

Discovery Practices

- Visioning
- Root cause analysis
- Generative research
- Human centred design (HCD)
- Hypothesis thinking
- Value definition
- Value Prioritisation

Visioning

□ What is it

- Visioning involves imagining and describing the desired state or outcome in vivid detail, providing a sense of direction and purpose.
- Visioning is a powerful tool for setting goals, aligning efforts, and inspiring people to work together towards a shared aspiration, or North Star.
- The outcome of this practice is a concise description known as a vision statement.

□□ Key Benefits / Why is this important

- It is difficult and challenging for most people to quickly grasp the concept and the objective without involving them in an explanatory dialogue. A vision statement acts as a North Star, for anyone involved in the Ideation phase and beyond as to what the future should look like when the idea is successfully realised.
- This North Star acts as a focal point of a common goal the team can believe in and align their work to.

□□ Techniques supporting this practice

- Product Vision Board (template)

Root cause analysis

□ What is it

- This analytical technique is intended to get to the root cause of a problem by asking 'why' or 'what caused this several times.
- Each question seeks a deeper understanding until the asker discovers the root issue.

□□ Key Benefits / Why is this important

- Industry research has multiple case studies of organisations misinterpreting what is problem is actually worth solving. Symptoms associated to the problem are far easier to observe and capture. Addressing the symptom typically results in lower value outcomes.
- Focused on using the power of 'why'. It does not mean that the research facts presented are incorrect, but a user's perception of the problem may not accurately describe the true underlying problem.
- This practice directly supports a key principle of outcome based ways of working, by forcing the team to spend more time exploring the problem before rushing to think about potential solutions.

□□ Techniques supporting this practice

- 5 Whys
- Problem definition
- User interviews

Generative research

□ What is it

- Generative research sometimes referred to as discovery or exploratory research, is defined as “a method of research that helps researchers develop a deeper understanding of users in order to find opportunities for solutions or innovation.” Contrary to evaluative research, which is about evaluating our design and our product by using usability testing methods, the goal of generative research is to generate information about end users and explore the problem space related to our product.
- You are expected to produce a research plan, execute the research and deliver a summary findings identifying the users, their needs and their pain points. This is typically summarised in a research findings report which then is the key input to inform the discovery outcomes.

□□ Key Benefits / Why is this important

- This practice enhances existing understanding by gathering rich and detailed information about users' behaviours, attitudes, motivations, and preferences. It enables an equal focus across functional, emotional and social needs of a user, while quantitative methods, such as Google Analytics only surfaces functional needs.
- It directly supports a key principle of outcome based ways of working, by forcing the team to spend more time exploring the problem before rushing to think about potential solutions.

□□ Techniques supporting this practice

- User interviews
- Usability testing
- Empathy mapping

- Task oriented research

Human centred design (HCD)

□ What is it

- It is an iterative design practice that places the human user at the center of the design and development process. It emphasizes empathy, rapid prototyping, and user feedback to create solutions that are tailored to the needs, preferences, and contexts of the end users.
- The guiding elements are
 - Holistic Approach: HCD takes into account the complete user experience, not just the product or service itself.
 - Collaborative and Interdisciplinary: HCD thrives on collaboration and often involves multidisciplinary teams.
 - Iterative Process: Rather than a linear progression, HCD is iterative, often requiring multiple cycles to arrive at the best solution.
 - User Feedback: Constant feedback from users is integral. This feedback loop ensures that designs are always in tune with user needs and contexts.
 - Focus on Experience and Emotion: Beyond just usability, HCD looks at the emotional responses and overall experiences of users.
- HCD always starts by understanding and empathizing with the end-users. Designers immerse themselves in the user's environment to gain a deep understanding of their needs, challenges, and contexts from both a functional and emotional lens.
- Insights gathered during the empathy phase help in defining the real problems and needs of the users. This involves re-framing the initial problem in terms of user needs, and are transformed into potential opportunities with associated hypothesis.

□□ Key Benefits / Why is this important

- Positioning the user at the heart of discovery increases the likelihood that any subsequent solution ideas and opportunities will be solving valuable problems for users, and not just providing an additional list of features and functions that the team think are worthwhile.

