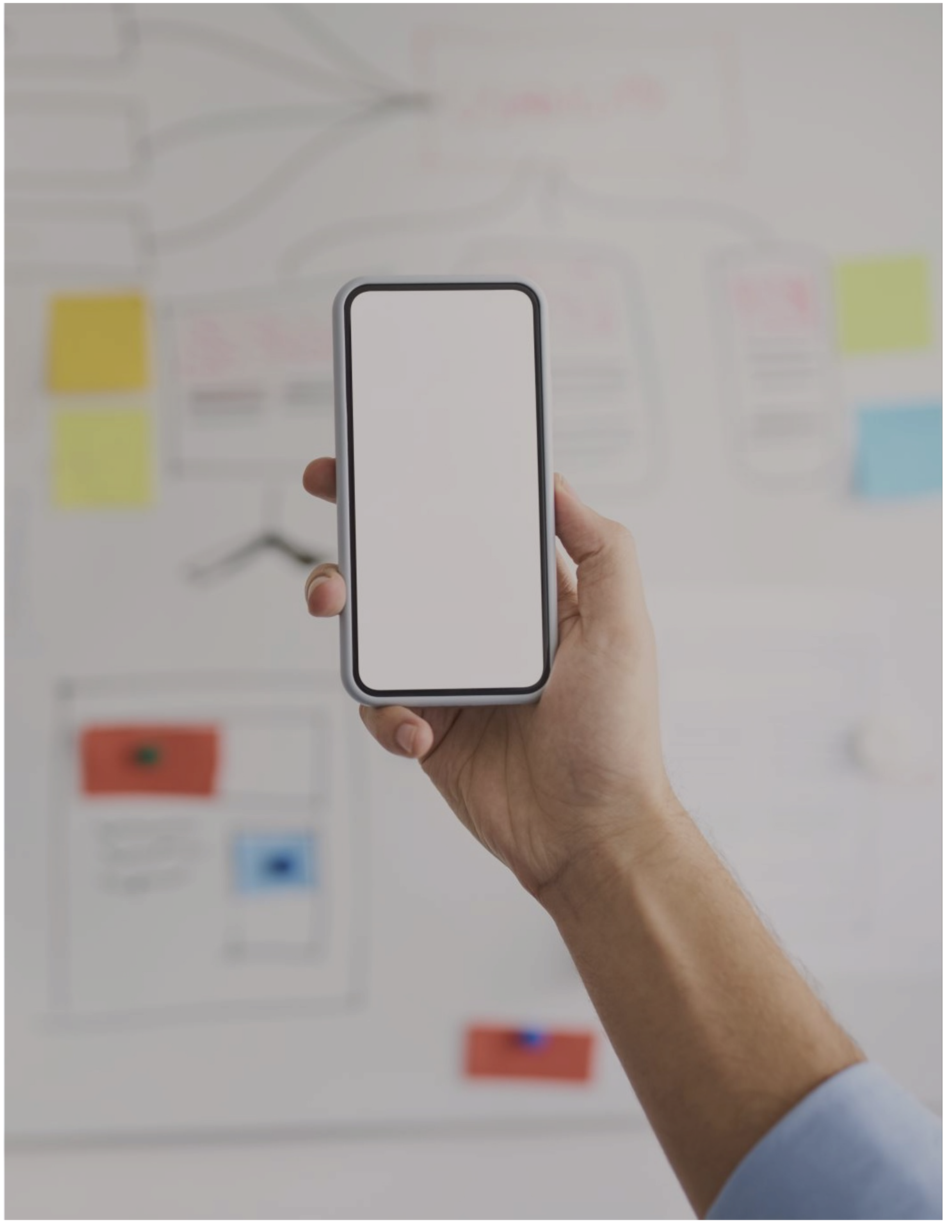
Essential Patterns of Mobile Navigation

CRISTINA.GENA@UNITO.IT

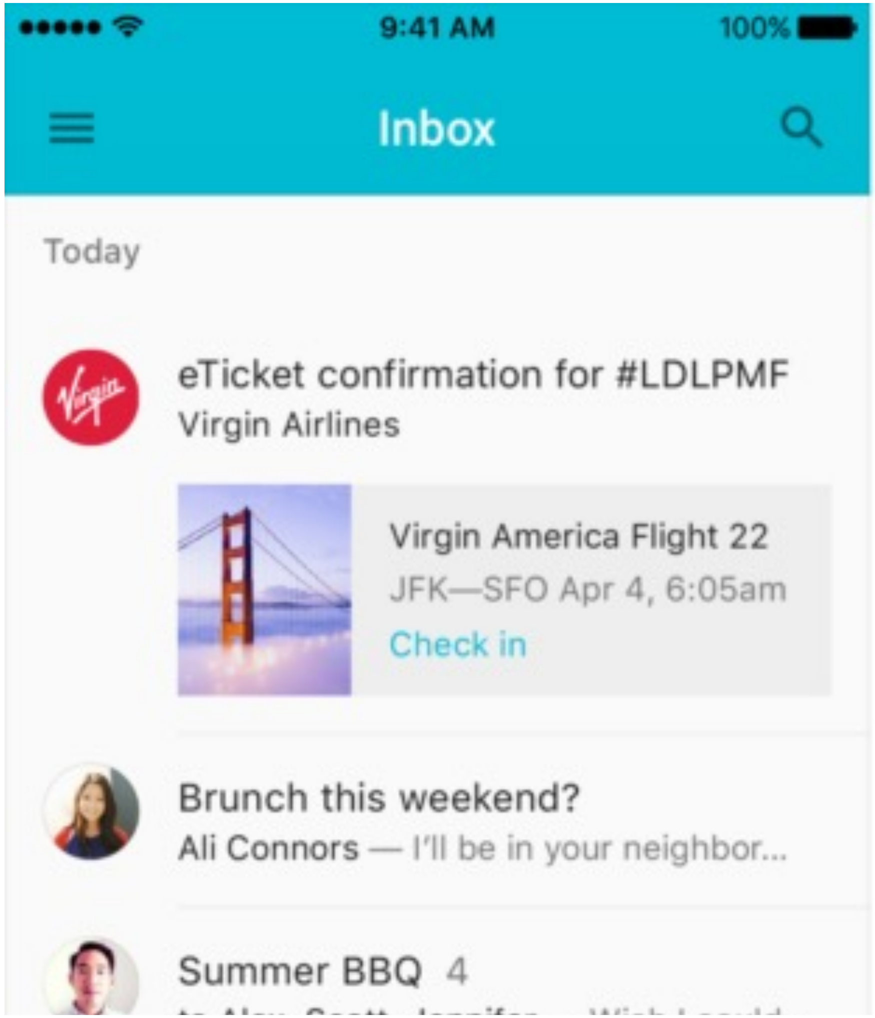


«People expect a lot from mobile apps today, and the expectations are just getting higher.

You need to work hard to meet these expectations and make your app useful, relevant, and valuable for your users. Improving the user experience isn't a one-time task, it's an ongoing experience.»

