3 Templates for Uncomplicating Your Product Management Process

Problem Brief

Hypothesis statement and metrics. To be filled out last.

Statement: Describe the hypothesis driving this project.

Example: [user / account segment] experiences [negative outcome] because [reason], so we expect that solving this problem will cause [measurable, specific behavior change].

Metric(s) and Baseline: Define how you'll evaluate success.
Introduction

Having product data is not the same thing as using that data to make better decisions. And having numbers in front of you isn’t the same as using those numbers to build things your customers will love. So, how do product teams go from data to insights? And, how do successful product teams transform problems into products that solve those problems?

To start, you’ll need a complete, organized, unbiased, trustworthy, and governed foundation of data. The better optimized that foundation, the greater the number of potential insights (and number of opportunities) it can generate for the business.

So, let’s say you have a foundational data set, then what? Next you’ll need a way to infuse rigorous decision-making, clear prioritization, easy cross-team collaboration, and most importantly, the why, into your processes for product development.

In this workbook, we’ll provide a comprehensive process for product development and three templates that will help you and your team leverage your existing skills and your data to:

1. Identify the problem to solve
2. Design a solution
3. Test and review your hypotheses
4. Iterate and improve
1. Identify the problem to solve

If someone asked you what the typical division of labor between product managers and engineers should be, how would you answer? Many would say something like, “product managers list requirements and engineers build them.” As common as that notion is, we might suggest a new approach.

A key (arguably the most important) role of a Product Manager (PM) is to identify and frame problems to solve, and then lead cross-functional teams to come up with impactful solutions—not to define a solution up-front. “Great leaders align their teams around the why,” David Fullerton, said VP of Engineering at Heap.

In practice, we all know that teams working together to understand “the why” is almost always a better way to generate more ideas than any one person working alone can. Enter the Problem Brief.

What is a Problem Brief?

Quick answer: A Problem Brief is a formalized, organized worksheet for articulating the problem you’re trying to solve. It includes your problem statement (hypothesis), key metrics, and intended business impact.

How do you use it?

- Host a kickoff meeting with PMs, engineers, designers, and at least 1-2 team members from your customer success teams.
- Together, fill out the Problem Brief and align around a product hypothesis. This is a statement that spells out the problem we’re trying to solve, and hypothesizes about what the impact of solving it will be.
- Follow this structure for your hypothesis: [user / account segment] experiences [negative outcome] because [reason], so we expect that [specific product change] will cause [measurable, specific behavior change]

The goal is to align across teams and create a shared customer context about a problem, making a measurable hypothesis – without prescribing a solution. The solution ideation comes next.

Go deeper by reading this article about how to frame a problem, and download The Problem Brief template to get your teams aligned before ideation.
2. Design the solution

After you’ve written the Problem Brief, your teams can move to the next phase, which is the solution and ideation phase. You’ll want to employ a Design Brief to outline and discuss your proposed solution. The designer(s) drive the Design Brief, but like everything in this process, it’s created collaboratively.

Together, you can ideate, brainstorm, or even jump into a virtual whiteboarding session to discuss potential solutions, their feasibility, and their level of difficulty.

For smaller projects, your Design Brief is simply a summary of that conversation. For larger projects, you’ll do more discovery, iteration, sketching, competitive analysis, and ideation. This might take a few hours, or it might take weeks.

Now, it’s time to fill out your Design Brief. In general, this shouldn’t take more than a half day— it’s called a “brief” for a reason!

Sometimes a couple of pages of text does the trick—and sometimes, a few sketches are valuable in clarifying things. Avoid mock-ups and wireframes: they’ll take significantly longer, and they’ll focus discussion at the wrong level. Here’s an example of a helpful sketch:

The sketch on the left accompanied the design brief for Heap’s Report Alerts feature. On the right, a screenshot post-launch.
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So, what is in a Design Brief?

- Behaviors: Without a step-by-step guide, what does your design do, exactly?
  Example: “Add an emoji button to the message input that produces a popup menu of emojis.”

- Assumptions: What critical assumptions underlie your solution?
  Example: “Assume you’re content with a relatively small subset of the entire world of emojis.”

- Key Constraints: What non-obvious constraints shape or limit your solution?
  Example: “Licensing on emoji graphics means that unless you design our own, these will look different on various platforms.”

- Discarded Alternatives: To the extent they’re useful for context, what alternate solutions did you consider but eliminate? Why? This is useful in reviews to proactively handle questions of the, “Why not just do X?” variety. (On occasion, you’ll want to pursue multiple distinct solutions into a review or even into more detailed designs. In that case, you can duplicate sections of the design brief per solution as needed.) Example: “Slack-style autocomplete for emojis. Discarded because it’s actually more effort on a mobile device.”

2.5. Product Quality Review

An important, sometimes missed, next step is a Product Quality Review (PQ). This is when the team reviews both the Problem Brief and the Design Brief with leadership to get input.

