



Design Process

Sep 2nd 2021

Web & Mobile Design - DMA 331

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

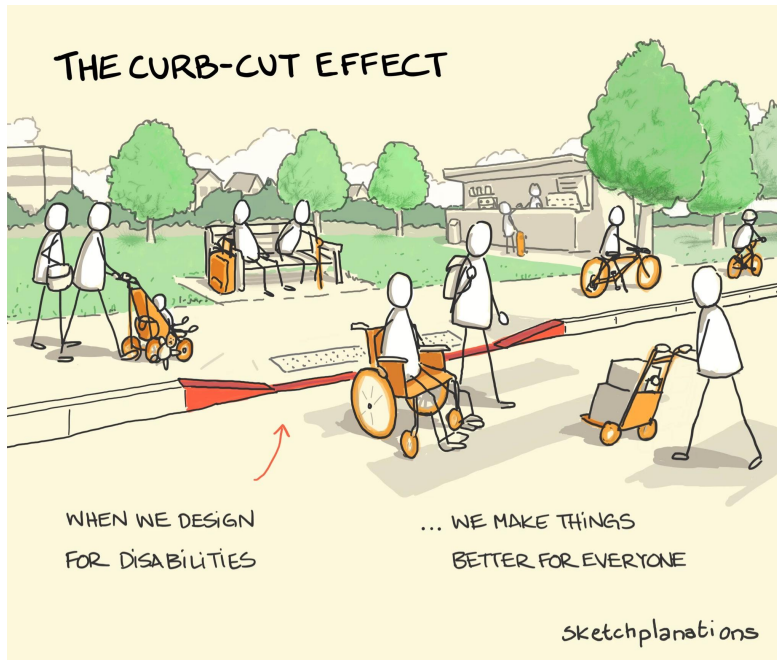
<https://airbnb.design/defining-design-generalists/>

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.”

<https://www.theverge.com/2020/9/3/21419630/toaster-human-design-breville-tech-products>

This is interesting.. Something we work on on a regular basis... simplifying and getting technology out of the way



Everyone benefits!

<https://sketchplanations.com/the-curb-cut-effect>

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 know your name. In fact, you can sit anywhere and your food will magically make its way to you!”