Xd Idea

Hamburger menu

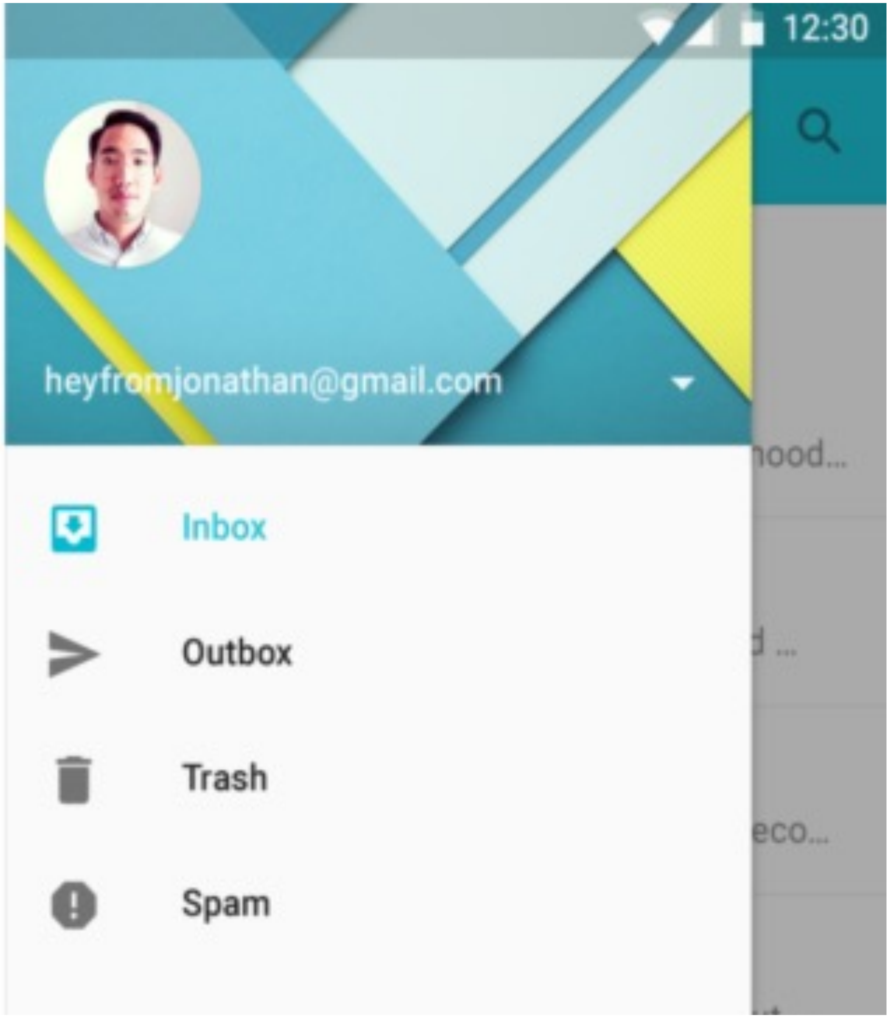


eTicket confirmation for #LDLPMF
Virgin Airlines

Virgin America Flight 22
JFK—SFO Apr 4, 6:05am

Brunch this weekend?
Ali Connors — I'll be in your neighbor...

Summer BBQ 4



Hamburger menu

https://xd.adobe.com/ideas/principles/app-design/essential-patterns-mobile-navigation/

Screen space is a precious commodity on mobile, and the hamburger menu (or side drawer) is one of the most popular mobile navigation design patterns for helping you save it. The **hamburger menu allows you to hide the navigation** beyond the edge of the screen and reveal it only upon a user's action.

When to use

The main downside of the hamburger menu is its low discoverability, and it's not recommended as the primary navigation menu.

However, this pattern might be an appropriate solution for secondary navigation options.

By hiding these options behind the hamburger icon, designers avoid overwhelming users with too many options.

Hamburger menu

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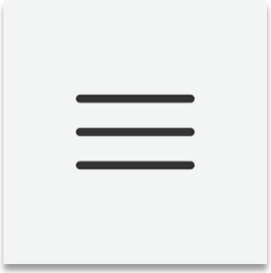

Pros

A large number of navigation options. The main advantage of the navigation menu is that it can accommodate a fairly large number of navigation options in a tiny space.

Clean design. The hamburger menu allows the designer to free up screen by shifting options off-screen into a side menu. This pattern can be particularly useful if you want the user to focus on the main content.

Cons

Less discoverable. What's out of sight is out of mind. When navigation is hidden, users are less likely to use it. While this type of navigation is becoming standard and many mobile users are familiar with it, many people still simply don't think to open it.

Clashes with platform navigation rules. The hamburger menu has become almost a standard on Android (the pattern has the name "navigation drawer" in material design), but in iOS, it simply cannot be implemented without clashing with basic navigation elements, and this could overload the navigation bar

Hamburger menu

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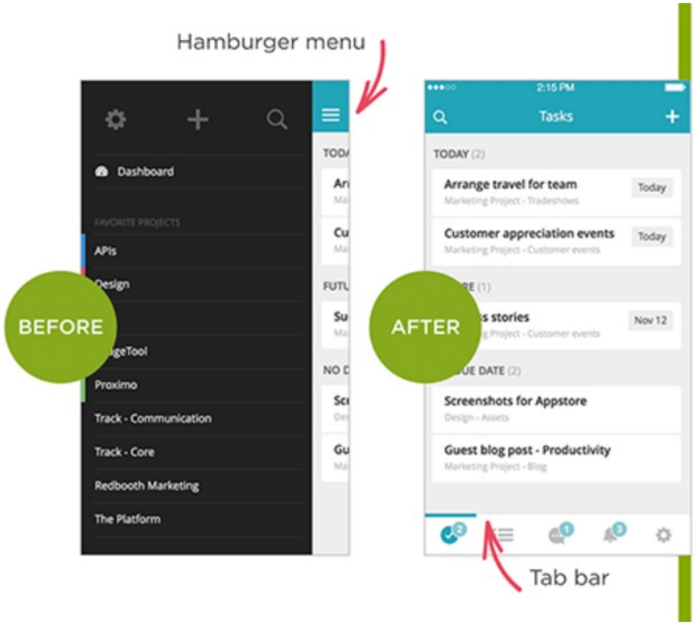
Tips

Prioritize the navigation options. If the navigation is complex, hiding it won't make it user-friendly. A lot of practical examples clearly show that exposing menu options more visibly increases engagement and user satisfaction. Ask yourself, "What's important enough to be visible on mobile?" Answering that question will require an understanding of what matters to your users.



number of sessions more than doubled; session time increased 70%; 65% increase in daily active users.

Hamburger menu

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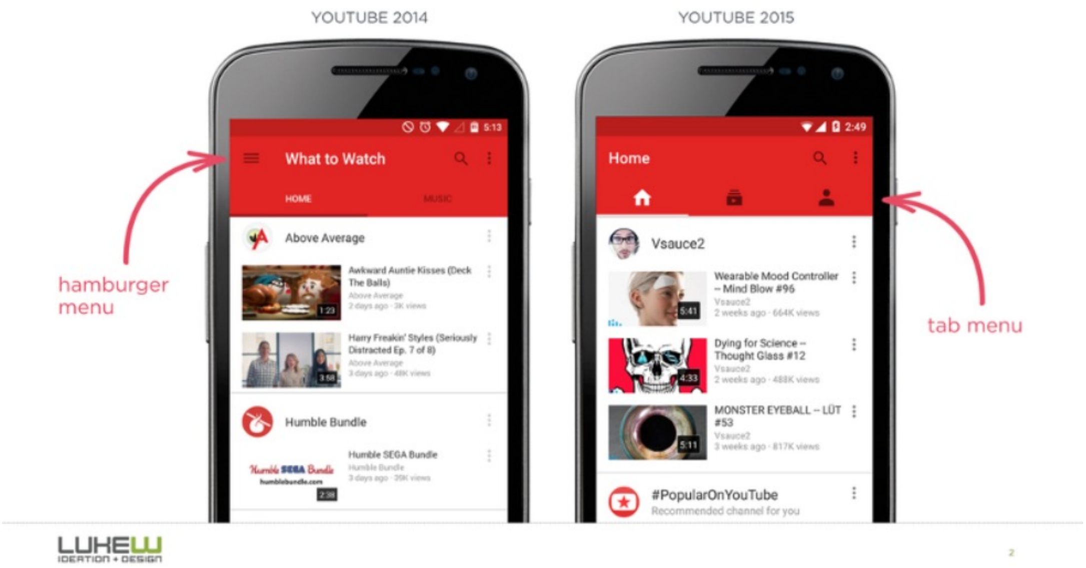
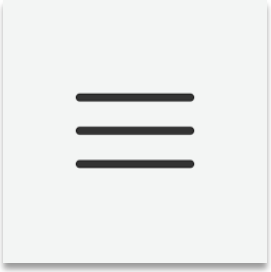
Tips

Consider using tabs. A tab bar works well if you have a limited number of high-priority navigation options.





