

Empathize - Understand the experience (Situation + Emotion)

- a. Observe (passive) - users and their behavior in the context of their lives
- b. Engage - people in conversations and interviews (Ask Why)
- c. Watch and Listen - ask someone to complete a task and tell you what they are doing

Thinking Steps:

- i. Consider the user requirements
- ii. Find a solution to their problem
- iii. Ask the right questions

iv. Know how the user feels while interacting

Ask What? How? Why? (Beginner Mindset)

*Never to judge what you observe but to question everything

*Leave our own assumptions and experiences behind when making observations

Photo and Video User-Based Studies - natural setting or controlled environment

Empathizing Interview

Preparation for the interview: Brainstorm themes/topics, Target specific Areas of Information

- 1. Find the Right User - Is the interviewee a good representation of your user group
- 2. Write a Script - What is the valuable outcome / Keep discussion on right path
- 3. Questions should be:
 - a. Non-leading - Don't suggest an answer or general approach to the topic
 - b. Open-ended - broad question that can be answered in detail (see things from a customer's perspective)
 - i. Explorative - force expansion on new point of view and uncover area (Have you thought of?)
 - ii. Affective - people's feeling about something (How do you feel about?)
 - iii. Reflective - Encourage more elaboration (What do you think causes?)
 - iv. Probing - Invites deeper examination (Can you describe how?)
 - v. Analytical - look for the roots of a problem (What are the causes of?)
 - vi. Clarifying - Help align and avoid misunderstandings (Did you mean?)
//Closed-ended question - narrow focus, answered in single word or pick from multiple choice option (yes/no q.)
 - c. Specific and Clear - Make the question easy to understand and short (ask one question at a time)

Define - Process + Synthesis the findings in order to form a user point of view that you will address

- a. User - Develop an understanding of the type of person you are designing for
- b. Needs - Synthesize and select a limited set of needs that you think are important to fulfil
- c. Insights - Express insights you developed and define principles

Thinking Steps:

- i. Every detail is collected from research performed in empathy stage
- ii. Encourage the team to gather useful techniques

POV helps to reframe a design challenge into an actionable problem statement that will launch the design team into generative ideation

<USER> needs to <NEEDS> because <INSIGHTS>
make sure that: valid, insightful, actionable, unique, narrow, meaningful, and exciting

HMV, "HOW MIGHT WE", potential to spark ideation sessions such as brainstorms. Should be broad enough.

Stakeholder maps used to document the key stakeholders and relationship. Discover ways influence other stakeholders/risks/positive stakeholders to involve in the design process.

Visualize by drawings is the best way to communicate your idea.

Customer Journey Maps, research-based tool that tell customer stories.

Define map's business goal → conduct research → review touchpoints/channels → empathy map → sketch → iterate and refine → share with stakeholders

*** Ideate ***

focus on idea generation-translate into solution-explore ideas go beyond the obvious solution of the problem

Creativity - combine un/conscious w/ rational thoughts and imagination catalyst(image/word)

Group Synergy - leverage the group to reach out new ideas & build upon others

Ideation will help you to ask the right questions, thinking beyond the obvious solution, bring diff. perspective and strength of team members, increase volume and variety of solutions

To facilitate ideation session?

Manage creative space (no boardroom meeting space), set expectation (mentally prepare stakeholders), define problem (problem statement/design brief), conduct ideation (DIVERGE thinking 5 techniques:

Brainwriting/Problem Brainstroming/Sharing Brainstroming/SCAMPER/What if?), Sort the idea(CONVERGE thinking Prioritisation/Affinity/Idea evaluate), Evaluate and create action steps (define action steps ahead of next meeting)

Creative culture - where ppl feel comfortable in expressing their ideas in the workspace

- appreciated what they do, who they are, suggested idea.
- given the freedom to do their work
- comfortable collaborating/co-creating

- encourage experiment
- explain reasons and politics behind proj
- no restricted to chain of cmd.
- reward the generated good idea.

UNLEASH creativity in workplace - 3 Ways

1. Reward creativity (Motivate with rewards, tangible or intangible, taken seriously and need to be implemented)
2. Creative working space (designated space for ideation and brainstorming to take place, have plenty of whiteboard or flipchart to visualize the idea)
3. Encourage collaboration and co-creation (encourage them to work in multi-disciplinary teams from different departments, open friendly atmosphere where everyone is approachable)

DOUBLE DIAMOND

a simple visual map of the design process.

4 phases: Discover, Define, Develop, Deliver

To find the right solution, iterate as much as necessary. Develop&Refine the strong, Drop the weak.

THINKING method

→ DIVERGE thinking: Generate creative idea by exploring many possible solution, involve a variety of aspects or perspective. Emotional, visuals and artistic intuitive.