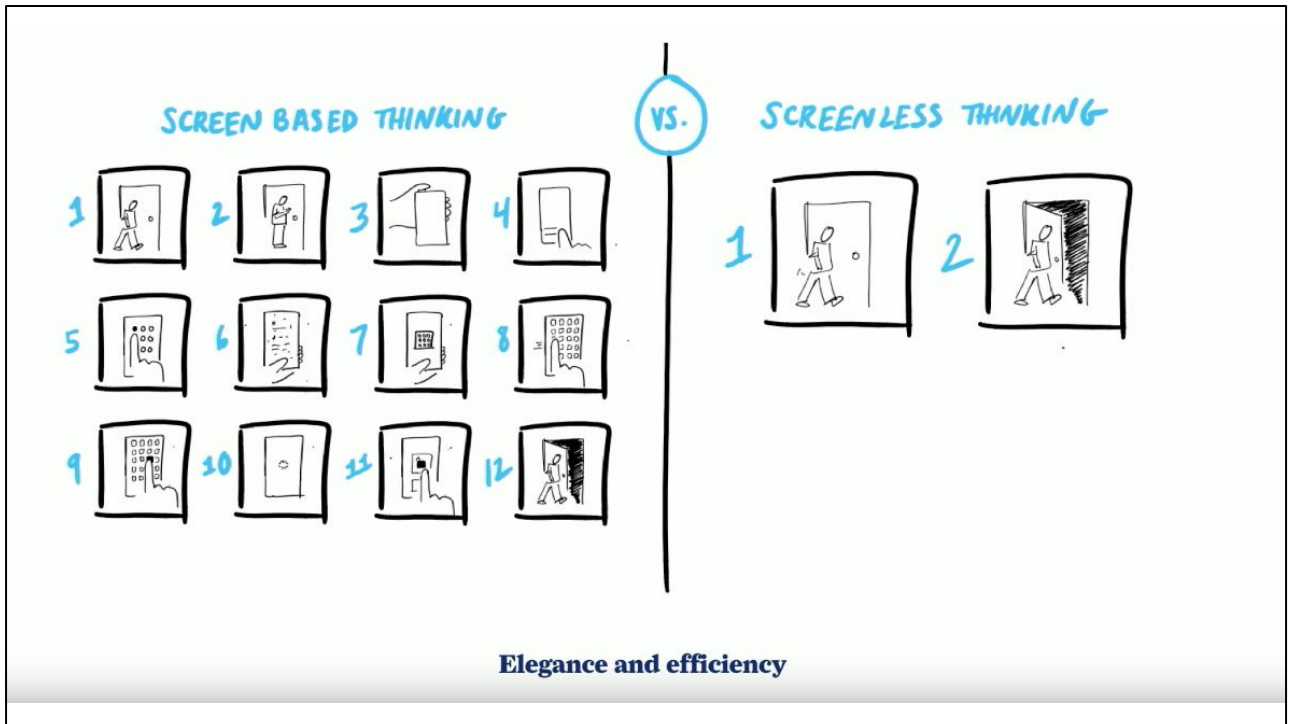


<https://medium.com/@mizko/4-invisible-user-experiences-you-d13cc9c3c7ab>

Frictionless / Seamless

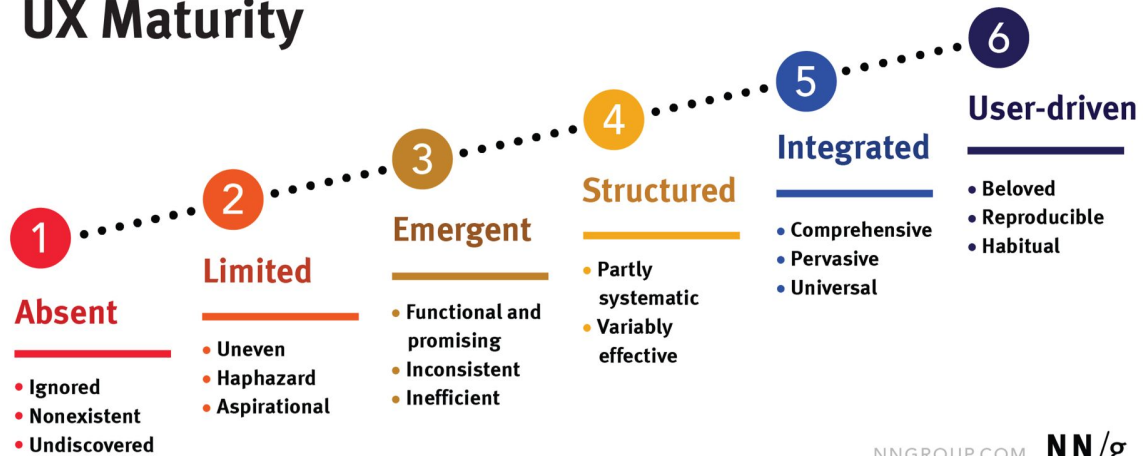
Abstracted money out...