Hamburger menu

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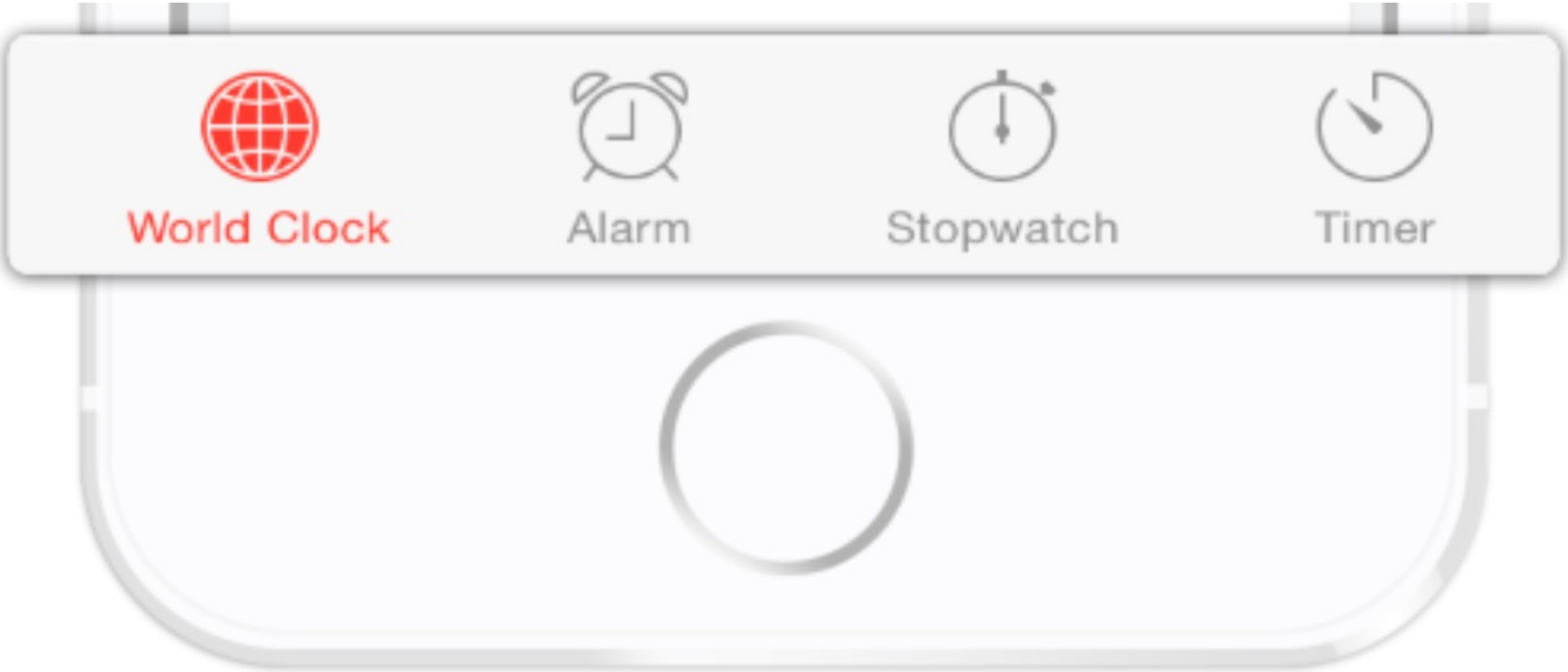
Tips

Review your information architecture. Good apps are highly focused. So, if you have one complex app, you could split its functionality into two (or more) simple apps. Facebook released its Messenger app to solve the problem of complexity. The reduced functionality results in a reduced set of menu options, and less need for a hamburger menu.



Tab bar

Tab bar

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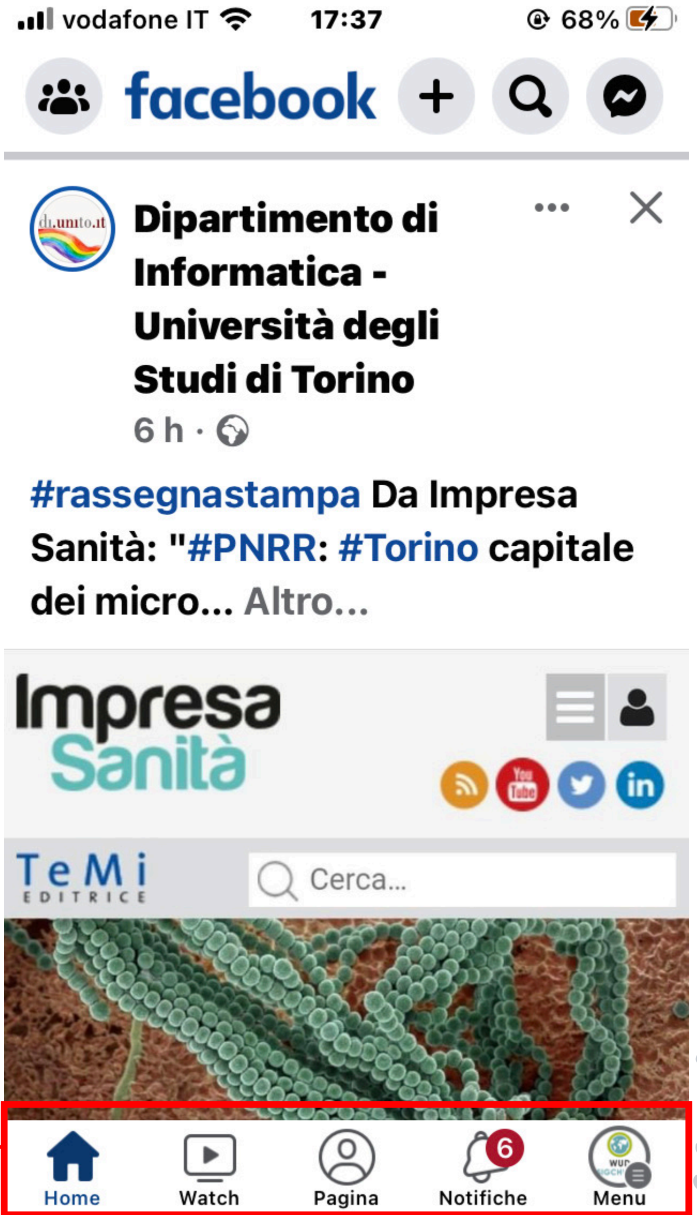
The tab bar is a mobile navigation design pattern that was inherited from **desktop** design. It usually contains relatively few destinations, and those destinations are of similar importance and require direct access from anywhere in the app.

When to use

Tabbed navigation is a great solution for apps with relatively few top-level navigation options (up to five). The tab bar makes the main pieces of core functionality available with one tap, allowing rapid switching between features.



Dipartimento di Informatica - Università degli Studi di Torino

6 h ·

#rassegnastampa Da Impresa Sanità: "#PNRR: #Torino capitale dei micro... Altro...

