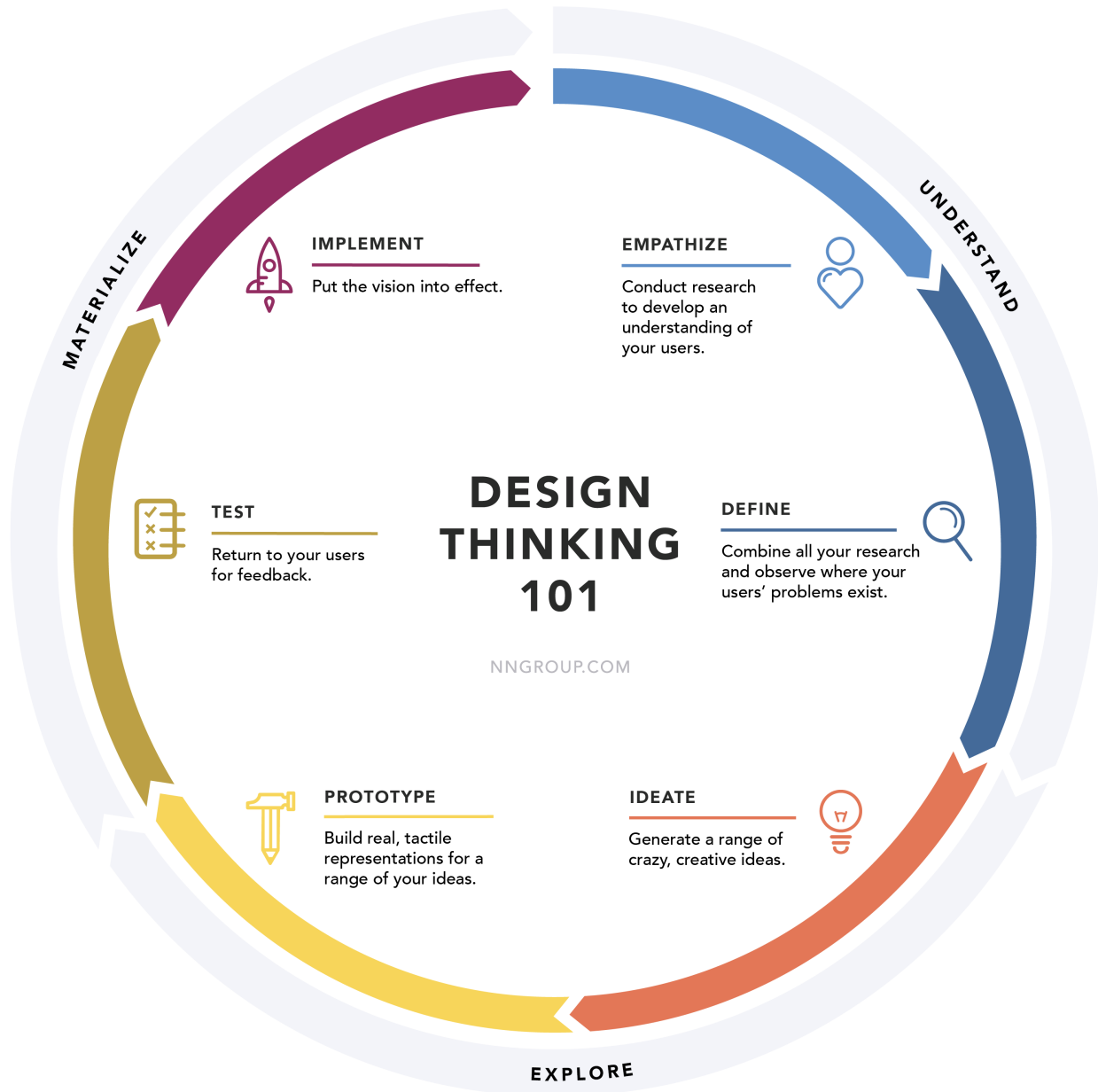




UX Rituals, Artifacts, & Frameworks

Design Thinking Overview

ROOTED IN RESEARCH



Proceeding on a software initiative without research can be risky and can lead to wasted time, money, and effort

What is Design Thinking?