Data share and guest tracking in the park



The disney example gets back to this

Stages of UX Maturity

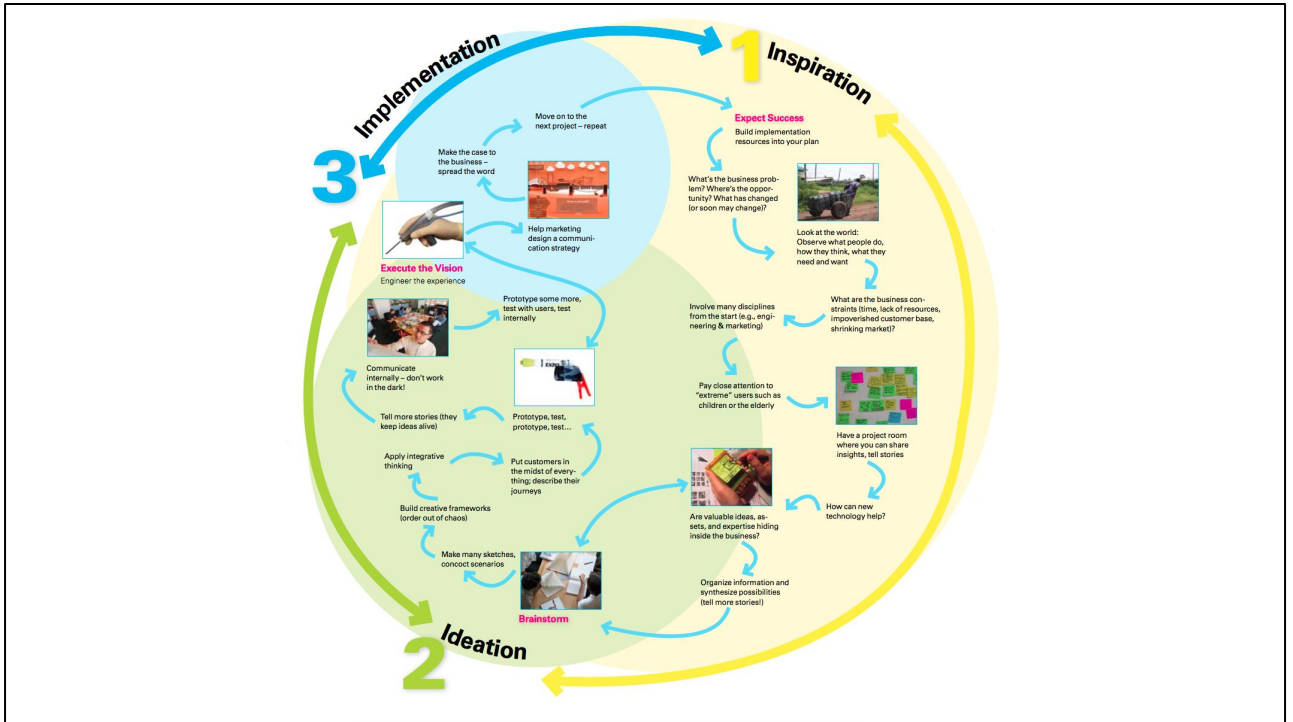


NNGROUP.COM **NN/g**

Stage 1: A company at this stage is either **oblivious to UX** or **believes it does not need it**.

Stage 6: UX is the **norm** — **habitual, reproducible, and beloved** across the organization. Few companies operate at this stage.

Design Process



Design Thinking Framework



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.



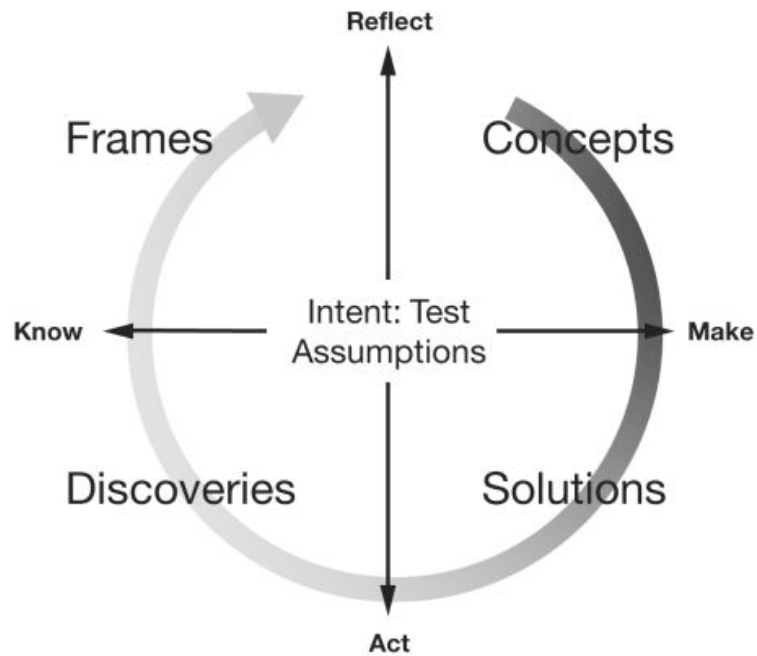
IMPLEMENTATION

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.

