Hypothesis-Driven Development

Instructions & Template for Peer-Reviewed Assignment

NOTE: Go to the 'File' menu and then use either 'Make a copy' or 'Download As' to make yourself an editable copy of this template.

What am I doing?

Overview

For this assignment, you'll be developing:

1. A general description of your subject company
2. A demand/value hypothesis
3. An experiment to test your hypothesis

General Instructions

Also, as you go through these, you may want to delete the **Intro Note and Instructions** sections in your copy. (In Google Docs, right-click (or two-finger click on Mac) and select 'Delete Table'.)

Part 1: Formulate a Positioning Statement

Intro Note

If you're in the specialization, I recommend picking a concept you can build up through the courses. For example, you might have an idea to solve a problem (job, desire) you've had or seen, or you might want to focus on something at your current job. *Regardless, it's most important that the idea is relatively specific (vs. perfect) and that it's okay for you to share it with your peer reviewers.*

Instructions & Example

For your product concept, just state what it does in the format you see below in 'Assignment'. As obvious as it may seem, I find this helps with focus and collaboration- it will also help your peer reviewers better understand the balance of your assignment.

For an example, please see Appendix 1/Positioning Statement.

Assignment

Introduce your the company whose product you're working on with the positioning statement structured as follows [fill in the brackets]:

> For job seekers who struggle with creating compelling, ATS-friendly resumes, the AI Resume Generator is a resume-building software that automates resume customization, optimizes keywords, and provides real-time feedback to enhance job application success. Unlike manual resume writing or static templates, our product leverages AI to provide dynamic, data-driven resume recommendations tailored to specific job descriptions.

Part 2: Sketch a Demand/Value Hypothesis

Intro Note & Examples

In this assignment, we're going to focus on the demand/value hypothesis. You'll start by explicitly declaring one in this section, making sure that it links back to a clear problem scenario/job-to-be-done and alternative. You saw a few of these in action in Weeks 1 & 3, and I've included examples from the startup Enable Quiz in the appendix. Here's an example for this section: Demand/Value Hypothesis at Enable Quiz.

Instructions

There are three rows in the template, but for the assignment you only need to complete *one*.

Note: If you're in the specialization and you have drafted problem scenarios, etc. in one of the other courses, feel free to use those here.

Assignment

Problem Scenarios/Jobs-to-be-Done	Current Alternatives	Your Demand/Value Hypothesis
Job seekers need an efficient way to create optimized resumes that align with job descriptions to increase their chances of getting interviews.	Writing resumes manually. Using generic resume templates. Hiring professional resume writers.	"If we provide AI-driven resume recommendations for job seekers, then they will achieve a higher ATS score and receive more interview invitations."

Part 3: Sketch Three Experiments via MVP

Intro Note

Here, you'll sketch three ideas on how you might test your Value Proposition. Pick one of the VP's from above and draft three alternative MVP-based experiments. For each, consider generally how it would work and what observations (qualitative or quantitative) you'd get out of the experiment. These should in some way help you either improve or validate/invalidate your Demand/Value Hypothesis.

You're free to pick whatever MVP types you like for these (Concierge, Wizard of Oz, or Smoke Test), but my advice is to push yourself to diverge and consider a few ideas that are as different as possible. In practice, this is helpful both for getting to the best possible experiment as well as cultivating that habit with your team.

Example

For an example, see: Appendix 1/Part 3: Sketch an Experiment.

Instructions

Please fill out the template wherever you see [ADD-...] in brackets. Be sure to reference the Rubric for grading criteria.

Assignment

Demand/Value Hypothesis

"If we provide AI-driven resume recommendations for job seekers, then they will achieve a higher ATS score and receive more interview invitations."

Experiment Ideas

#	What type?	How would it work?	What observations?
1	Wizard of Oz	Recruit Participants:	Quantitative Data:

		Find job seekers actively applying for positions via job boards and career websites.	ATS score improvements between original and AI-enhanced resumes.
		Target users who struggle with resume writing or have low application response rates.	Interview callback rates for AI-optimized resumes vs. control group resumes.
		User Experience:	Qualitative Data:
		Participants submit their current resume and target job postings.	User testimonials on usability and perceived resume effectiveness.
		AI (assisted by human experts) optimizes their resumes with keyword adjustments, formatting, and tailored content.	Recruiter feedback on resume clarity and relevance.
		Users receive their improved resumes and apply to jobs.	
		Observations Collection:	
		Track application submission rates and interview invitations over a 4-week period.	
		Gather user feedback on perceived resume improvement.	
		Measure ATS scores before and after AI optimization.	

2		
3		

Submitting Your Assignment

Remember to upload your work in ONE document (PDF format).

Appendix 1: Reference Example

Part 1: Positioning Statement

Intro Note

Note: In this case, the product and the company are the same/the company has just one product. This may or may not be the case for your subject company. If it's a large, multi-product company, you may want to include a positioning statement for both the subject company as well as your specific product. That said, please be sure to at least include a positioning statement for your product concept.

Positioning Statement

For [hiring managers] who [need to evaluate technical talent], [Enable Quiz] is a [talent assessment application] that [allows for quick and easy assessment of topical understanding in key engineering topics]. Unlike [formal certifications or ad hoc questions], our product [allows for lightweight but consistent assessments of technical talent].

Part 2: Sketch a Demand/Value Hypothesis

Problem Scenarios/Jobs-to-be-Done	Current Alternatives	Demand/Value Hypothesis
Screening Technical Talent Engagement Metric [Candidates interviewed by the HR Manager]	Helen the HR Manager: Checking resumes, calling references, and just taking their word for it. Frank the Functional Manager: A few probing questions to get a general feel.	If we offer HR managers at companies that hire a lot of engineers a lightweight quizzing app, they will convert to paid subscriptions.

Part 3: Sketch Three Experiments via MVP

Demand/Value Hypothesis

[Of the Demand/Value Hypothesis from Part 2, which one are you testing?]

Experiment Ideas

#	What type?	How would it work?	What observations?
1	Concierge	We'll find one or two HR managers who have open tech positions or will have soon. Working from the job description and consulting the HR and maybe functional managers, we'll draft a quiz and make it available to them on Google Forms (no code required). We'll watch for form inputs and return the HR managers grades.	First off, we'll look at whether they actually use the quiz or not. We'll want to make sure they're willing to tell us (and track) how many candidates they interview. Since we're mostly looking at how this thing might work for them, we would check in weekly and make ourselves available for questions and help. Next, we'd look at if/whether it helped- both the HR and the functional/hiring manager. We'd do this at the end of the process, after they fill an open position.
2	Wizard of Oz	We'd make the product available to a limited set of users and have them supply the inputs we anticipate using for them to create quizzes. After they submit those inputs, we'd post back to them a message saying 'Thanks! Your quiz will be available in [24] hours.'	Does anyone do this? Where do they drop off? Can we make what we think is a good quiz from the inputs they supply? If not, that's a sign we need to rethink the process.
3	Smoke Test	Here, we'd go with a classic Smoke Test pattern: Google Adwords. Starting from where	We'd look at click-through-rate and sign-up's. If we can't find a CTR >5% and sign-up's >20% we'll

		we know there are a lot of hires, we'd try various key phrase formulations across various topics. For example-- hire [Ruby, etc.] developer interview questions [Ruby, etc.] developer The ads would take the user to a landing page where they can sign up to get a free two month subscription when the product launches.	consider that an invalidation of our demand/value hypothesis.