- Hands on, user-centric approach
- Starts and ends with user data
- Addresses real (not imaginary) user needs
- Tests actual systems with actual users

Phases of Design Thinking

Understand

- Empathize - Gain Knowledge of your users
- Define - Unearth users' problems
- **Artifacts in the UNDERSTAND phase**
 - [Personas](#) - Users' Traits
 - [Empathy Maps](#) - Users' Perspective
 - [Journey Maps](#) (as-built) - Users' current actions
 - [Service Blueprints](#) (future-state) - Employee/System current actions

Explore

- Ideate - Generate concepts
- Prototype - build tactile representations
- **Artifacts in the EXPLORE phase**
 - [Journey Maps](#) - (future-state) Users' ideal actions
 - [Service Blueprints](#) - (future-state) - Employee/System ideal actions
 - [Design Studio](#) - Quick Ideation
 - Wireframes -Workflow, weighting, & hierarchy
 - [Prototypes](#) - Proposed solution

Materialize

- Test - Get feedback from users
- Implement - Put the vision into effect
- **Artifacts in the MATERIALIZE phase**
 - [Usability Studies](#) - Validate proposed solution
 - Hand-off to dev - Ready for implementation

- Information Architecture - System hierarchy

Additional reading

Design Thinking 101

It is a common misconception that design thinking is new. Design has been practiced for ages: monuments, bridges, automobiles, subway systems are all end-products of design processes. Throughout history, good designers have applied a human-centric

NN <https://www.nngroup.com/articles/design-thinking/>

Design Thinking 101



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Personas / User Types

USERS' TRAITS

https://s3-us-west-2.amazonaws.com/secure.notion-static.com/a6e78a17-81f1-4053-86b1-b6af505b9fb9/Primary_Persona_-_Partner.pdf

Penelope is the primary persona for the *marketing website*. Penelope may not be the correct primary persona for the actual product. Each persona should be laser-focused on the scope of the initiative.

WHAT IS A PERSONA?

- A realistic description of a singular, target user

WHY PERSONAS?

- Allow for focus on **users needs**
- Team members more captivated by **concrete instances** rather than generalizations
- Provide a **proxy for ideation**, rather than personal bias
- Focused exclusively on attributes **relative to your problem space**

HOW ARE PERSONAS CREATED?

- Field Study
- 1-on-1 Interviews with user
- Aggregate previous research
- Prioritize on 2x2 if too many personas
- ~~Focus groups~~

WHO PARTICIPATES IN THE CREATION OF A PERSONA?

- Lead: UX
- Contributors: UX, Product, BizDev, User (for validation)

TIME TO COMPLETE

- 4-8 hours per persona. Revisit quarterly or on pivots.



3 personas are ideal for any product or experience. Any more than that and you risk trying to please everyone and end up not pleasing anyone. Archetypes with similar goals and challenges should be grouped together.

Keep in mind that any self-reported data, such as that resulting from focus groups and surveys, is possibly misleading and should be verified through other methods.


LumaTax Personas:

- Scope: Marketing Website
 - [Penelope; The accounting firm Partner](#)
 - [Aaron; The accounting firm associate](#)
 - [Cathy; The curious tax-paying client](#)

Additional Reading

Personas Articles, Videos, Reports, Training Courses, and Online Seminars by NN/g

For most teams, approaching persona creation qualitatively is the right balance of effort vs. value, but very large or very small organizations might benefit from statistical or lightweight approaches, respectively.

