

# Design Process

Sep 2nd 2021

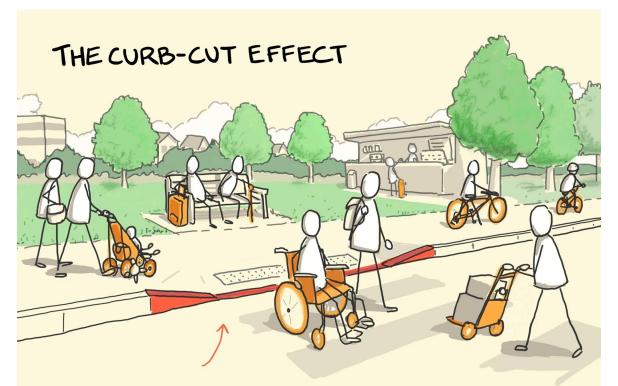
## **Reading Discussion**

# Design Generalists vs Specialists

Personal branding and your story as a generalists tends to more important than that of a specialists as the role of a specialist is more universally clear, but I believe generalists hold more influence in industry in relation to all the stakeholders

# Designing for Humans

"Human-centric design has definitely progressed in recent years, but it's still common to power on a device and be blasted with notifications, pointless questions, and a barrage of information overload that ultimately makes it more difficult to use."



WHEN WE DESIGN FOR DISABILITIES ... WE MAKE THINGS
BETTER FOR EVERYONE

sketchplanations

#### **Frictionless Experiences**

"Behind the scenes, they capture everything from you. With this data they are able to crunch your preferences..... This invisible experience also flows into your restaurant booking. When you make the reservation the restaurant host will already knows your name. In fact, you can sit anywhere and your food will magically make its way to you!"

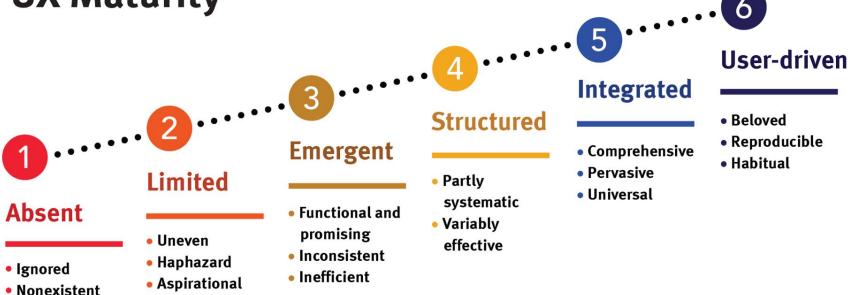


# SCREENLESS THURING SCREEN BASED THINKING

**Elegance and efficiency** 

# **Stages** *of* **UX Maturity**

Undiscovered



### **Design Process**

# Implementation

Move on to the next project - repeat

Make the case to the business spread the word



Help marketing design a communication strategy

**Execute the Vision** Engineer the experience



Prototype some more, test with users, test internally



Communicate

internally - don't work in the dark! Tell more stories (they keep ideas alive)



Prototype, test, prototype, test...

Apply integrative thinking

Put customers in the midst of everything; describe their journeys

Build creative frameworks (order out of chaos)

> Make many sketches, concoct scenarios





## Inspiration

#### **Expect Success**

Build implementation resources into your plan

What's the business problem? Where's the opportunity? What has changed (or soon may change)?



Look at the world: Observe what people do, how they think, what they need and want

Involve many disciplines from the start (e.g., engineering & marketing)

What are the business constraints (time, lack of resources, impoverished customer base. shrinking market)?



Pay close attention to "extreme" users such as children or the elderly



Have a project room where you can share insights, tell stories



Are valuable ideas, assets, and expertise hiding inside the business?

> Organize information and synthesize possibilities (tell more stories!)



technology help?



#### INSPIRATION

In this phase, you'll learn how to better understand people. You'll observe their lives, hear their hopes and desires, and get smart on your challenge.