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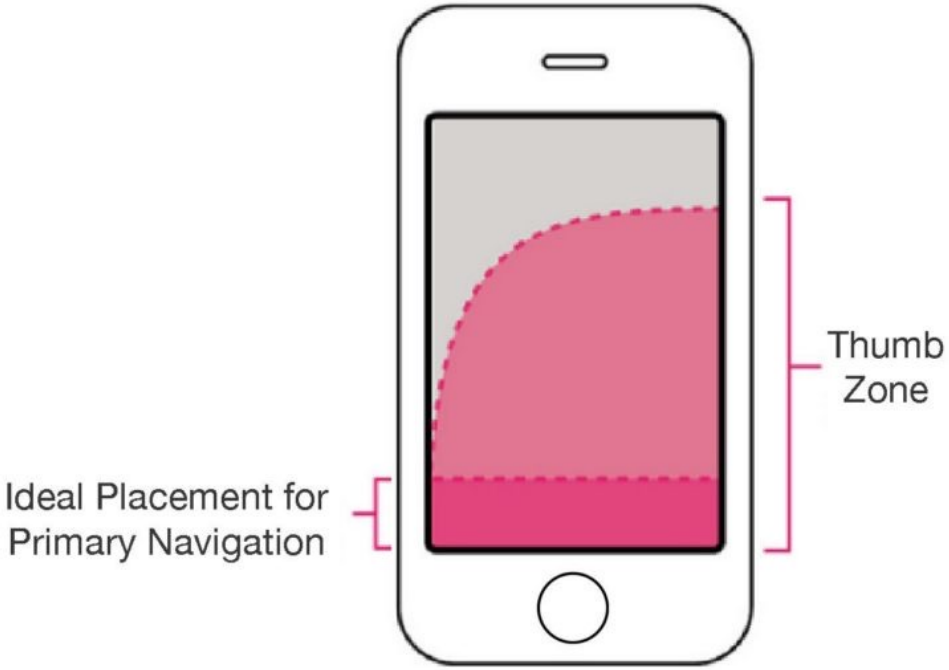
Tab bar

Pros

The tab bar fairly easily communicates the current location. Properly used visual cues (icons, labels, and colors) enable the user to understand their current location at a glance.

Tab bars are persistent. The navigation remains in sight no matter what page the user is viewing. The user has clear visibility of all the main app views and has single-click access to them.

Within thumb zone. The bottom navigation is easier to reach with the thumb when the device is held in one hand.



Tab bar

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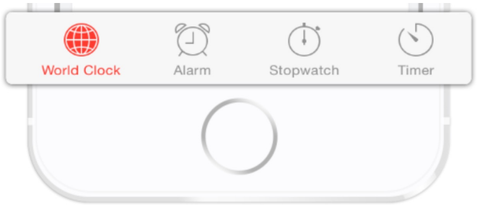
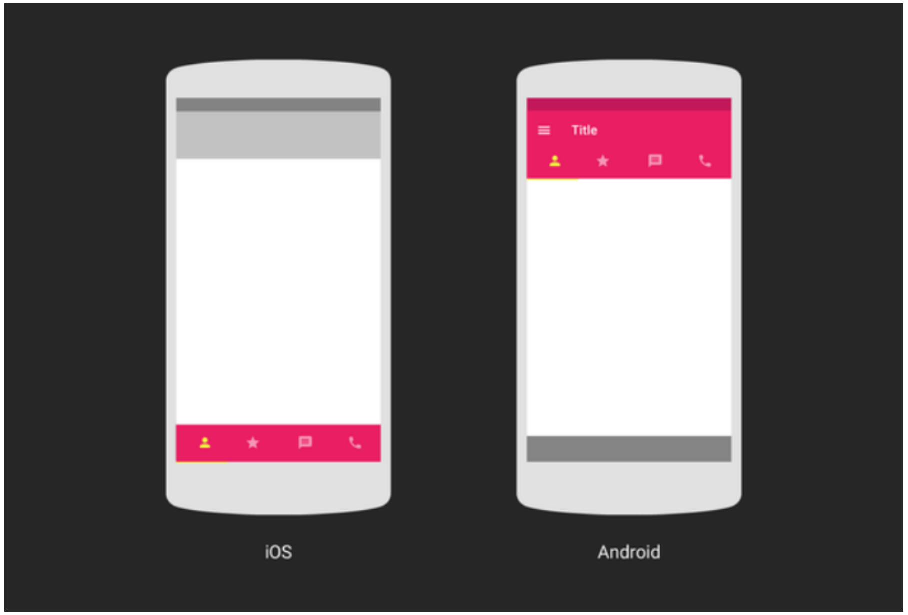


Cons

- **The location and logic of the tab bar options on iOS and Android are different**
- Tabs appear at the top of the screen on Android and the bottom of the screen on iOS.
- This happens presumably because Android's control bar at the bottom is hardware.
- Please note that this rule doesn't apply to mobile websites, because the experience with them should be consistent regardless of the device used to browse them (Android or iOS).

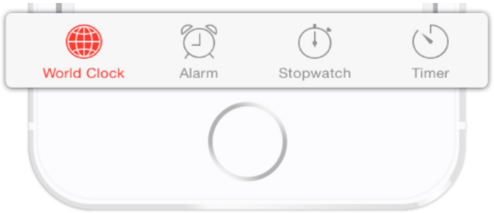


The navigation options are limited. If your app has more than five options, then fitting them in a tab or navigation bar and still keeping an optimum touch-target size would be hard.

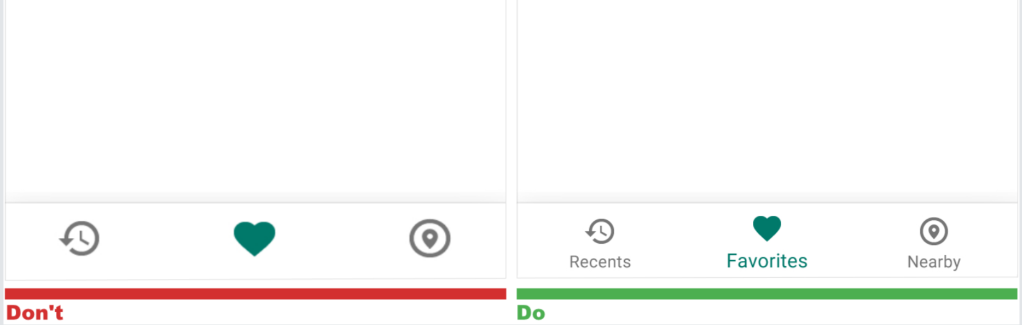
Tips

- **Make touch targets big enough to be easily tapped or clicked**. To calculate the width of each bottom navigation action, divide the width of the view by the number of actions. Alternatively, make all bottom navigation actions the width of the largest action.

- **Order the navigation options.** Users expect to see a certain order in the tab bar.
  - The first tab item has to be the home screen of the app,
  - The order of tabs should reflect their **priority** or the logical order in the user flow.
  - One of the tabs should always be **active** and visually highlighted.

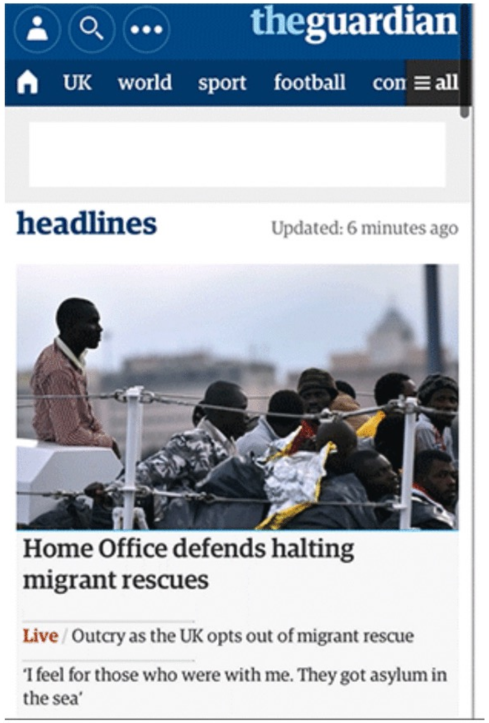


Tips



- **Test your icons for usability.** As you can see in the example below, app designers sometimes hide functionality behind icons that are pretty hard to recognize. To prevent this from happening, test your icons with the five-second rule: **If it takes you more than five seconds to think of an appropriate icon for something**, then it is unlikely that an icon can effectively communicate that meaning.
- **If an icon fails the five-second rule (i.e. isn't self-evident),** it needs a text label. It's pretty rare in the offline world that we rely on iconography alone to represent ideas — and for good reason. Due to the absence of a standard usage for most icons, text labels are necessary to communicate meaning and reduce ambiguity. Users should understand what exactly will happen before they tap on an element.

