

# How to incorporate customer research into all three tracks of Desirability-Viability-Feasibility innovation

*In this explainer document, I discuss three different categories of customer research methods to consider as part of your innovation efforts.*

Introduced by IDEO, the DVF framework is a powerful tool to coordinate and evaluate innovation efforts within cross-functional teams. It characterizes successful innovation as the result of positively answering the following three questions:

- **Desirability:** Will customers actively want to use it?
- **Viability:** Will it generate enough revenue to cover costs and return sufficient profit?
- **Feasibility:** Can you build it with the resources you have available to you?



Many teams take a siloed approach to DVF innovation, working in separate Desirability, Viability, and Feasibility tracks, isolated from their peers, as well as from potential customers. This is dangerous because customers in particular provide vital input to optimize solutions.

Customer research, applied across all three tracks of the DVF Framework, saves teams time and effort, provides more accurate estimates for decision-making, and prevents expensive missteps. However, figuring out how to apply research across the three tracks requires moving beyond traditional user research and incorporating techniques from other disciplines.

In this quick explainer document, I'll discuss what kinds of questions customer research can help your team answer, and I'll share some of the most common research methods you can use to answer them.

## Customer research for Desirability questions: What most innovation teams already know

### Desirability

- Discover & validate concept with representative users
- Refine design through iterative user testing

Most innovation teams in tech will already be aware that user or customer research plays a vital role in new product development. Often called customer or product discovery, learning user needs and validating those needs with potential customers is one of the most widely recommended innovation methods among design thinkers and entrepreneurs today.

Once a concept is under development, user testing (i.e., observing as users complete tasks with it) is a simple but effective way to figure out what is and isn't working, and to polish the interface, making it enjoyable to use.

The challenge for most innovation teams isn't in recognizing the importance of user research; it's in making time for it. When deadlines are looming, it's all too easy to skip talking to users and to look to what your competitors are doing instead.

Unfortunately, this places all of your trust in your competitors' research (assuming they've done any) and makes it harder to differentiate your own offering.

## Common research methods for Desirability questions:

- Discovery interviews
- Validation interviews
- Contextual inquiry
- Concept testing

## Customer research for Viability questions: Valuable inputs for profit modeling

Customer research also has an important role to play in investigations of a concept's business viability. Customer input can be valuable in assessing customers' "willingness to pay" (WTP) for a product or service, as well as informing how features are bundled together, and even sales channels.

I find that many small innovation teams omit any true customer testing from their Viability work, perhaps because this type of market research has traditionally been expensive and slow. But modern lean and DIY market research methods mean that you absolutely can (and should!) obtain this type of customer insight early, and that you can do so at a surprisingly low cost of time and money.

By knowing upfront approximately what customers are willing to pay and how to design offers to reach and satisfy them, leaders of Viability-track innovation can make much more informed revenue vs. cost comparisons.

## Common research methods for Viability questions:

- "Willingness to Pay" studies
- Product configuration studies
- Customer segmentation studies
- Discovery interviews
- Contextual inquiry

### Viability

- Inform estimates of price & revenue
- Inform estimates of marketing costs

# Customer research for Feasibility questions: Letting the end user determine pass-fail experiences

## Feasibility

- Ensure that working prototypes satisfy real user expectations

Technical explorations, especially for early-stage innovation, benefit greatly from user input, especially when the technical solution impacts the quality of the user's experience. In these cases, testing actual, working prototypes with representative users will provide critical pass-fail data that you can't get any other way.

Here's a real-world example:

An engineering team was developing AI-generated "clusters" of web content around users' inferred interests. Unfortunately, when we tested them with users, we learned that real people's interests were too idiosyncratic to be inferred in this way. What looked like a good collection of websites and images for the "average" human didn't map to the unique hobbies, projects, and passions of an individual.

It took testing with actual users to recognize that the technical solution didn't address real user needs.