 <https://www.nngroup.com/topic/personas/>

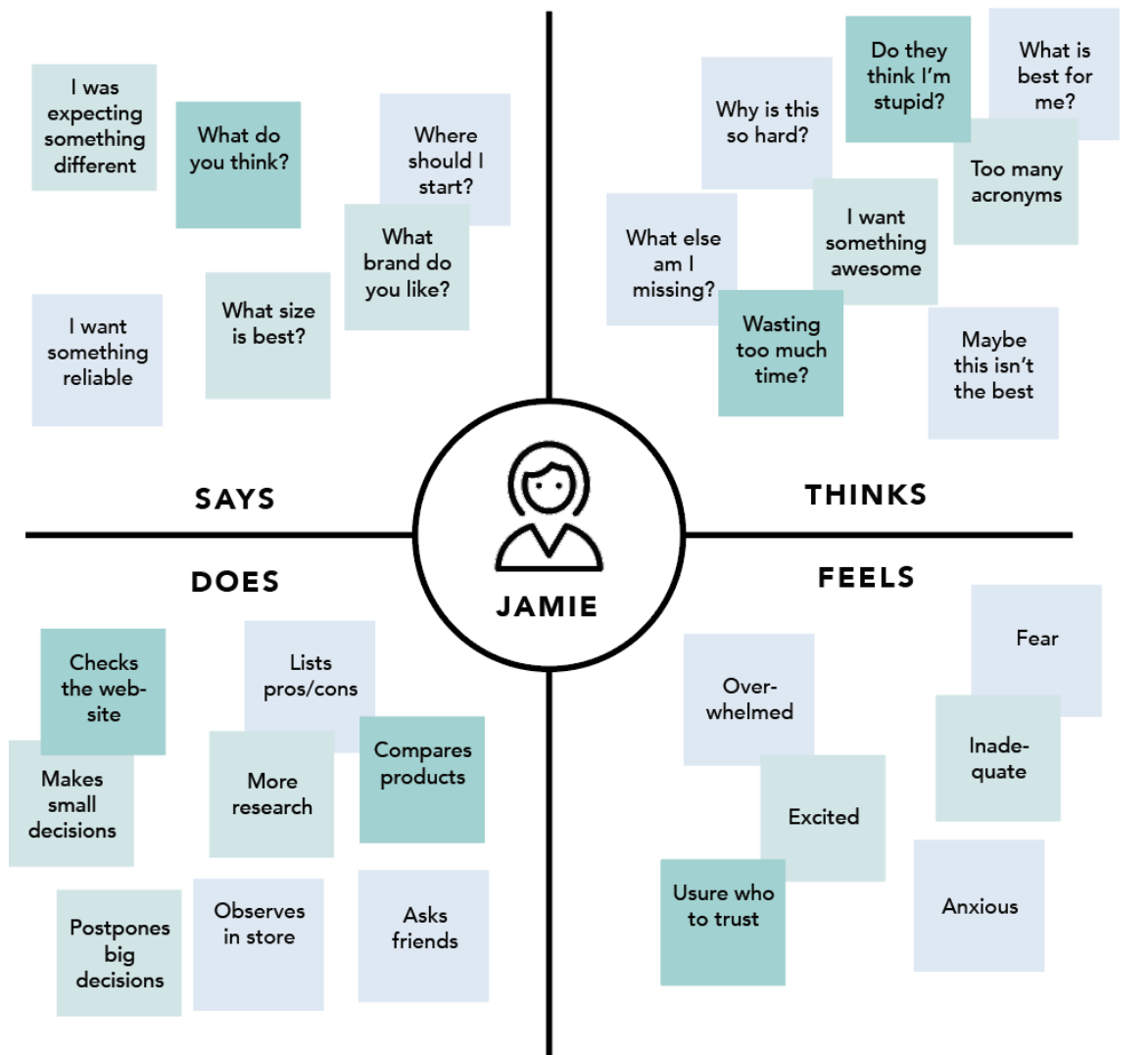


Empathy Maps

A USER'S PERSPECTIVE

“As UX professionals, it is our job to advocate on behalf of the user. However, in order to do it, not only must we deeply **understand our users**, but we must also **help our colleagues understand** them and prioritize their needs. Empathy maps are a powerful, fundamental tool for accomplishing both.” - Sarah Gibbons– Nielsen Norman Group

EMPATHY MAP Example (Buying a TV)



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WHAT IS AN EMPATHY MAP?

- Non-sequential **visualization of users' thoughts, statements, feelings, actions** related to the product

WHEN DO YOU CREATE AN EMPATHY MAP?

- **At the beginning** of any design process
- When **categorizing research** notes from an interview

WHY EMPATHY MAPS?

- Help distill and **categorize user knowledge**
- Discover **gaps in current knowledge**
- Assist in the **evolution of personas**
- Guide us towards **meaningful innovation**

HOW ARE EMPATHY MAPS CREATED?

- Internal workshop
- Aggregate research
- User Surveys

WHO PARTICIPATES IN THE CREATION

- **Lead:** Facilitator (UX or PM)
- **Attendees:** UX, PM, SMEs

HOW LONG DOES IT TAKE TO CREATE AN EMPATHY MAP?