Priority+ pattern



headlines

Updated: 6 minutes ago

Home Office defends halting migrant rescues

Live / Outcry as the UK opts out of migrant rescue

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Priority+ pattern

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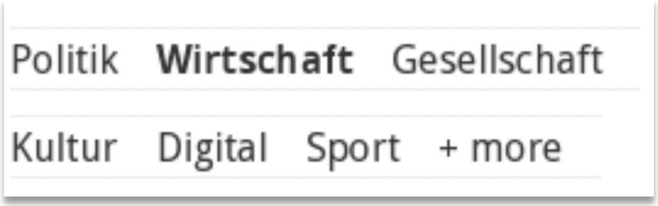


Politik **Wirtschaft** Gesellschaft

Kultur Digital Sport + more

The “Priority+” mobile navigation design pattern was coined by Michael Scharnagl to describe navigation that works well for **responsive** design. It exposes what’s deemed to be the most important navigation elements and hides away less important items behind a “**more**” button.

When to use

This pattern might be a good solution for content-heavy apps and websites **with a lot of different sections and pages** (such as a news website or a large retailer’s store).

The Guardian makes use of the priority+ pattern for its section navigation. Less important items are revealed when the user hits the “All” button.

https://xd.adobe.com/ideas/principles/app-design/essential-patterns-mobile-nav

Priority+ pattern

Pros

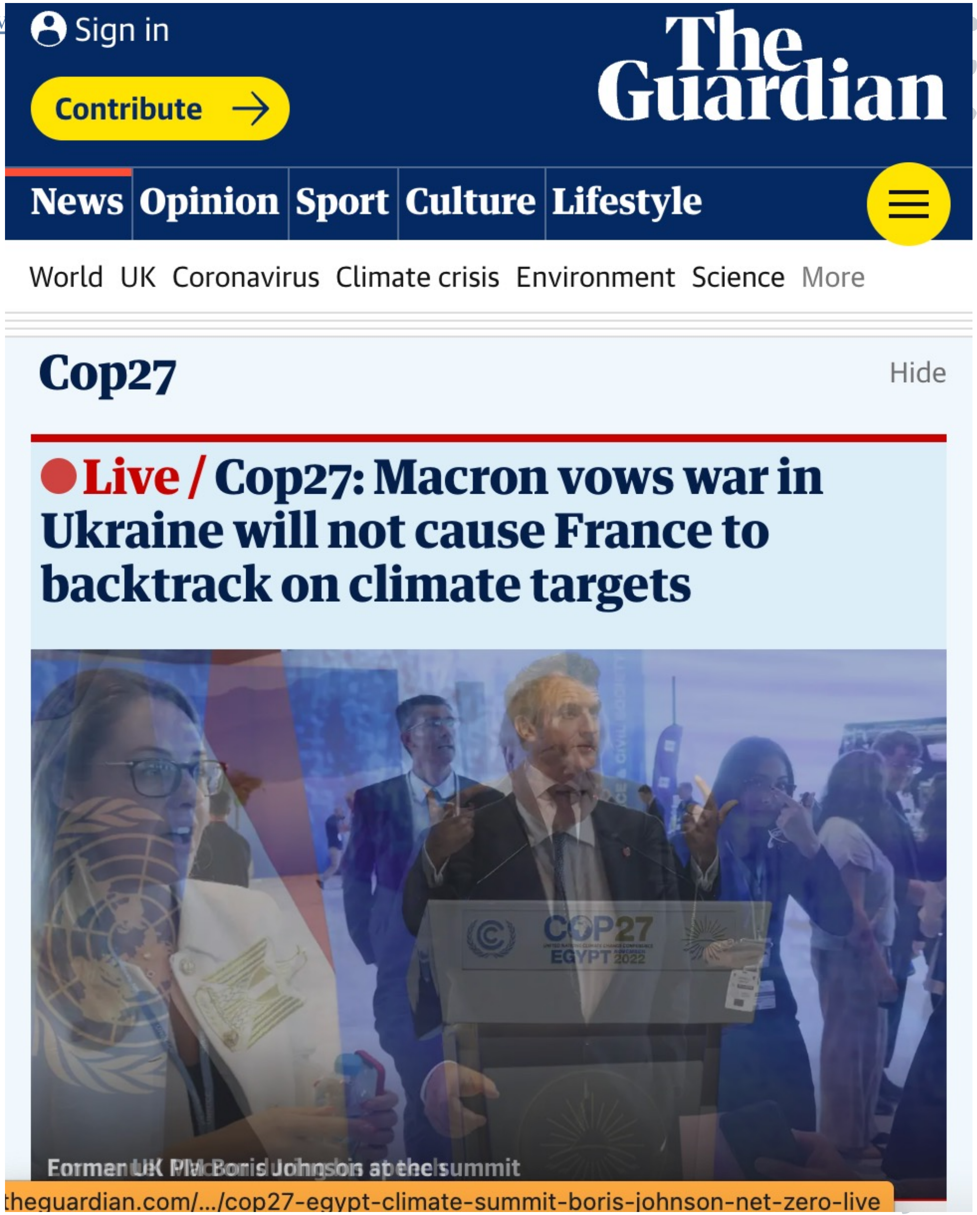
This pattern prioritizes navigation options. It surfaces the most frequently accessed navigation options.

It makes use of available screen space. As space increases, the number of exposed navigation options increases as well, which can result in better visibility and more engagement.

This menu is very adaptive. You can scale it quite nicely across screen sizes without having to transform the pattern.

Cons

It might hide some important navigation options. The priority+ pattern requires designers to assume the relative importance of navigation items. Be aware that the items you prioritize to be visible might not be the same ones users are looking for most.

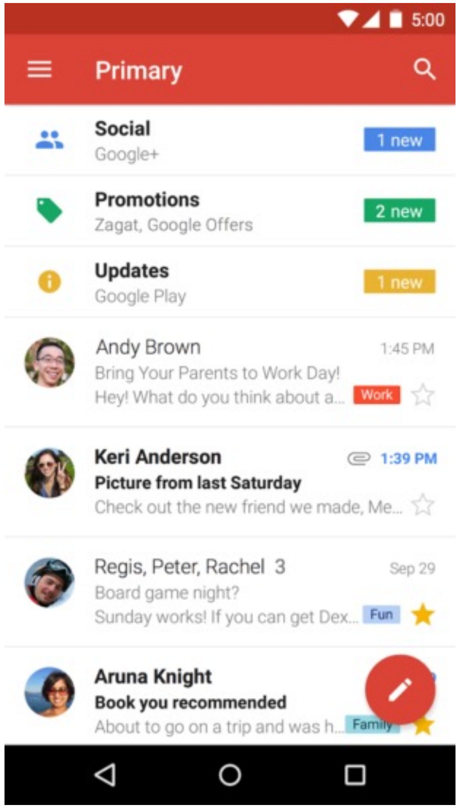


Live / Cop27: Macron vows war in Ukraine will not cause France to backtrack on climate targets

Former UK PM Boris Johnson at the summit

theguardian.com/.../cop27-egypt-climate-summit-boris-johnson-net-zero-live

Floating action button



5:00

Primary

Social
Google+
1 new

Promotions
Zagat, Google Offers
2 new

Updates
Google Play
1 new

Andy Brown 1:45 PM
Bring Your Parents to Work Day!
Hey! What do you think about a... Work

Keri Anderson 1:39 PM
Picture from last Saturday
Check out the new friend we made, Me...

Regis, Peter, Rachel 3 Sep 29
Board game night?
Sunday works! If you can get Dex... Fun

Aruna Knight
Book you recommended
About to go on a trip and was h... Family

Floating action button

https://xd.adobe.com/ideas/principles/app-design/essential-patterns-mobile-navigation/

Shaped like a **circle icon** floating above the UI, the floating action button changes color upon focus and lifts upon selection. I

t's well known by all Android users and is a distinct element of **material design**.

Floating above the interface of an app, it promotes user action, says Google.

Floating action buttons can stand out among copy for ease of use when a user wants to add additional pieces.