Human-Centered Design <https://www.designkit.org>

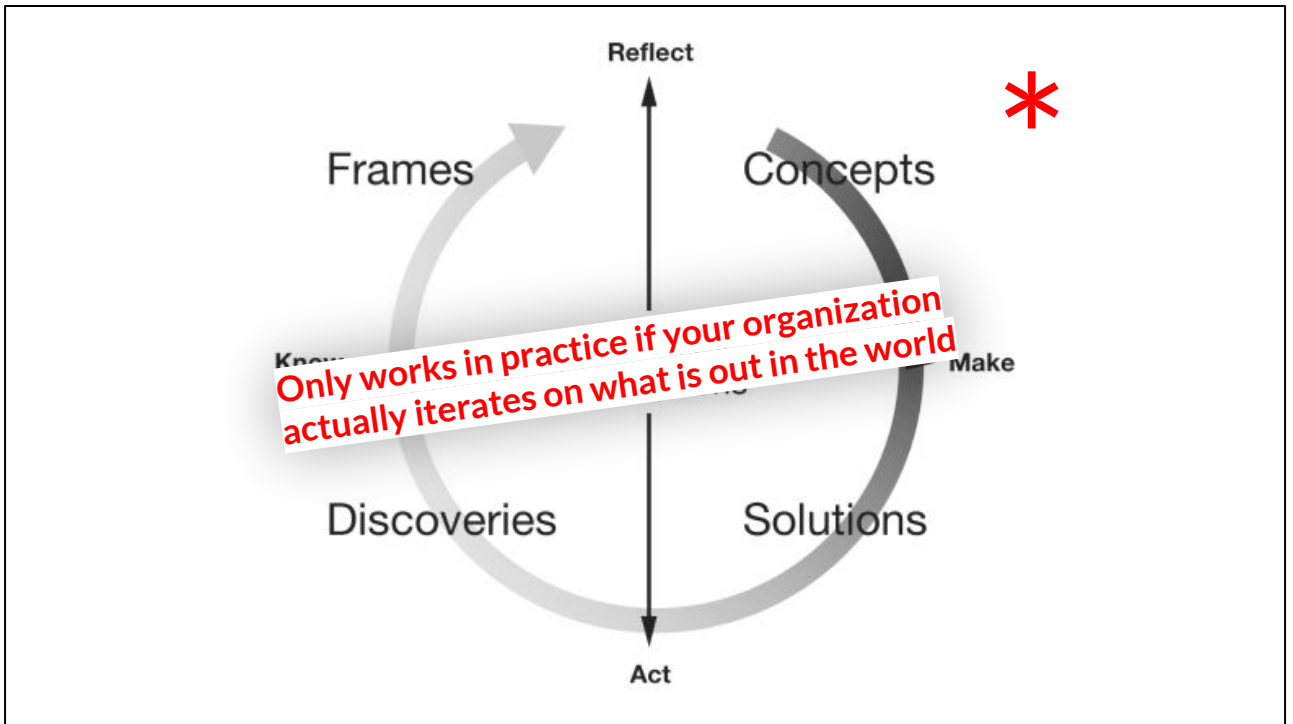


Agile



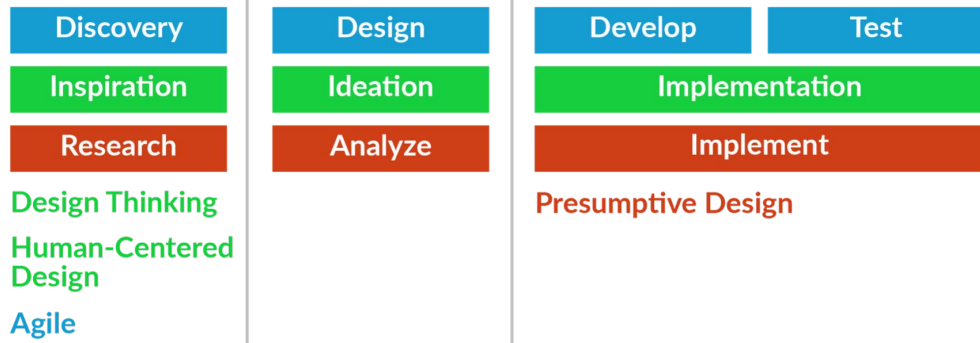
Presumptive Design - Sounds cool, but

<https://www.presumptivedesign.com>



Presumptive Design - Sounds cool, but big asterisks really only works if your organization will used to and willing to iterate.. Otherwise you just have a poorly designed application out in the world

<https://www.presumptivedesign.com>



Overview... we are generally following Human-Centered Design approach as implementation is not the focus for this course

Largely these all follow the same steps

Inspiration

Frame the Challenge

Interview

Analogous Inspiration

Card Sort

Immersion

Pulled from the HCD field guide.....

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.