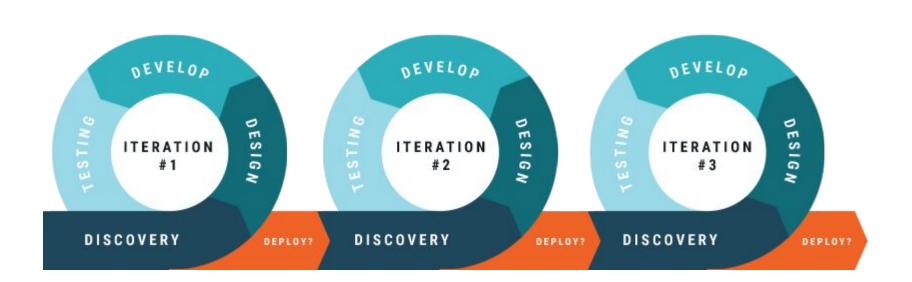
#### **IDEATION**

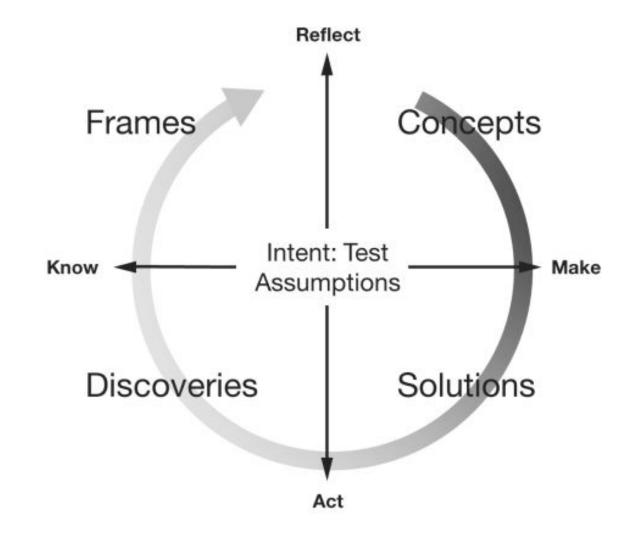
Here you'll make sense of everything that you've heard, generate tons of ideas, identify opportunities for design, and test and refine your solutions.

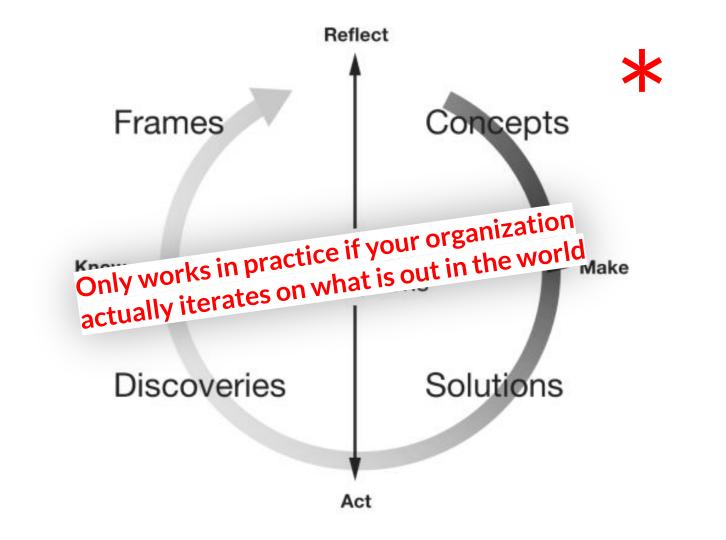


#### IMPLEMENTATION

Now is your chance to bring your solution to life. You'll figure out how to get your idea to market and how to maximize its impact in the world.







Discovery

Inspiration

Research

**Design Thinking** 

Human-Centered Design

Agile

Design

Ideation

Analyze

Develop

Test

**Implementation** 

Implement

**Presumptive Design** 

#### Inspiration

Frame the Challenge

Interview

**Analogous Inspiration** 

**Card Sort** 

**Immersion** 

#### **Analogous Inspiration**



To get a fresh perspective on your research, shift your focus to a new context.

IDEO.org teams are often led by their intuition to take creative leaps. It may feel silly to visit an Apple store when you're designing for those living in difficult circumstances, but you may unlock the key to a memorable customer experience or a compelling way to arrange products. Analogous settings can help you isolate elements of an experience, interaction, or product, and then apply them to whatever design challenge you're working on. Besides, getting out from behind your desk and into a new situation is always a great way to spur creative thinking.

