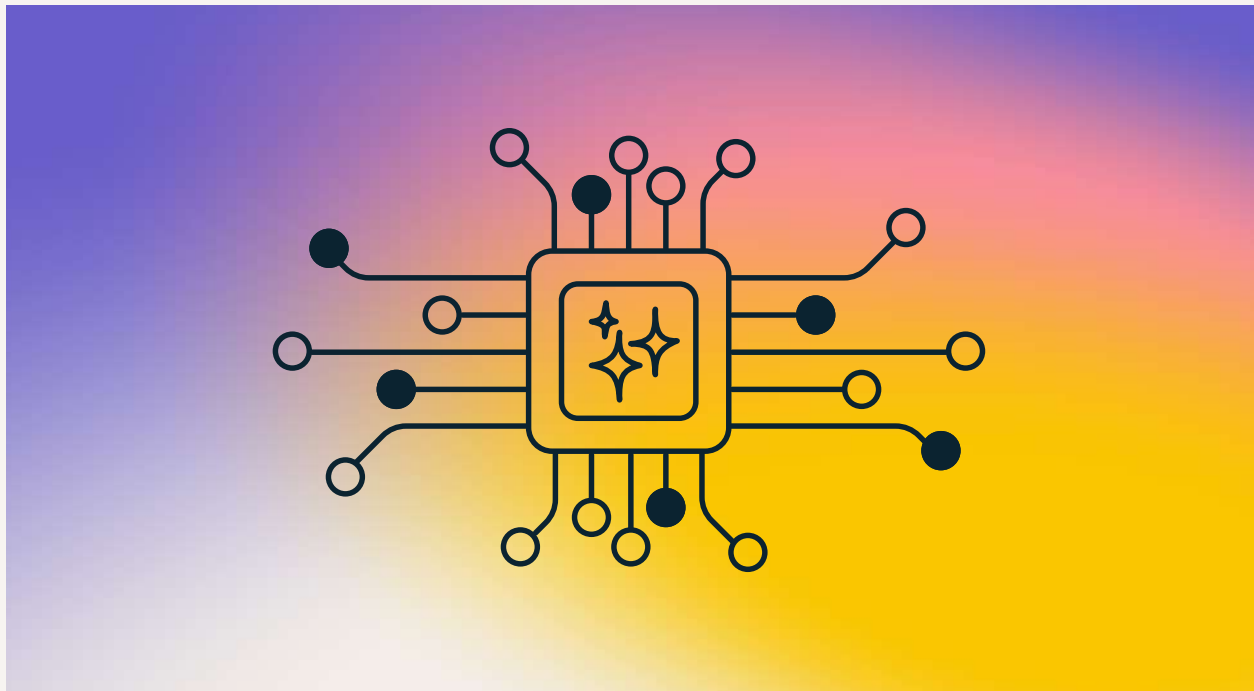
13 "AI Experts Map Out Future Opportunities of AI." Sprig, Accessed on 27 June 2023, <https://sprig.com/blog/ai-experts-map-out-future-opportunities-of-ai>.

## Challenges to Consider (cont'd)

Sprig addressed the challenge of inaccuracy at the inception of Sprig AI by placing a human in the loop to ensure all results were accurate.

“When we first started building Sprig AI, we included a human in the loop who could actually review the accuracy of the results,” said Sprig CEO and Founder Ryan Glasgow.

“This additional review made our customers feel and see that the data was accurate.”



# The Future of AI and Product Management

We are just starting to unlock the power of AI in the area of product management. At the end of the day, product management is really all about what people can do – how product leaders can rally together teams towards a goal or how they can steer the ship in the right direction.

AI is a tool to make these people even more effective. It can significantly enhance the effectiveness of product teams by offering valuable insights, accelerating ideation processes, and conducting research.

It can be even more powerful when you have the right data on your product, from the right users. Sprig enables product teams to capture user insights from the right audience, and then our Sprig AI will turn open-text responses into actionable product recommendations.

**Learn more at [sprig.com](https://www.sprig.com)**