Floating action button

https://xd.adobe.com/ideas/principles/app-design/essential-patterns-mobile-navigation/

When to use

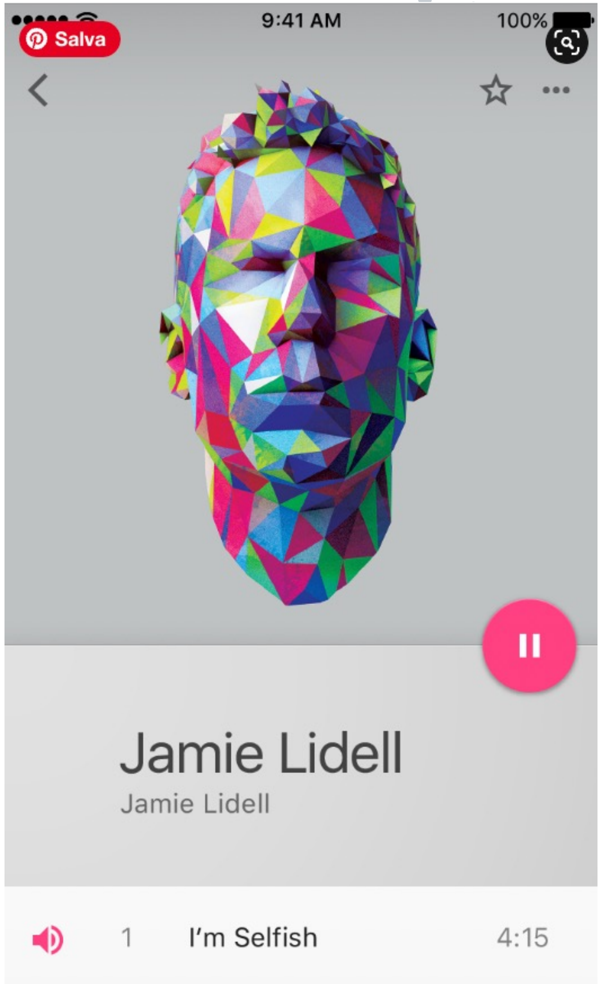
- The design of the floating action button hinges on the premise that users will perform a certain action most of the time.
- You can make this “hero” action even more heroic by reinforcing the sense that it is a core use case of your app.
- For example, a music app might have a floating action button that represents “play.”
- The button is a natural cue to users for what to do next.
- In user research, Google found that users understand it as a **wayfinding** tool.
- **Thus, it is a way to prioritize the most important action you want users to take.**

https://xd.adobe.com/ideas/principles/app-design/essential-patterns-mobile-navigation/

Floating action button

Pros

- **It's a signpost of what's important**. It's a good way to prioritize the most important action you want users to take.
- **It takes up little screen space**. Compared to the tab bar, it doesn't take up an entire row.
- **A visually pleasing UI element such as this might not improve usability.** However, emotion is a factor in user experience. If a user is pleased to use an app because they find it visually attractive, then that would create positive UX effects.
- **It also improves effectiveness**. A study by Steve Jones demonstrates that a floating action button slightly impairs usability when users first interact with the button. However, once users have successfully completed a task using the element, they are able to use it more efficiently than a traditional action button.

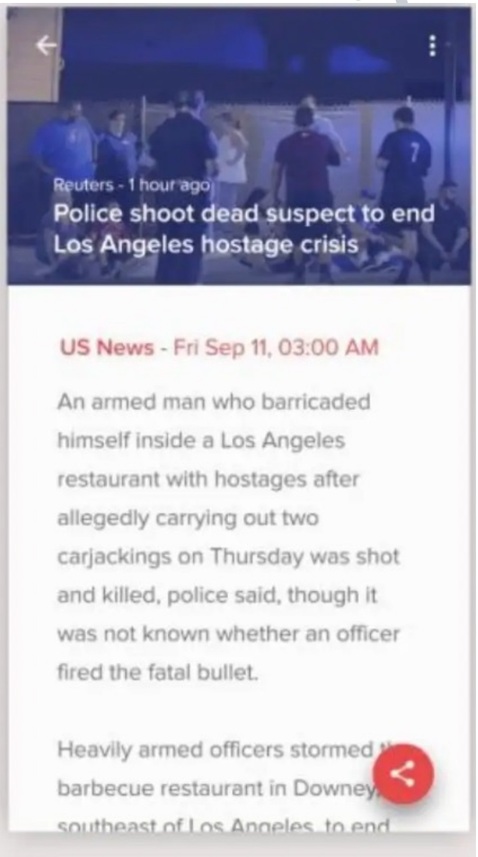


https://xd.adobe.com/ideas/principles/app-design/essential-patterns-mobile-navigation/

Floating action button

Cons

- **A floating action button can distract users from the content.** It is designed to stand out – it is colorful, raised and grid-breaking. Its design is meant to draw the user's attention.
- **Using strong colors** such as red can help stand out from the background**.**
- **It can block content.**
- **It is also icon-only navigation.** By design, the floating action button is a circle containing an icon. It's an icon-only button, with no room for text labels. The problem is that icons are incredibly hard to understand because they're so open to interpretation.
- **The same floating button can have various meanings depending on the web page or application you are interacting with.** Same icon, different meanings: "Compose" in the Gmail and Inbox apps, but "Edit" in the Snapseed app. Here, context helps to explain the action**.**



Reuters - 1 hour ago

Police shoot dead suspect to end Los Angeles hostage crisis

US News - Fri Sep 11, 03:00 AM

An armed man who barricaded himself inside a Los Angeles restaurant with hostages after allegedly carrying out two carjackings on Thursday was shot and killed, police said, though it was not known whether an officer fired the fatal bullet.

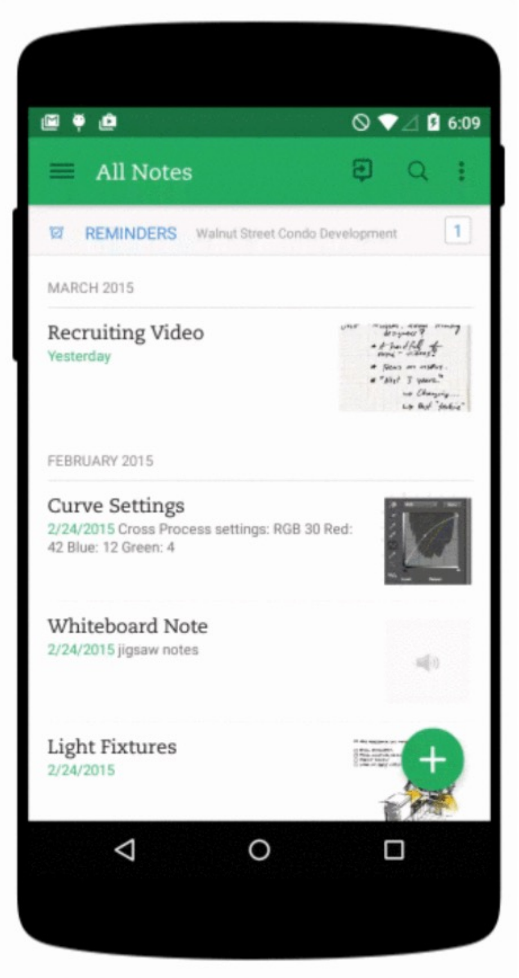
Heavily armed officers stormed t barbecue restaurant in Downey southeast of Los Angeles, to end

https://xd.adobe.com/ideas/principles/app-design/essential-patterns-mobile-navigation/

Floating action button

Tips

- **Less is more.** Because it is so prominent and intrusive, use only one per screen.
- **Prioritize usage.** Not every screen should have one, simply because not every screen has an action of such importance.
- **The floating action button is strongly associated with positive actions.** Because it is full of character, it's generally taken to be a positive action, like create, favorite, navigate, search and so on**.**
- **Don't use it for destructive actions, like delete.**
- .