#### **Ideation**

Find Themes Create a Concept

Create Insight Statements Gut Check

Explore Your Hunch Get Feedback

How Might We Get Visual

**Create Frameworks** 

**Brainstorm** 

#### **Explore Your Hunch**



A huge part of human-centered design is following your nose. If you've got a feeling about something, give yourself a chance to explore it.

Human-centered design is an inherently intuitive process. And though a lot of the methodology is about arriving at new ideas you'd never dreamed of, you should always feel like you have the space to Explore Your Hunch. It could be an idea you had before the project started, or one that cropped up as you've been working. Either way, there are lots of ways to test your hunch, and you're destined to learn something when you do.

#### **Implementation**

Live Prototyping

Pilot

Monitor and Evaluate

Keep Iterating

Keep Getting Feedback

#### **Monitor and Evaluate**

1 \_\_\_\_\_ 2 \_\_\_\_ 3 \_\_\_\_ 4 \_\_\_\_ 5 \_\_\_\_

Your goal has always been to have big impact.

Design the ways that you'll measure and grow it into your solution.

Throughout the design process you've constantly been learning, evaluating, and improving your solution. And now that you're on the verge of getting it out into the world you'll need a plan to find out if you're having the impact that you want. There are lots of ways to run a Monitoring and Evaluation (M&E) assessment, the key is to understand what kind is right for you. Sometimes it's easy, either your solution makes money or it doesn't. But if you're trying to change a community's behavior or increase the adoption of a service, you may need a more nuanced approach.

## **Usability Heuristics**

#### 1: Visibility of System Status

The design should always keep users informed about what is going on, through appropriate feedback within a reasonable amount of time.





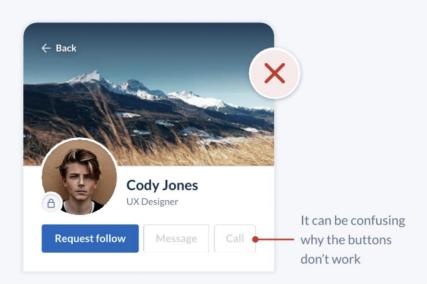


- 1 "You Are Here" maps
  Interactive mall maps have to show
  people where they currently are, to help
  them understand where to go next.
- Checkout flow Multistep processes show users which steps they've completed, they're currently working on, and what comes next.
- 3 Phone tap
  Touchscreen UIs need to reassure users
  that their taps have an effect often
  through visual change or haptic feedback.

#### UI DESIGN DETAILS

#### **Avoid disabled buttons**

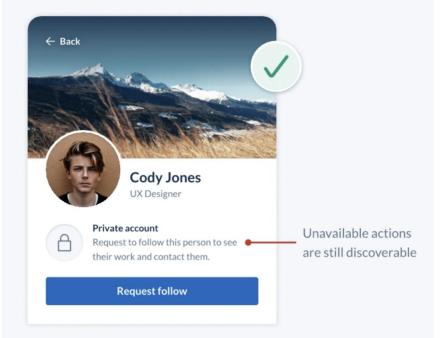
Disabled buttons can cause people to get stuck, they have very low contrast, and aren't natively keyboard accessible.





#### Only show available actions

Explain why actions are unavailable instead of disabling them.



1/4

#### 2: Match between System and Real World

The design should speak the users' language. Use words, phrases, and concepts familiar to the user, rather than internal jargon. Follow real-world conventions, making information appear in a natural and logical order.







1 Stovetop controls

When stovetop controls match the layout of heating elements, users can quickly understand which control maps to each heating element.

- 2 "Car" vs. "automobile"

  If users think about this object as a "car," use that as the label instead.
- 3 Shopping cart icon
  A shopping cart icon is easily recognizable because that feature serves the same

purpose as its real-life counterpart.

#### 3: User Control and Freedom

Users often perform actions by mistake. They need a clearly marked "emergency exit" to leave the unwanted action without having to go through an extended process.







1 Exit sign

Digital spaces need quick "emergency" exits, just like physical spaces do.

2 Undo and redo

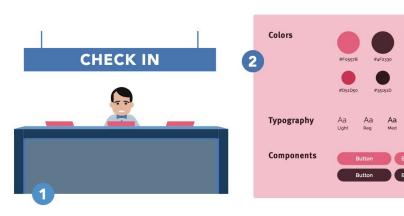
These functions give users freedom because they don't have worry about their actions — everything is easily reversible.

3 Cancel button

Users shouldn't have to commit to a process once it's started — they should be able to easily cancel and abandon.