This is one of my favorites... I use this everyday and most folks forget about leveraging other industries

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.

This is a great one too

Lets you go down the path of intuition.. And sometimes those ideas are naturally just the right ones!

Implementation

Live Prototyping

Pilot

Monitor and Evaluate

Keep Iterating

Keep Getting Feedback

Monitor and Evaluate



Your goal has always been to have big impact.
Design the ways that you'll measure and grow it into
your solution.

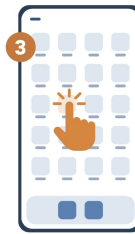
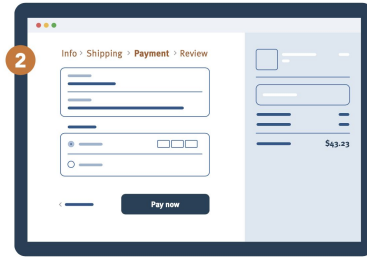
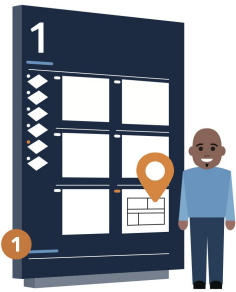
Throughout the design process you've constantly been learning, evaluating, and improving your solution. And now that you're on the verge of getting it out into the world you'll need a plan to find out if you're having the impact that you want. There are lots of ways to run a Monitoring and Evaluation (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.

This one can be pretty hard to do sometimes but can add a ton of value... things like user analytics can help but not the be all end all

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.

2 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.

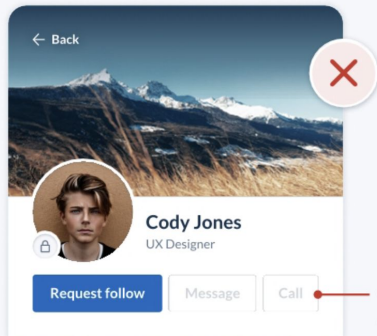
<https://www.nngroup.com/articles/visibility-system-status/>

Relates to the idea of direct manipulation... thinking about Light dimmer switch

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.



It can be confusing why the buttons don't work

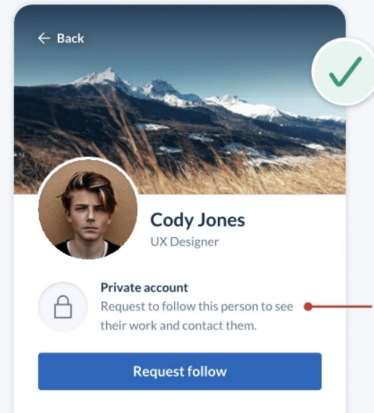
Adham Dannaway
UI/UX Designer

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UI DESIGN DETAILS

Only show available actions

Explain why actions are unavailable instead of disabling them.



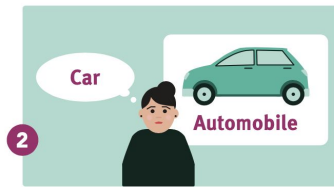
Unavailable actions are still discoverable

Adham Dannaway
UI/UX Designer

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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.

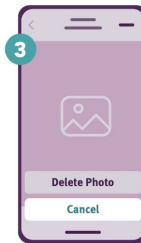
3 Shopping cart icon

A shopping cart icon is easily recognizable because that feature serves the same purpose as its real-life counterpart.

<https://www.nngroup.com/articles/match-system-real-world/>

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 to worry about their actions — everything is easily reversible.

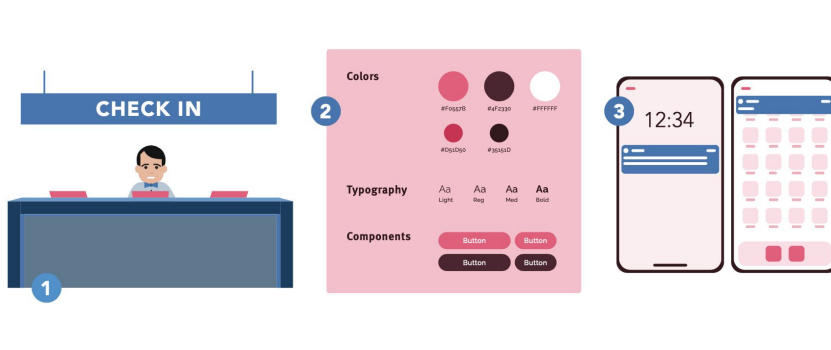
3 Cancel button

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

<https://www.nngroup.com/articles/user-control-and-freedom/>

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.