REMINDERS Walnut Street Condo Development 1

MARCH 2015

Recruiting Video
Yesterday

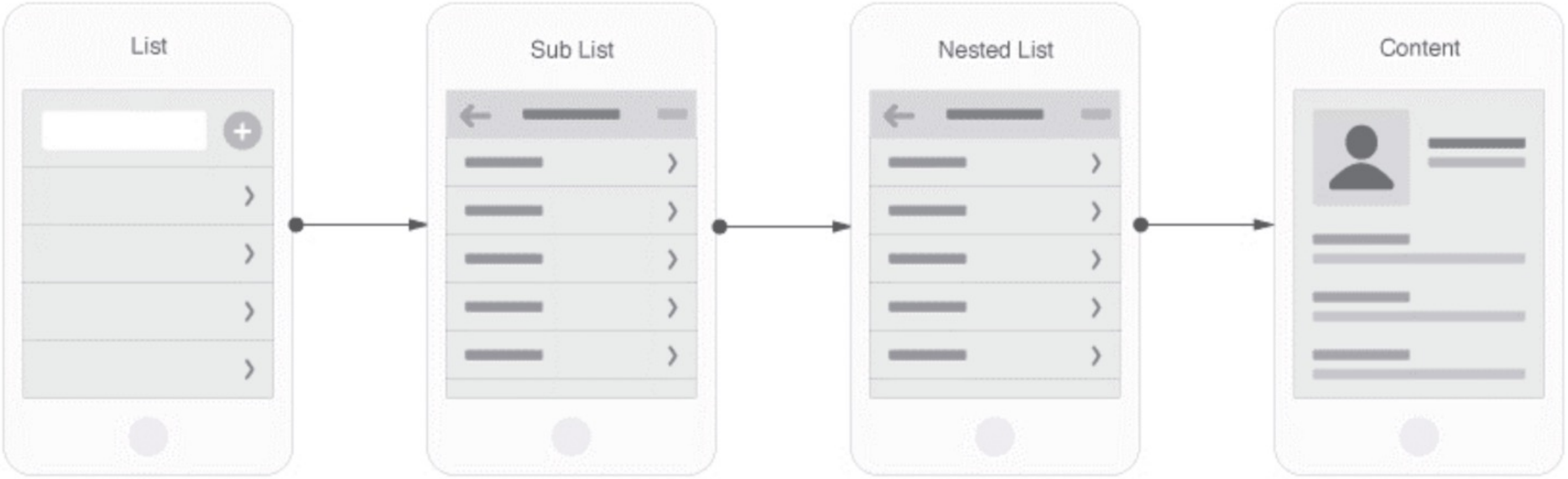
FEBRUARY 2015

Curve Settings
2/24/2015 Cross Process settings: RGB 30 Red: 42 Blue: 12 Green: 4

Whiteboard Note
2/24/2015 jigsaw notes

Light Fixtures
2/24/2015

Full-screen navigation



Full-screen navigation

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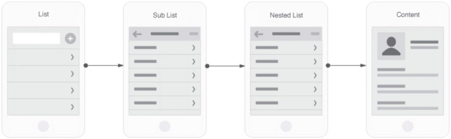


While with other mobile navigation patterns mentioned, you'd be struggling to minimize the space that the navigation systems take up, the full-screen pattern takes the exact opposite approach.

This navigation approach usually devotes the home page exclusively to navigation. Users incrementally tap or swipe to reveal additional menu options as they scroll up and down.

When to use

This pattern works well in **task-based** and **direction-based websites** and **apps**, especially when users tend to limit themselves to only one branch of the navigation hierarchy during a single session.

Full-screen navigation

https://xd.adobe.com/ideas/principles/app-design/essential-patterns-mobile-navigation/

Pros

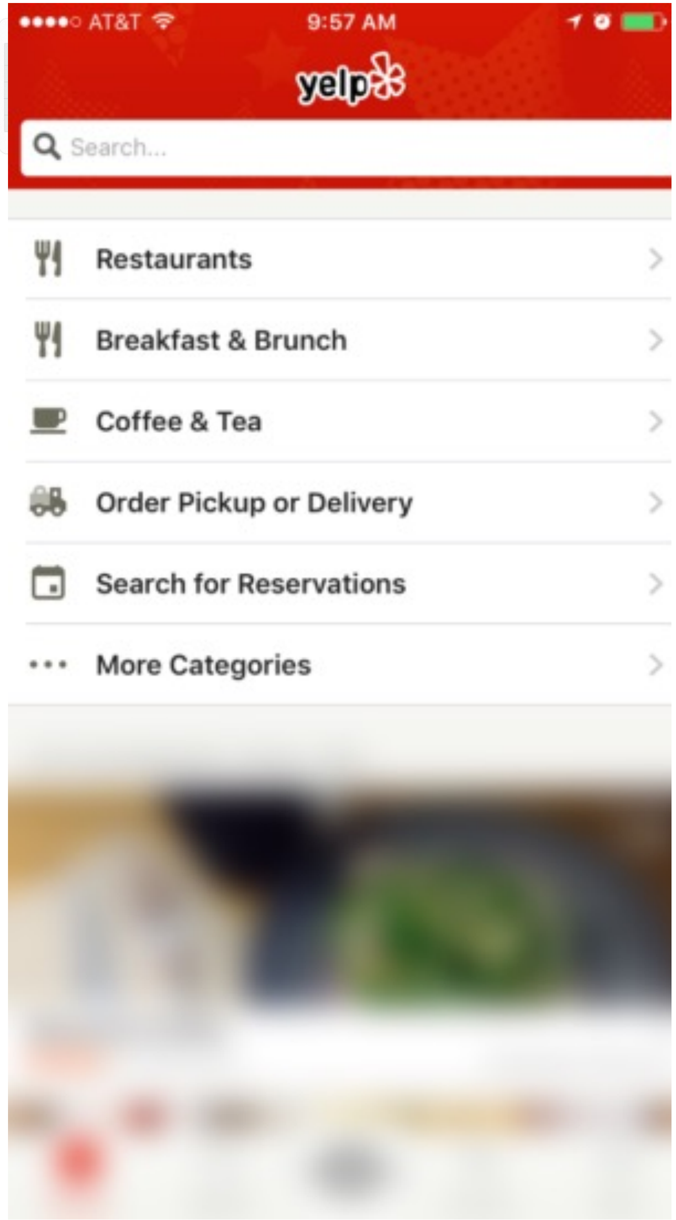
The full-screen navigation pattern is best for achieving simplicity and coherence. You can organize large chunks of information in a coherent manner and reveal information without overwhelming the user; once the user makes their decision about where to go, then you can dedicate the entire screen space to content.

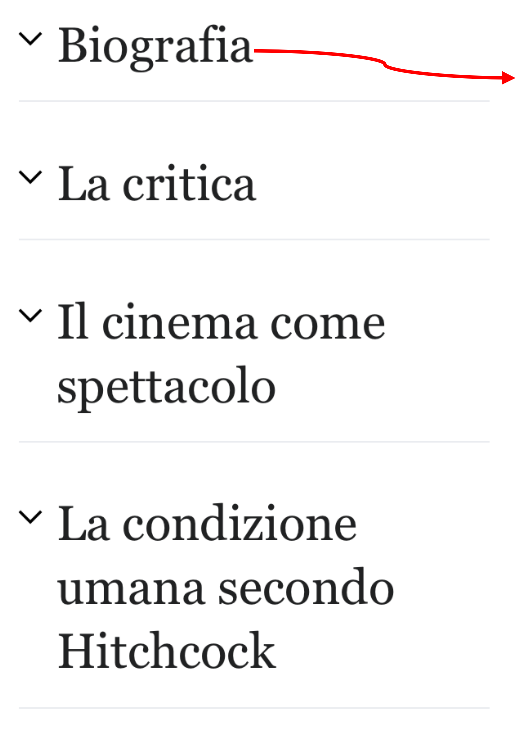
Cons

You won't be able to display any content except the navigation options.