#### 4: Consistency and Standards

Users should not have to wonder whether different words, situations, or actions mean the same thing. Follow platform and industry conventions.





1 Check-in counter

Check-in counters are usually located at the front of hotels. This consistency meets customers' expectations.

2 Design system

Using elements from the same design system across the product lines lowers the learning curve of users.

**3** Notifications

A standardized notification design provides a similar but distinguishable look and feel for different app pop-ups.

#### **5: Error Prevention**

Good error messages are important, but the best designs carefully prevent problems from occuring in the first place. Either eliminate error-prone conditions, or check for them and present users with a confirmation option before they commit to the action.



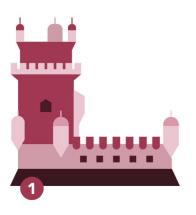


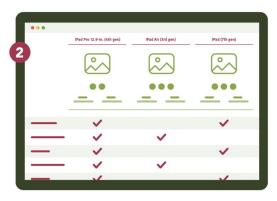
- **1 Guard rails**Guard rails on curvy mountain roads
  prevent drivers from falling off of cliffs.
- 2 Airline confirmation

  The confirmation page before checking out on airline websites gives users another chance to review the flight details.
- 3 Date selection on calendar
  Offer good defaults and set boundaries
  when people book services by dates.
  Grey out unavailable options.

#### 6: Recognition rather than Recall

Minimize the user's memory load by making elements, actions, and options visible. The user should not have to remember information from one part of the interface to another. Information required to use the design should be visible or easily retrievable when needed.







#### 1 Lisbon

People are more likely to correctly answer the question "Is Lisbon the capital of Portugal?" rather than "What's the capital of Portugal?"

#### **2** Comparison table

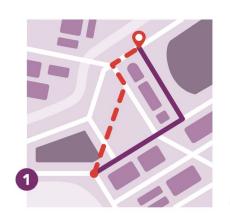
Comparison tables list key differences so that users don't need to remember them to make comparisons.

#### 3 Search

Search queries are presented together with the results as a reference.

#### 7: Flexibility and Efficiency of User

Shortcuts — hidden from novice users — may speed up the interaction for the expert user such that the design can cater to both inexperienced and experienced users. Allow users to tailor frequent actions.





#### 1 Shortcuts

Regular routes are listed on maps, but locals with more knowledge of the area can take shortcuts.

#### 2 Keyboard shortcut

Keyboard shortcuts for complex products can help expert users finish their tasks more efficiently.

#### 3 Tap to like

Social apps allow two ways to like posts. Experienced users can tap to like because it speeds up their browsing.

#### 8: Aesthetic and Minimalist Design

Interfaces should not contain information which is irrelevant or rarely needed. Every extra unit of information in an interface competes with the relevant units of information and diminishes their relative visibility.



- 1 Ornate vs. simple teapot
  Excessive decorative elements can interfere with usability.
- Communicate, don't decorate Over-decoration can cause distraction and make it harder for people to get the core information they need.
- Messy vs organized UI

  Messy UI increases the interaction cost
  for users to find their desired content;
  Organized UI lowers the cost.

## 9: Help Users Recognize, Diagnose, and Recover from Errors

Error messages should be expressed in plain language (no error codes), precisely indicate the problem, and constructively suggest a solution.







- Wrong way sign
  Wrong-way signs on the road remind
  drivers that they are heading in the
  wrong direction and ask them to stop.
- 2 Internet connection error Good internet connection error pages show what happened and constructively instruct users on how to fix the problem.
- 3 No search results

  Provide useful help when people
  encounter search-result pages returning
  zero results, such as popular topics.

#### 10: Help and Documentation

It's best if the design doesn't need any additional explanation. However, it may be necessary to provide documentation to help users understand how to complete their tasks.



- 1 Airport information center
  Information kiosks at airports are easily recognizable and solve customers' problems in context and immediately.
- 2 Frequently asked questions
  Good frequently-asked-question pages
  anticipate and provide the helpful
  information that users might need.
- 3 Information icon
  Information icons reveal tooltips to explain
  jargon when users touch or hover over
  them, which provides contextual help.

# State your Assumptions

Helps make sure you are on the right track. Lines up your understanding with your users and the folks you are designing for

## **UX Audit**

**Assignment Review**