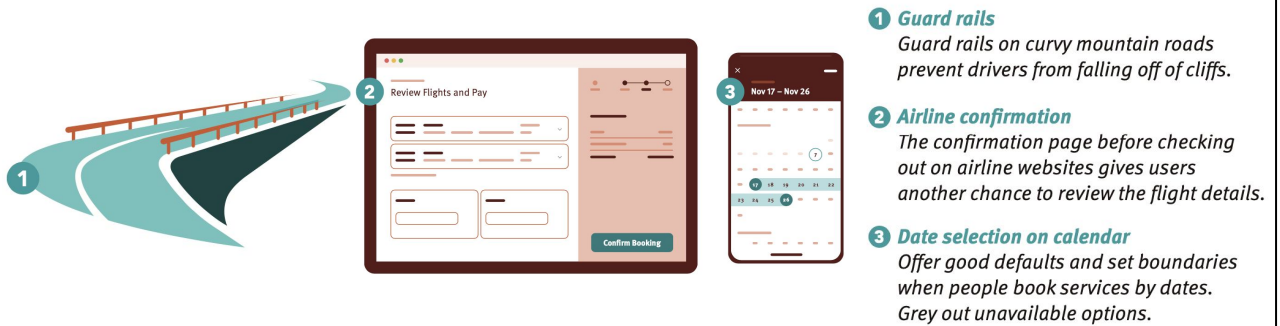
The diagram illustrates three examples of consistency and standards in design, each numbered in a blue circle:

- 1 Check-in counter**
An illustration of a hotel check-in counter. A sign above the counter reads "CHECK IN". A staff member is visible behind the counter. This consistency meets customers' expectations.
- 2 Design system**
A design system palette showing colors, typography, and components. The colors section includes three color swatches with hex codes: #F08080, #4F0307, and #FFFFFF. The typography section shows four font weights: Light, Reg, Med, and Bold. The components section shows four button styles: Button, Button, Button, and Button.
- 3 Notifications**
Two smartphone screens displaying notifications. The left screen shows a notification at 12:34. The right screen shows a notification with a red background. A standardized notification design provides a similar but distinguishable look and feel for different app pop-ups.

<https://www.nngroup.com/articles/consistency-and-standards/>

5: Error Prevention

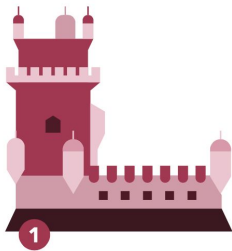
Good error messages are important, but the best designs carefully prevent problems from occurring in the first place. Either eliminate error-prone conditions, or check for them and present users with a confirmation option before they commit to the action.



<https://www.nngroup.com/articles/slips/>

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.

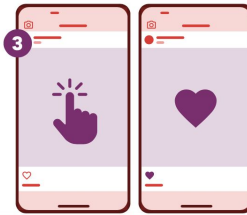
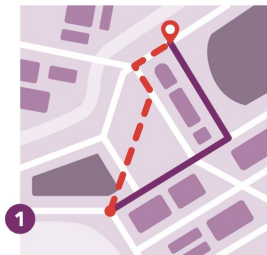
3 **Search**

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

<https://www.nngroup.com/articles/recognition-and-recall/>

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.

<https://www.nngroup.com/articles/flexibility-efficiency-heuristic/>

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.

2 **Communicate, don't decorate**

Over-decoration can cause distraction and make it harder for people to get the core information they need.

3 **Messy vs organized UI**

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

<https://www.nngroup.com/articles/aesthetic-minimalist-design/>

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.



❶ *Wrong way sign*

Wrong-way signs on the road remind drivers that they are heading in the wrong direction and ask them to stop.

❷ *Internet connection error*

Good internet connection error pages show what happened and constructively instruct users on how to fix the problem.

❸ *No search results*

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

<https://www.nngroup.com/videos/usability-heuristic-recognize-errors/>

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.

<https://www.nngroup.com/articles/help-and-documentation/>

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

Assignment due next week and the readings

<https://dma331.rehanbutt.com/assignments/ux-audit>