- 1-2 hours per persona

Additional Reading

Empathy Mapping: The First Step in Design Thinking

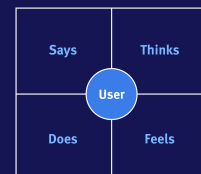
As UX professionals, it is our job to advocate on behalf of the user. However, in order to do it, not only must we deeply understand our users, but we must also help our colleagues understand them and prioritize their needs. Empathy maps, widely used

NN <https://www.nngroup.com/articles/empathy-mapping/>

Empathy Mapping: *The First Step in Design Thinking*

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Journey Maps

A USER'S ACTIONS & SENTIMENT

“Journey mapping is a process that provides a holistic view of the customer experience by uncovering moments of both frustration and delight throughout a series of interactions. Done successfully, it reveals opportunities to address customers’ pain points, alleviate fragmentation, and, ultimately, create a better experience for your users.” - Sarah Gibbons - Nielsen Norman Group

https://s3-us-west-2.amazonaws.com/secure.notion-static.com/0d3846c3-cf32-421a-8dae-b1b3fa80f649/LumaTax.com_2021_refresh_Journey_Map_-_LumaTax_2021_Website_Refresh_Journey_Map.pdf

This journey map was created for the 2021 marketing website redesign

WHAT IS A JOURNEY MAP?

- A **Sequential** visualization of the **actions, pain points, questions and sentiment** a person goes through in order to accomplish a goal

WHEN SHOULD YOU CREATE A JOURNEY MAP?

- **At any point** in the design process
- Can be **current or future** focused

WHY JOURNEY MAPS?

- To pinpoint specific moments that cause **pain or delight**
- One **shared understanding** of the customer’s path
- Flip pain points to **opportunities (a.k.a User Needs)**

HOW ARE JOURNEY MAPS CREATED?

- Internal workshops

WHO PARTICIPATES IN THE CREATION OF A JOURNEY MAP?

- Lead: Co-facilitators (UX & Product)
- Attendees: SMEs

HOW LONG DOES IT TAKE TO CREATE A JOURNEY MAP?

- 4-12 hours per map

Additional reading

Journey Mapping 101

Journey maps are a common UX tool. They come in all shapes, sizes, and formats. Depending on the context, they can be used in a variety of ways. This article covers the basics: what a journey map is (and is not), related terminology, common

NN <https://www.nngroup.com/articles/journey-mapping-101/>

Journey Mapping 101

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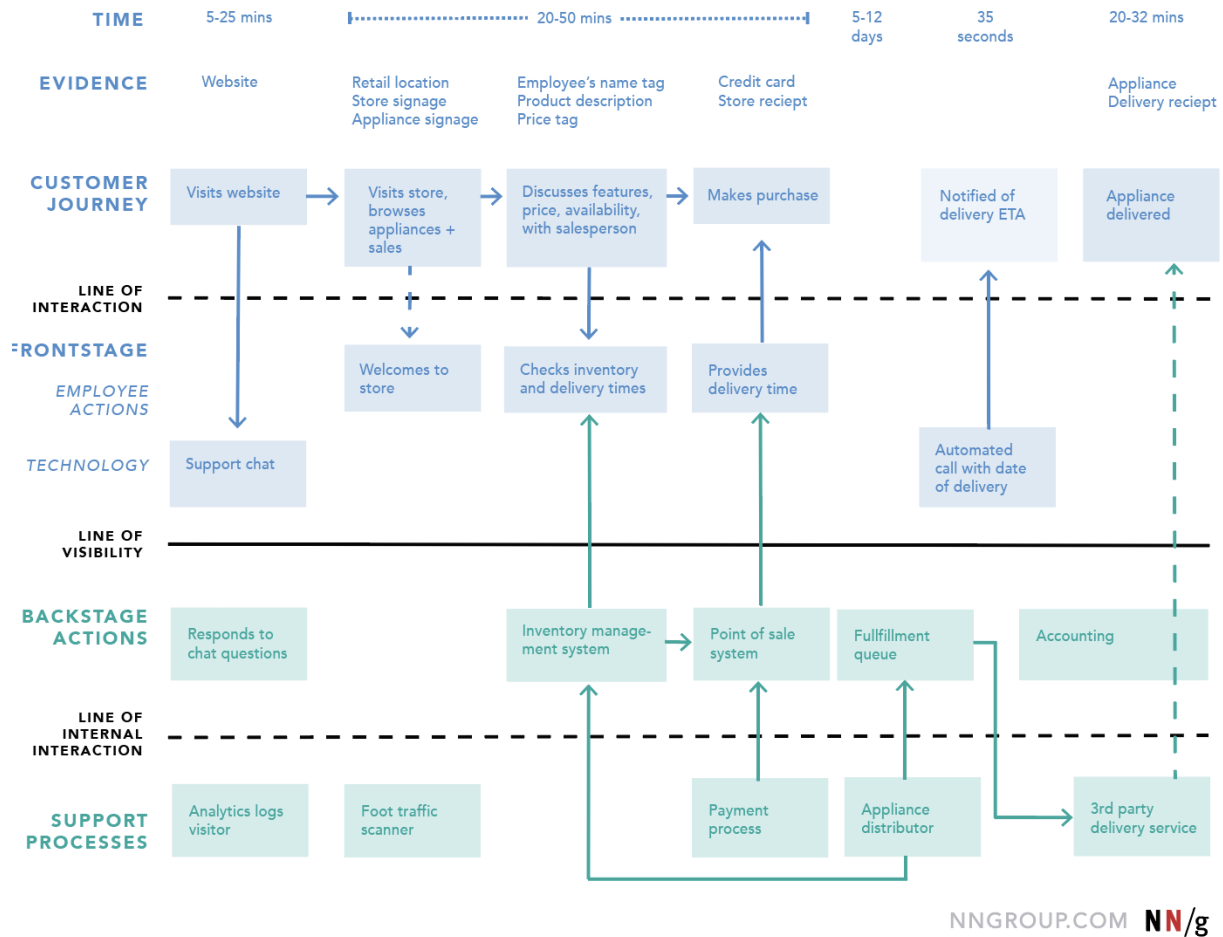