☐☐ Techniques supporting this practice

- Empathy mapping
- User journey mapping
- User interviews
- Observational study
- Surveys

Hypothesis thinking

□ What is it

- Hypothesis thinking ensures that decisions are objective, deliberate, data-driven, and focused on continuous learning and improvement.
- This practice enables a team to turn assumptions into a testable format - a hypothesis. Its fundamental premise is that most beliefs or points of view gathered as part of ideation or discovery are opinions, however well formed.
- By using a formal construct to articulate a belief, most of the subjectivity surrounding decisions is removed by capturing data from the associated experiment.
- The typical steps in this practice are: Formulating the Hypothesis: Once the problem/assumption is identified, the product manager formulates a clear hypothesis followed by the experiment design. This could involve creating a prototype, introducing a new feature behind a feature flag, or rolling out a minimal viable product (MVP).

□□ Key Benefits / Why is this important

- Risk Reduction by focusing on small bet experiments informed by the hypothesis, before converging on a chosen solution with larger investment and effort
- Data-Driven Decision emphasizes evidence over intuition or mere guesswork, ensuring decisions are grounded in actual user behaviour and feedback.
- Aligns well with agile methodologies, emphasizing quick iterations, feedback loops, and adaptability.
- Accelerated learning to validate key assumptions. Even invalidated hypotheses provide valuable insights. By understanding what doesn't work, or what users don't want, teams can refine their understanding of their users and the market.

□□ Techniques supporting this practice

- Problem definition
- Value prop canvas
- Hypothesis statements (template)

Value definition

□ What is it

- This practice sits at the very core of modern ways of working. Define value incorrectly, and all subsequent work delivered will not optimise valuable outcomes. What is perceived as valuable often does not transpire to be true.
- **Value can be highly subjective.** This is because it is inherently highly subjective, reflecting the functional, emotional and social needs of end users, and the current objectives of a directorate or business sponsor.
- For example for one user profile the most valuable feature on their smart phone may be access to social media, while for another group digital payment wallets and banking maybe their most valuable feature.
- **Value can be highly transient** - What is valuable changes over time, reflecting the changing circumstances and jobs to be done of end users and the environment that they interact with.
- For example a business sponsor's key focus for the current quarter is reducing operational costs by increasing greater automation efficiencies in running a service. The next quarter the most valuable objective may have changed to improved end user satisfaction through higher first time self service resolutions to simple requests via digital channel.
- The **key types of value** to be considered are: financial, reputation, user satisfaction, growth and operational integrity.

□□ Key Benefits / Why is this important

- Increasing confidence and articulation of where value lies, increases the likelihood of delivering timely valuable outcomes that solve genuine user needs and demonstrably contributes to one or more organisation objectives
- Defined value is the foundation to enabling product managers to undertake meaningful prioritisation of backlogs

☐☐ Techniques supporting this practice

- OKR mapping
- Value proposition framework
- Idea capture form (template to structure thinking)

Value Prioritisation

□ What is it

- Discovery activity will surface a number of problem/opportunity statements, and associated assumptions. For each statement and assumption a hypothesis statement should be defined and an experiment identified and defined
- Typically the effort required to run all the defined experiments outstrip the planned capacity of the resource available. Additionally some experiments may be nullified by other hypotheses being proven/disproven.
- A prioritisation activity should be taken near the end of discovery to sequence which experiments should be targeted first during the Validation phase.
- The most valuable outcomes in validation are focused on learning. Prioritisation should focus on addressing the riskiest and most impactful assumptions as early as possible in this phase, to gain the most valuable learnings, with the smallest effort expended. The product manager and service designer creates the prioritised list of experiments, and works with technology and architecture to assess feasibility and effort to execute such experiments successfully.
- This may result in some resequencing of the initial priorities to balance speed and effort of delivery with learning value.

□□ Key Benefits / Why is this important

- Without this practice, the speed and cost to address the riskiest assumptions is increased, as the team and stakeholders fill the void of what are the best next steps with subjective opinion.
- The rigour of this practice provides a strong foundation from which to more effectively mobilise the right resources to kick off Validation

□□ Techniques supporting this practice

- Assumption / Impact Quadrant matrix