TABLE *of* CONTENTS

Inception

Inception, a term adapted from agile development, is a short, days long discovery spike used to define the key inputs needed to create a more informed solicitation for your digital acquisition. The goal of inception is to quickly align your digital acquisitions team around a shared understanding of who the end users are, the problem you're trying to solve, and a vision for how the product will best serve end users and your organization over time. Inception allows your team to create improved solicitations based on prioritized, actionable user stories and focused product objectives. The entire cross-functional team and key stakeholders should be involved for the entirety of the inception phase, and this should occur before your contracting officers begin to develop the solicitation.

Key activities include, but are not limited to:

- Creating proto-personas

- Deconstructing the problem
- Drafting a problem statement
- Capturing assumptions and hypotheses
- Identifying the Minimum Viable Product (MVP)
- Defining a product vision
- Determining a product strategy
- User story mapping

Creating proto-personas

Overview

In order to identify your key users and to ensure alignment among the team during inception, create proto-personas. Proto-personas are:

- A variation of personas used develop early design hypotheses
- An encapsulation of the organization's beliefs about who is using your product or service and what is motivating them to do so
- Used to initiate and reinforce awareness of the end user's point of view during strategic planning

It's also important to note that although proto-personas are a valuable tool, they're not:

- A substitute for heavily-researched personas based on feedback from actual users of the product
- Validated representations of the organization's target audience

If your team or program have already created actual personas (ones based on end user research) for the product, those can be used in place of creating proto-personas for inception.

How-to guide

Steps for creating proto-personas:

1. Individually, each team member should spend a few minutes listing out all of the different types of users for the product which come to mind. Everyone should focus on listing end users, people who will actually use the product when it's built.
2. In groups of two, discuss the users they've identified and list key information about each user such as demographics, needs and goals, and behaviors. Each type of user should also have a name and a quick sketch associated with it.
3. Bring the full team back together to discuss each user type. Then, narrow the list down to no more than five to focus on for this product. This can be done using dot voting or any other prioritization technique.
4. Once you've prioritized the proto-personas you plan to focus on as a team, determine which attributes would be most important to consider across all user types.
5. For each attribute you choose, rank each of the prioritized proto-personas against that attribute.
6. Document your team's final output for each of the prioritized proto-personas digitally so that will be easier to share and reuse in future conversations. The final proto-personas should include a name, sketch, key demographic information, needs and goals of that person in relation the product, and list of their behaviors.

Resources

- Using Proto-Personas for Executive Alignment

Deconstructing the problem

Overview

When developing new products, processes, or programs, most agencies aren't sufficiently rigorous in defining the problems they're attempting to solve and articulating why those issues are important across the organization and to vendors. Agencies often miss opportunities, waste resources, and end up pursuing innovation initiatives that aren't properly aligned with their core mission because they have not properly understood the problem.

Problem deconstruction helps focus your team at the beginning of a new project and ensures that you're solving the right problem and tackling it in the right way with your acquisition strategy. In the end, your team should be able to answer the following questions:

- What is the solvable problem?
- Who has the problem or who is the customer?
- What form should the final solution take? What is the scope (in time, money, resources, technologies) that can be used to solve the problem?
- What barriers and constraints exist to solving this problem?

How-to guide

Creating a problem statement

1. Understand your team's current understanding of the problem by answering the "Campfire Questions":
    a. What problem are we solving for our users?
    b. Why is solving it important?
    c. Why now?
2. As a group, draft a problem statement based on the assumptions and current understanding of the problem from your team.
3. Use the CATWOE Analysis to identify the people, processes, and environment that contributes to the problem.
4. If stuck, use the Five Ws (Who, What, When, Where Why) and H to answer fundamental questions about your products.
5. Identify barriers and constraints that may have prohibited this problem from being solved previously. Barriers are obstructions that can be overcome (like a fence) while constraints are limiting factors that can't be overcome.
6. Reframe the problem statement to answer these questions:
    a. **What is the solvable problem?** This should explain why the team is needed.
    b. **Who has the problem or who is the customer?** This should explain who needs the solution and who will decide the problem has been solved.