Service Blueprints

EMPLOYEE / SYSTEM ACTIONS

“Service blueprints help pinpoint dependencies between employee-facing and customer-facing processes in the same visualization and are instrumental in identifying pain points, optimizing complex interactions, and ultimately saving money for the organization and improving the experience for its customers.” - Sarah Gibbons, Nielsen Norman Group

SERVICE BLUEPRINT *Example (Appliance Retailer)*



WHAT IS A SERVICE BLUEPRINT?

- Visualizes the **relationships between different components** – people, props (physical or digital), and processes that are **tied to points in a customer Journey Map**

WHEN SHOULD YOU CREATE A SERVICE BLUEPRINT?

- **After Journey Mapping**
- Before making **process changes**
- Pinpointing an **internal breakpoint**
- Can reference **existing processes** or an **ideal future-state**

WHY SERVICE BLUEPRINTS?

- Identify opportunities for **optimization**
- **Bridge cross-department** efforts
- Provide **shared understanding** of how a service is provided

HOW ARE SERVICE BLUEPRINTS CREATED?

- Internal Workshop

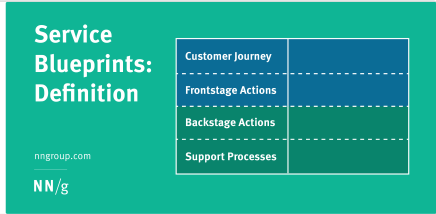
WHO PARTICIPATES IN THE CREATION OF A SERVICE BLUEPRINT?

- **Lead:** Facilitator (UX/PM)
- **Attendees:** Cross-functional SMEs

HOW LONG DOES IT TAKE TO CREATE A SERVICE BLUEPRINT?