At times, this can look a lot like a design review, but it’s not—try to avoid a process in which executives litigate design details. Rather, the PQ review ensures you’re making good trade-offs among product quality, project scope, and timeline.

By doing product quality reviews, and by using such a low-fidelity artifact in them, you’ll be better equipped to make critical decisions about project work (including and especially whether to proceed) at an early enough stage that neither design nor engineering is needlessly wasted.

Once a project clears PQ review, you’ll be off to the races!

The designer starts the design in earnest, and the design brief allows engineers to start scoping and building—at least the back end.

There’s risk here: the quick, high-level nature of the design brief means we sometimes have to change the implementation once we get into the meat of the design. But, if the risk is low enough, and the reward is high enough, then it’s justified.
3. Test and review hypotheses

Product launches are always fun—and while it’s rewarding to gift new bells and whistles to your users, it’s even more important to use your product launches to learn and evolve your product strategy. You can do this with an After-Action Report.

Briefly, After-Action Reports are organized reports written by PMs every time a new feature is shipped. It’s crucial for Product Management organizations to maintain these activities, for a few reasons.

- **Built-in accountability for PMs:** Engineers are accountable for delivering functional, quality code on time. Salespeople are accountable for generating revenue. Why shouldn’t PMs be accountable for their decisions?
- **Improves agility:** It’s easy to fall into a quarterly planning cadence that doesn’t promote an environment of constant learning. Creating a practice of following-up after each product change helps you reach more informed decisions faster.
- **Fosters test & learn culture:** Product development works best when it’s run as a series of educated experiments. With structured iteration, even failures can be celebrated as opportunities to learn. You might even consider sharing After-Action reports with your entire organization!

The results are the meat of an After-Action Report. You’ll want to make sure to provide these three things:

- **Shift in KPIs:** In this section, you simply compare your pre-launch baseline to your new measurements, and call out the major increases, decreases, or “neutral” or unclear impacts.
- **Anecdotes and customer quotes:** Did you get any specific praise or negative feedback from customers? Were there any particularly notable success stories?
- **Deep dive into changes:** In general, it is very unlikely that you will know the full impact of a product change before you actually ship that change, so it is critical that you are able to formulate and answer new, unplanned questions on-the-fly. This is where you can make extensive use of a foundational, complete data set, because behavioral insights sit on top of that.

So, what should be in an After-Action Report?

- What did you ship?
- Time from plan to release
- What was our original hypothesis?
- What are the results?
4. Iterate to improve your product experience

The magic of the After-Action Report is that it will likely surface unknown unknowns in your user funnels—you may even define a new behavioral event you never even thought to track prior to the process.

If you’re using a comprehensive data tool, where all user behavior is captured and organized automatically, you’ll have instant access to the historical click-data associated with that new event—yes, even the thing you didn’t think of in the first place.

So, instead of waiting weeks to get a new answer to a new question about a new behavior, you can keep iterating to improve your product in real-time.

• What did you learn from the market?
• What new hypotheses do you have?
• What new A/B tests can you run?

Conclusion

These three worksheets give you and your teams an end-to-end, high-level structure for product development.

This is a repeatable process you and your teams can use to iterate and fine-tune for your specific needs. Use these templates to figure out what to build based on the why, then design it, launch it, and gather more data to continue asking questions.

As Product Managers at Heap, we’re responsible for knowing why our product works and why it doesn’t. At Heap, we believe that constant experimentation is the way to learn the most about the products we’re putting out into the world. We also believe that we should squeeze every possible drop of knowledge from every experiment we run.
About Heap

Heap’s mission is to power business decisions with truth through a complete, governed, unbiased foundation of data. We empower product teams to focus on what matters— building the best products— not wrestling with their data or their analytics platform.

Heap automatically collects and organizes customer behavioral data at every moment of your digital product experience, so product managers can focus on and deliver exactly what their customers need and want. You can explore, ask and answer limitless questions with easy-to-use reports and templates, surface unknown unknowns, and reveal the stickiest parts of your funnel in just a few clicks.

From individual PMs looking to optimize specific features to the CPOs looking at overall Product strategy for the business, people everywhere use Heap to capture and understand their customer data.

With 10 minutes and a single snippet of code, you too can see the impact Heap can have on your product organization and the business.

Explore other Heap Resources

Related Materials

- **Articles**
  - How to Frame a Problem
  - How to Complete a Design Brief
  - Learning from Every Launch

- **Templates**
  - The Problem Brief template
  - The Design Brief template
  - The After-Action Report

Additional Resources

- **eBooks**
  - The Future of Product Management
  - The Book of Questions

- **Webinar**
  - What Vs. Why: How to align your product and eng teams around data

- **Free Trial**
  - Try Heap for Free

- **Request a Demo**
  - Get an industry-personalized demo

- **Case Studies**
  - Northwestern Mutual improves personalization for customers
  - Splunk prioritized products with customer-first insights