Use: Brainstroming/Brainwriting/Free writing/Scenarios/SCAMPER
(Substitute, Combine/Adapt/Modify/Put to another use/Eliminate/Reverse) → CREATE Choices, Accepted all ideas

[INITIAL EXPLORATION]

- Brainwriting: write the idea down
- Brainstroming: generate lots of idea
 - Dumping (indiv./post-it, vote, 4 cat./bingo/six thinking hat etc.) → Writing (pass to others) → Walking (to another group)
 - RULES: Time-limited/Start with problem statement/Defer judgement, criticism/Encourage weird, wacky, wild idea/QUANTITY/build on each others idea/Be VISUAL/one convo. at a time.

[PUSHING BOUNDARY]

SCAMPER (Substitute, Combine, Adapt, Modify, Put to another use/Eliminate/Reverse) parts of your product

→ CONVERGE thinking: Gather different perspective to find a single answer.
Logical thinking → care about clear results
Use: Decision Tree, De/Inductive Reasoning, SWOT, Eval matrix, prioritization map, affinity map → MAKES CHOICES, be deliberate and explicit

Prioritization Map - map idea based on the ease of implementation and benefit to user

Affinity Map - make sense of information

Idea Evaluation - compare and understand difference among ideas.

Methods to select ideas

- post-it voting or dot-voting
- Four Categories method (Most rational/delightful/darling/long-shot)
- Bingo selection (Physical/Digital/Experience prototype)
- Idea affinity map

*** PROTOTYPE ***

Build to think → cheap, fast, simple to shape the idea to experience/interact with them

- Start building - an artifact in low-res
- Storyboard - scenario to roleplay in env.

WHY PROTOTYPE?

- find design issue early.
- Iterate more quickly on concept
- Compare design variations
- Gather design feedback better
- Good presentational tool
- Encourage collaboration
- More durable product
- Resolve conflicts

TYPES OF PROTOTYPE

→ Low-fidelity - basic models/cheap+easy
(Storyboard/Sketch/Card Sorting/Wz of Oz)

(-) Lack of realism/might not appropriate for intended user/remove ctrl from user

(+) Fast/Cheap/Easy to change/Disposable/Quick overall view/Available to all/Encourage design thinking

→ High-fidelity - closer to finished product

(3D models w/ movable part)

- Engage stakeholders to see their vision realize

- Allow to test/gather info with higher level of validity and applicability

(-) Longer time to develop/Tester may focused more on superficial characteristic as to content/Demotivate to make change/May gives false impressions

HOW PROTOTYPING WORKS

Start building/Don't spend too much time/Remeber what you are testing for/Build with user in mind/ Take advtg of the knowledge you don't have/What do you find exciting/Translate excitement to prototype

8 COMMON WAYS TO PROTOTYPE

Sketch and diagram (low-fidel)

Paper interface
Storyboards
Lego prototype
Role-playing
Physical Model (high-fidel)
Wizard of Oz (functions are fake/illusory-based prototype)
User-driven prototype (ask user to create sth w/in set of constraints)

PROTOTYPE EVALUATION MATRIX CRITERIA

Functionality/Cost/Aesthetics/Usability/Maintenance/Others

Chapter 7: TEST

- > Test - ask feedback on your prototype, learn about user, reframe your view, refine prototype.
- > Conducting user test
 - ideal to utilize natural settings or try to get users to perform a task or play a role if natural setting isn't possible.
 - Consideration test area:
prototype (test the prototype not user)/Context&Scenario (recreate scenario for user)/How to interact with user (don't over-explain how prototype works)/How to observe and capture feedback(not disrupting user interaction with prototype&find a way that freely allows you to observe what happening)
 - Guidelines when planning a test:
 1. let user compare alternatives / 2. show but don't tell / 3. ask user through experience / 4. observe / 5. ask follow-up questions
- > Negative feedback is a way to learn and improve: user encounter difficulty → revisit list of solution and estab. new ways to solve same problem/can identify prev. unconsidered problems./testing should provide new insight
- > 6 Best practice tips for gathering feedback:
 1. Ways to solicit feedback (depend largely on what type of prototype you built/testing out several versions of your prototype)
 2. Testing on the right people
 3. Ask the right question (be sure about what you are testing for/keep an open mind)
 4. Be neutral when presenting your idea (refrain from trying to defend it/avoid being attached to your idea)
 5. Adapt while testing (adopt flexible mindset & improvise during the testing session)
 6. Let the user contribute ideas
- > 3 Methods for maximizing learning from testing:
 1. Feedback Capture Grid (4 Quadrants: Likes/Criticism/Questions/Ideas)
 2. I like, I Wish, What If

3. Sharing inspiring stories.

Chapter 8: SERVICE SCIENCE

> Service is an act of performance that party can offer to another that is intangible, not result in the ownership of anything, and may or may not be tied to a physical product.