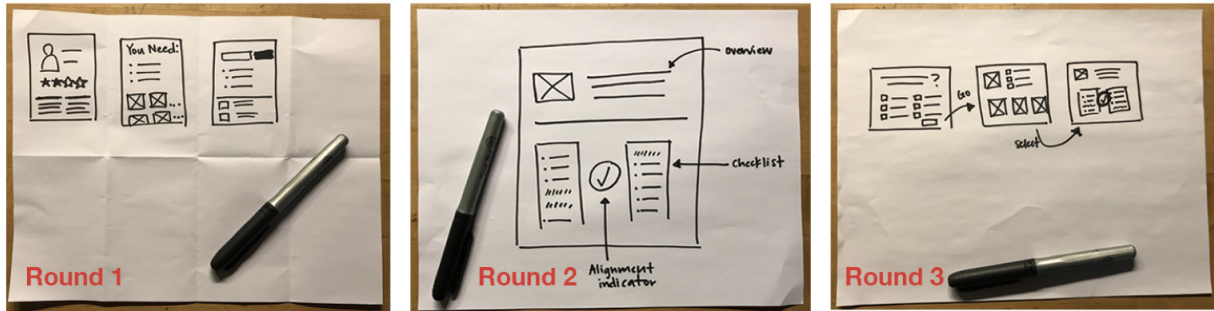
- 2-6 hours per blueprint

Additional reading

<p>Service Blueprints: Definition</p> <p>Service design is the activity of planning and organizing a business's resources (people, props, and processes) in order to (1) directly improve the employee's experience, and (2) indirectly, the customer's experience. Service blueprinting is the</p> <p>NN https://www.nngroup.com/articles/service-blueprints-definition/</p>	 <p>Service Blueprints: Definition</p> <p>nngroup.com</p> <p>NN/g</p> <table border="1"> <tr> <td>Customer Journey</td> <td></td> </tr> <tr> <td>Frontstage Actions</td> <td></td> </tr> <tr> <td>Backstage Actions</td> <td></td> </tr> <tr> <td>Support Processes</td> <td></td> </tr> </table>	Customer Journey		Frontstage Actions		Backstage Actions		Support Processes	
Customer Journey									
Frontstage Actions									
Backstage Actions									
Support Processes									

 **Design Studios**

QUICK UI IDEATION



“When time is taken to thoughtfully prepare and plan a design studio, it’s highly likely that the activities will result in a lot of value for the team. It’s a way to maximize ideas, get diverse perspectives and buy-in in a condensed session that fits well within lean environments.” - Sarah Gibbons, Nielsen Norman Group

WHAT ARE DESIGN STUDIOS?

- UX workshops that combine **UI ideation** and **critique** with **prioritization**

WHEN SHOULD YOU RUN A DESIGN STUDIO?

- The design problem is a UI challenge
- You need many ideas quickly
- When you have design “block”

WHY DESIGN STUDIOS?

- Diverse perspectives come together to solve a problem
- Fit into tight timelines – lots of ideas fast
- Collaborative – Everyone can contribute regardless of role, thereby increasing buy-in

HOW ARE DESIGN STUDIOS RUN?

- Internal Workshop

WHO PARTICIPATES IN A DESIGN STUDIO?

- **Lead:** Facilitator (UX)
- **Attendees:** All interested parties

HOW LONG DOES A DESIGN STUDIO TAKE?

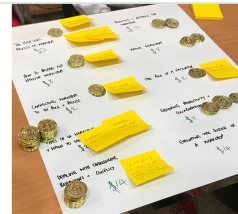
- 1-2 hours per studio

Additional Reading

Facilitating an Effective Design Studio Workshop

A design studio is a type of UX workshop that combines divergent and convergent thinking: it allows UX professionals to explore a wide set of ideas and also create a shared vision to move forward within a short amount of time. It incorporates

NN <https://www.nngroup.com/articles/facilitating-design-studio-workshop/>

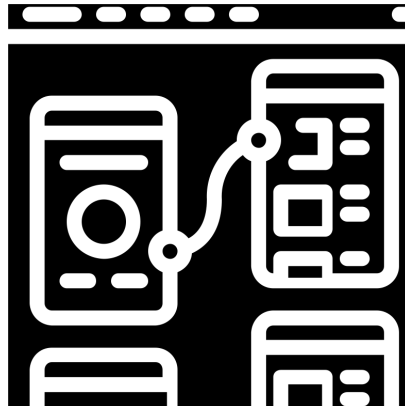


Facilitating
an *Effective*
Design Studio
Workshop

NN/g

Prototypes

PROPOSED SOLUTION



“Make no mistake: You cannot afford to not test prototypes. Your design will be tested, whether you plan for it or not.” - Sarah Gibbons, Nielsen Norman Group

WHAT IS A PROTOTYPE?

- A collection of visualized **candidate solutions** tied to specific design problems.
- Can be **low** or **high fidelity**

WHEN SHOULD YOU CREATE PROTOTYPES?

- When **exploring a proposed solution** to a user problem
- **Before writing any code** or creating views to address the problem

WHY PROTOTYPES?

- Produces a simulation of a **solution without the need to write code** (and then rewrite it)
- Allows stakeholders to **envision the solution**
- Is essential for usability studies
- Communicates **design intent** to developers

HOW ARE PROTOTYPES CREATED?

- Heads down
- Currently created in Figma

WHO CREATES PROTOTYPES

- **Lead:** Designer (UX)
- **Contributors:** UX, Product, BizDev

HOW LONG DO PROTOTYPES TAKE TO CREATE?