User research can enhance technical explorations by offering an opportunity to get direct input from end-users on whether the experience is satisfactory. For simple experiences, this can take the form of user testing a basic prototype. But for more comprehensive or integrated prototypes, you may need to test in the user's actual environment (field testing) or test over time (beta testing or diary studies).

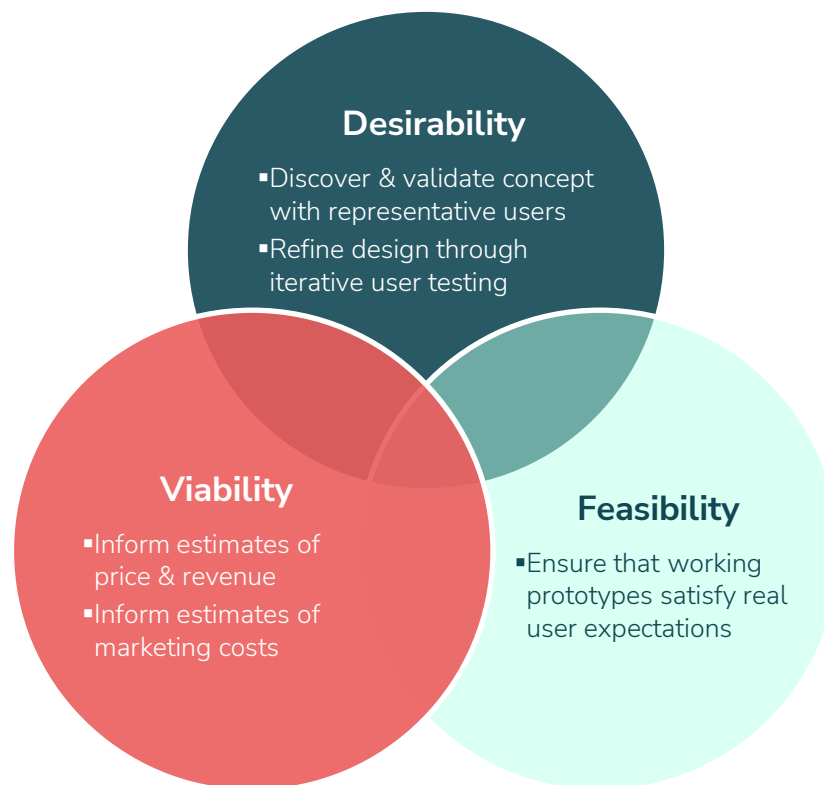
### Common research methods for Feasibility questions:

- Prototype user testing
- Field testing
- Beta testing
- Diary studies

# Customer research enhances innovation

In my experience with tech companies and startups, many teams using innovation frameworks overlook the value of deploying customer research across all of their workflows. But this approach deprives the team of invaluable inputs to establishing a concept's desirability, business viability and technical feasibility.

## How customer research can complement Desirability, Viability, and Feasibility efforts



By ensuring that product discovery and validation research is prioritized when answering Desirability questions, you are more likely to pivot early and achieve true product/market fit sooner.

By incorporating lean or DIY market research techniques into your toolkit, you can create more informed assessments of an innovation's long-term viability. This makes it easier to present a compelling business case for continued (or increased) team funding.

And by incorporating rigorous user testing into technical prototyping efforts, you can create a better feedback loop for your team's technical explorations. This enables faster pivots away from ideas that won't work for users, saving costly engineering time, and ensuring that developers can do their best work.

Customer research is the magic bullet for faster, more effective innovation. And the most successful teams are the ones that learn how to wield it cross-functionally, incorporating it into every aspect of their innovation process.

To learn more about the research methods outlined here, or to discuss your team's specific innovation challenges, you can [schedule a call with me here](#).



## About Llewyn Paine Consulting, LLC

Llewyn Paine Consulting, LLC, partners with product leaders to help them create more customer-data-driven organizations. Principal Llewyn Paine, Ph.D., was a founding member of high-profile emerging technology efforts at Disney and Microsoft and has been advising executives and business leaders on decision-making through data since 2010.