c. **What form should the final solution take?** What is the scope (in time, money, resources, technologies) that can be used to solve the problem?
d. **What barriers and constraints exist to solving this problem?**

Resources

- CATWOE Analysis
- Five Ws (Who, What, When, Where Why) and H

Developing a product vision and strategy

Overview

In the words of Jim Highsmith, for any project, but particularly those with high uncertainty for which significant requirements changes are anticipated, creating a product vision statement helps teams remain focused on the critical aspects of the product, even when details are changing rapidly. A product strategy describes how all of the product principles, statements of the value a product embodies, fit together. These help your teams maintain the coherence of decisions being made over time within changing circumstances.

How-to guide

Developing a product vision and strategy

1. Capture assumptions and hypotheses shared by the team about your product or service. Write down everything you know about the product and reference source of knowledge if possible on sticky notes.
2. Analyze the sticky notes and organize them into groups based. Each group should be given a label.
3. Determine the minimum viable product (MVP) by identifying key features on sticky notes and prioritizing them as a group with an activity like dot voting.
4. Identify success criteria for each of the prioritized features. Success criteria are the factors that help your team determine if the feature is

meeting the desired objectives. As a team, identify the success criteria that are both critical and measurable.

5. Identify any challenges and risks associated with the MVP.
6. Design a Product Box which assumes the product will be sold in a shrink wrapped box and your team needs to come up with a product name, graphic, 3-4 key bullet points to "sell" the product, a detailed feature description on the back, and operating requirements.
7. Draft a product vision statement. The vision statement should answer the following:
   a. For (people served)
   b. Who (statement of the need or opportunity to fulfill mission)
   c. The (product name) is a (product category)
   d. That (key benefit, compelling reason to change)
   e. Unlike (existing product)
   f. Our product (statement of primary differentiation)

Resources

- Product Vision by Jared Spolsky
- Tips for Writing a Compelling Product Vision
- Crossing the Chasm by Geoffrey A. Moore

User story mapping

Overview

A user story map is a visualization of the user's journey through the product that you're designing. It keeps your users and what they're doing with the product the focus of your planning, not the features the product has.

User stories are typically organized in a product backlog — a list of prioritized objectives that helps teams understand what features to develop over time. Teams work with the product owner to rank the backlog of user stories. Usually this results in a linear product backlog, which makes it hard to understand and explain to others what the product does. It also adds extra complexity to release planning for agile teams. The story map makes it much easier to tell a user's story.

There's a formula to build a user story map: users have a vision, which are achieved by goals. Their goals are reached by completing activities, and to complete an activity users must perform tasks. At the top of the whole story map is the users who are at the center of the journey, and the tasks are laid out according to the sequence of time on the X axis, and the priority of the tasks on the Y axis.

How-to guide

To create a user story map, you'll need to have at least four different colors of medium-sized sticky notes, permanent markers, and a large blank wall or poster boards. You'll be making many sticky notes and moving the sticky notes around, so make sure that you have a large wall space. Below are the steps to create a user story map:

1. Capture each proto-personas on separate sticky notes, starting with users that interact with the project the most. Place each of the prioritized personas in a linear line along the X axis on the wall or poster board at the top according to the highest priority to the left, and the lowest on the right side. Multiple personas can be used if they have the same goals at heart.
2. Identify the goals that each user is trying to accomplish. Each goal should be written on a separate color sticky note than the personas, and should be kept at a high level. There may be one or several different goals of that user — make sure you account for all the goals for that user.
3. Under each of the goals, list specific tasks of the specific users above. Each of the goals should have several activities to complete the overarching goal. In the diagram below, each of the goals have specific activities that are directly related to and map back to the goals of that user. Activities usually start with an actionable verb followed by a noun.
4. For each activity, identify the tasks that comprise that activity. Tasks also should start with a verb, but are more descriptive than activities.
5. Determine a release planning strategy by highlighting the features that encompass your MVP.

Resources

- Story Mapping Quick Reference
- User Story Mapping by Jeff Patton