- Variable depending on fidelity/complexity
- Typically about a week in preparation for a usability study

Additional Reading:

Prototypes vs Wireframes in UX Projects (Video)

An overview of the similarities and differences between user-interface wireframes and prototypes, as well as the audiences that are best suited for each.

NN <https://www.nngroup.com/videos/prototypes-vs-wireframes-ux-projects/>

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Prototypes vs
Wireframes



Usability Studies

VALIDATE ASSUMPTIONS



“If you can do only one activity and aim to improve an existing system, do **qualitative (think-aloud) usability testing**, which is the most effective method to improve usability.” - Jakob Nielsen, Nielsen Norman Group

WHAT ARE USABILITY STUDIES?

- A 1-on-1 forum where a researcher asks a participant to perform tasks on a system
- Tasks are organized to validate assumptions
- Results from multiple participants drive whether or not an assumption is valid
- Validated assumptions proceed to implementation

WHEN TO PERFORM USABILITY STUDIES?

- Before writing any code
- To validate a proposed solution
- Ideally, every sprint

WHY USABILITY STUDIES?

- Uncover problems in the design
- Discover opportunities to improve the design
- Learn users' behavior and preferences
- Prevents rework by ensuring the solution aligns with a users needs before code is written

HOW ARE USABILITY STUDIES PERFORMED?

- Assumptions generated
- Script written
- 5 individual 1-on-1 interviews with with users
- Assumptions validated/invalidated

WHO PARTICIPATES IN USABILITY STUDIES?

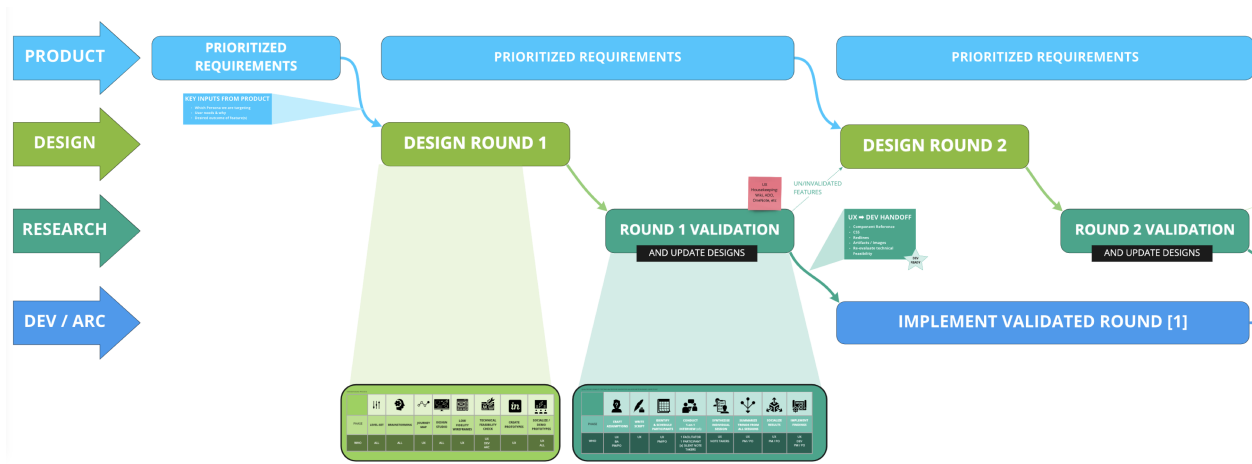
- **Lead:** Facilitator (UX)
- **Attendees:** Users (x5) (SME), Scribes (Any)

HOW LONG IS A USABILITY STUDY?

- Interviews should not be longer than an hour

- A full study with 5 participants should take 10-20 hours including assumption generation, script writing

An ideal UX/Usability/Dev cadence



Additional Reading:

<p>Usability Testing 101</p> <p>Usability testing is a popular UX research methodology. In a usability-testing session, a researcher (called a "facilitator" or a "moderator") asks a participant to perform tasks, usually using one or more specific user interfaces. While the participant</p> <p>NN https://www.nngroup.com/articles/usability-testing-101/</p>	<p>Usability Testing 101</p> <p>nngroup.com</p> <p>NN/g</p> <ul style="list-style-type: none"> Uncover problems in the design Discover opportunities to improve the design Learn about user's behavior and preferences
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[wip]

WIREFRAMES

INFORMATION ARCHITECTURE

HANDOFF TO DEV