> 8 Characteristics of service

1. Intangibility (Service are intangible ex. mobile network providers)
2. Perishability (Service perish as soon as they used/expired or can't be stored ex. airline seat)
3. Inseparability (service can't be separated from the service provider thus provider become part of a service ex. taxi and taxi driver)
4. Heterogeneity (QoS cannot be standardized and put procedures to place for make sure service provided is consistent ex. live concert)
5. Ownership (User cannot own the service, users have only access to services ex. personal care&medical services&gym)
6. Simultaneity (Either users are brought to services or providers go to users)
7. Quality measurement (Service sector requires another tool for measurement ex. quantify the food served in hotel)
8. Nature of demand (services are fluctuating in nature, demand can be abnormal, sudden seasonal, situational & dependent ex. transportation quality decrease during peak hours)

> Classification of Consumer services

1. Pure services: activities performed that do not include a tangible product.
2. Non-good services: personal/professional service for a fee ex. tax prep.
3. Owned-good services: Activities that alter improve or repair product ex. dry cleaning.
4. Rented good services: provide a product to use for a brief period for a fee ex. carpet cleaners.

> Classification on the customer involvement basis

1. Possession processing → working to tight deadlines to restore customer's possession to good working order, less physically involved ex. post office/warehousing etc.
2. Mental stimulus processing → interact with ppl's mind → has power to shape attitudes and influence behavior ex. education, news, ads, etc.
3. Information processing → most intangible form of service output → customer/supplier learn each other's need ex. financial services, accounting etc.

> Classification based on service tangibility

1. Tangible good linked to services → service provider offer tangible good

for use along with the services ex. theaters offer 3d glasses with movie.

> Classification on the business orientation

1. Non-profit org. & 2. Commercial org.

> Classification on the req of skills and expertise

1. Professional (req set of skills) ex. lawyer

2. Non-professional (not require any set of skill) ex. house keeping

> Classification on end user

1. consumer services

2. Business to business services

3. Industrial services

> What makes services distinct? → Intangibility & Inseparability &

Variability & Perishability

> Service-Dominant Logic

- Identify core competences, knowledge and skills that represent a potential competitive advantage
- Cultivate relationships with potential customer
- Use financial performance as an instrument of learning for improving the level of service for customers and markets
- Product dominant is service as process, but service dominant is service as INTERACTION.

> 3 Levels of action for design

- Value in use → ground for interaction and value coproduction
(Prototypes/Narrative tools)

- Infrastructure → processes and organization of the ground for interaction

- Governance → Policies and scale-up processes
(Service architecture/replicability/scalability)

- Customer satisfaction: EXPECTATIONS VS EXPERIENCES

- Marketing shifts from advertisements to experiences

- Goods-dominant logic is value-in-exchange, but service-dominant logic is value-in-use or value co-creation.

- Service design is not new/inter-disciplinary.

- Service design thinking is a common language. interative process.

- Service design doing: Exploration (Self-exploration/observation/contextual interview/mobile ethnography) → creation/reflection
(personas/CJM/stakeholder maps/value network maps/service prototype/service advertisement) → implementation (business model innovation/theatrical tools)

> 5 Basic principle of Service Design

1. User-centered: Design your services around your consumer needs. Needed to

know how consumer experience, ask them question like how they feel about using the services and what's their expectation.

2. Co-creative: All stakeholders should be involved in the service design process. Can't co-create value without involving users at every step of the process.

3. Sequencing (Iterative process): Sequencing helps determine the timeline of a project, deconstructing customer journeys into single touchpoints and service interactions. When combined, created service moments.

4. Evidencing (Visual communication): visual aids can help because it is hard to focus in on the detail of large, complicated project.

5. Holistic: it is important for service designer to think about each aspect of the service and every perspective in which it exists. Consider the whole journey and each consumer touchpoint, approach can be achieved by using personas to highlight difference experiences and journeys.

> Moving toward service dominant logic

- Require a change in what service are, how organization perceive and engage with design, and with user and stakeholders.

Step:

1. Good-Dominant Logic & Product Design: focused on its own resources & technical abilities

2. Advent of service economy & service design: from peripheral to mainstream.

3. Service dominant logic & design for service: Interest has moved toward integrating studies on product and services into a higher-level framework to understand value co-creation

- Servitization → make it into service

> 5 Fundamentals of service design

1. Systems: understanding services are consumed through systems of relationship between people.

2. Value: understanding how to create the best value for user and providers through their interaction.

3. People: understanding the part people play in providing/using/designing services/how to include them in the service

4. Journeys: understanding that services are experienced over time and need to be seen and innovated as journeys

5. Propositions: understanding how to innovate, package, market a service and how to develop a proposition towards a vision.

> What makes a good service designer?

Passions for process/co-creation/facilitation/empathy/understanding that the craft is in letting go not holding on/Visualization and communication/User-centered design research/Prototyping/Making tools for others/Managing ambiguity/Making things simple or appeared simple.