Tips

Use a hamburger menu to hide secondary functionality and keep the focus on the main experience



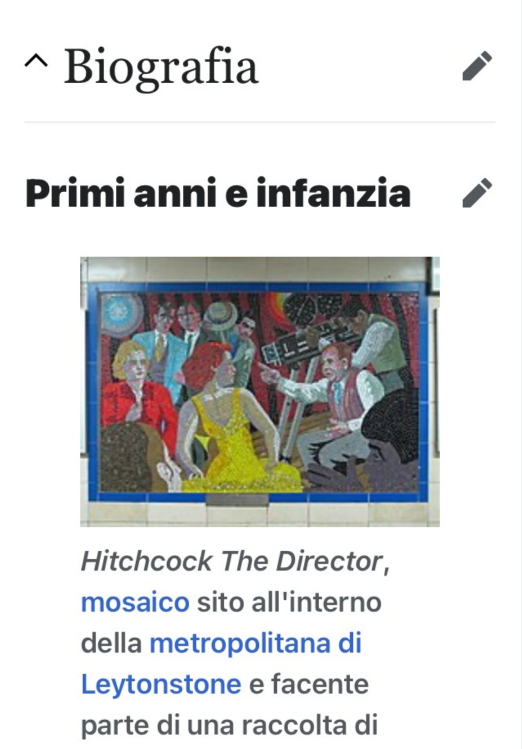


˅ Biografia

˅ La critica

˅ Il cinema come spettacolo

˅ La condizione umana secondo Hitchcock



˄ Biografia

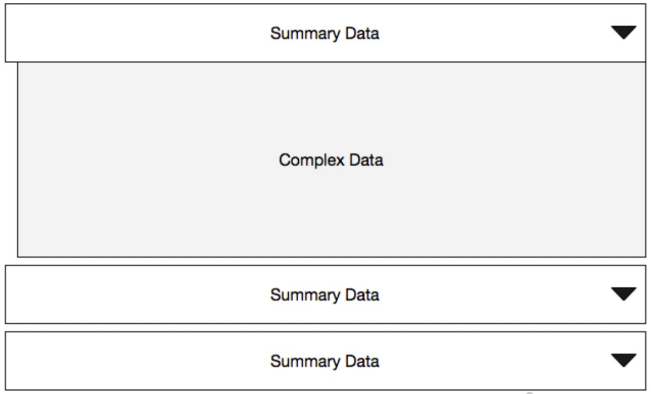
Primi anni e infanzia

Hitchcock The Director, mosaico sito all'interno della metropolitana di Leytonstone e facente parte di una raccolta di

Progressive disclosure

Progressive disclosure

https://www.nngroup.com/articles/progressive-disclosure/

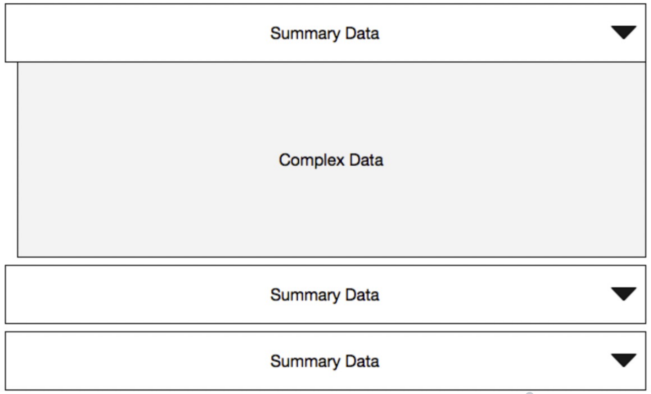


Interaction designers face a dilemma:

- **Users want power**, features, and enough options to handle all of their special needs. (Everybody is a special case somehow. For example: Who wants line numbers in a word processor? Millions of users, that's who, including most big law firms.)
- **Users want simplicity**; they don't have time learn a profusion of features in enough depth to select the few that are optimal for their needs.

Progressive disclosure

https://www.nngroup.com/articles/progressive-disclosure/



Summary Data

Complex Data

Summary Data

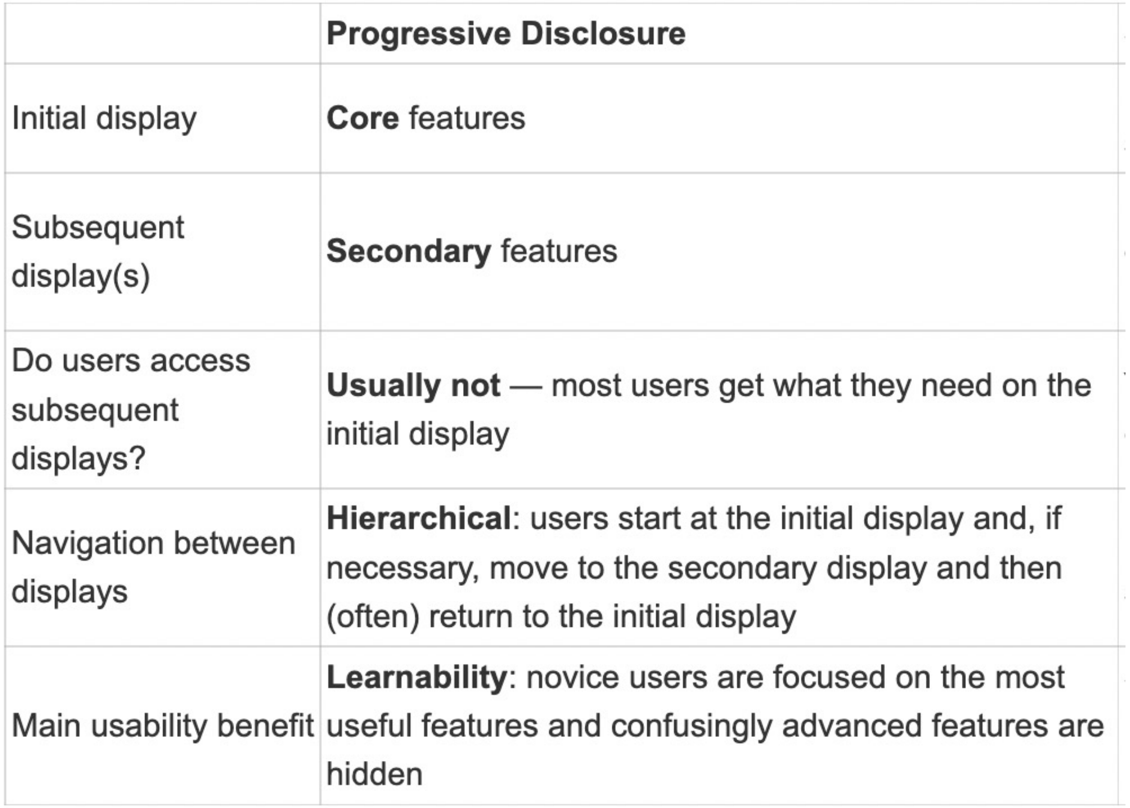
Summary Data

Progressive disclosure is one of the best ways to satisfy both of these conflicting requirements. It's a simple, yet powerful idea:

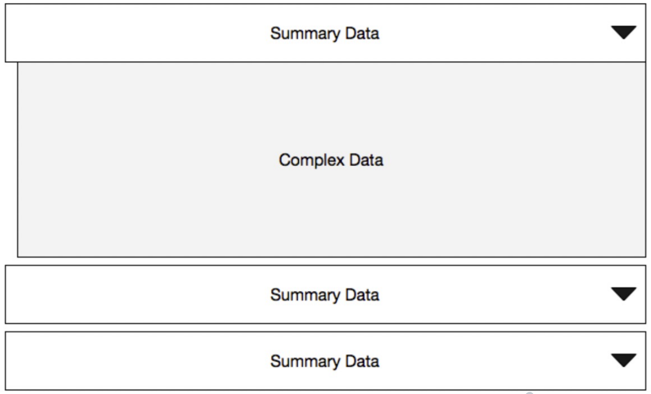
- Initially, show users only a **few** of the most important options.
- **Offer a larger set of specialized options upon request**.
- Disclose these **secondary features** only if a **user asks** for them, meaning that most users can proceed with their tasks without worrying about this added complexity.

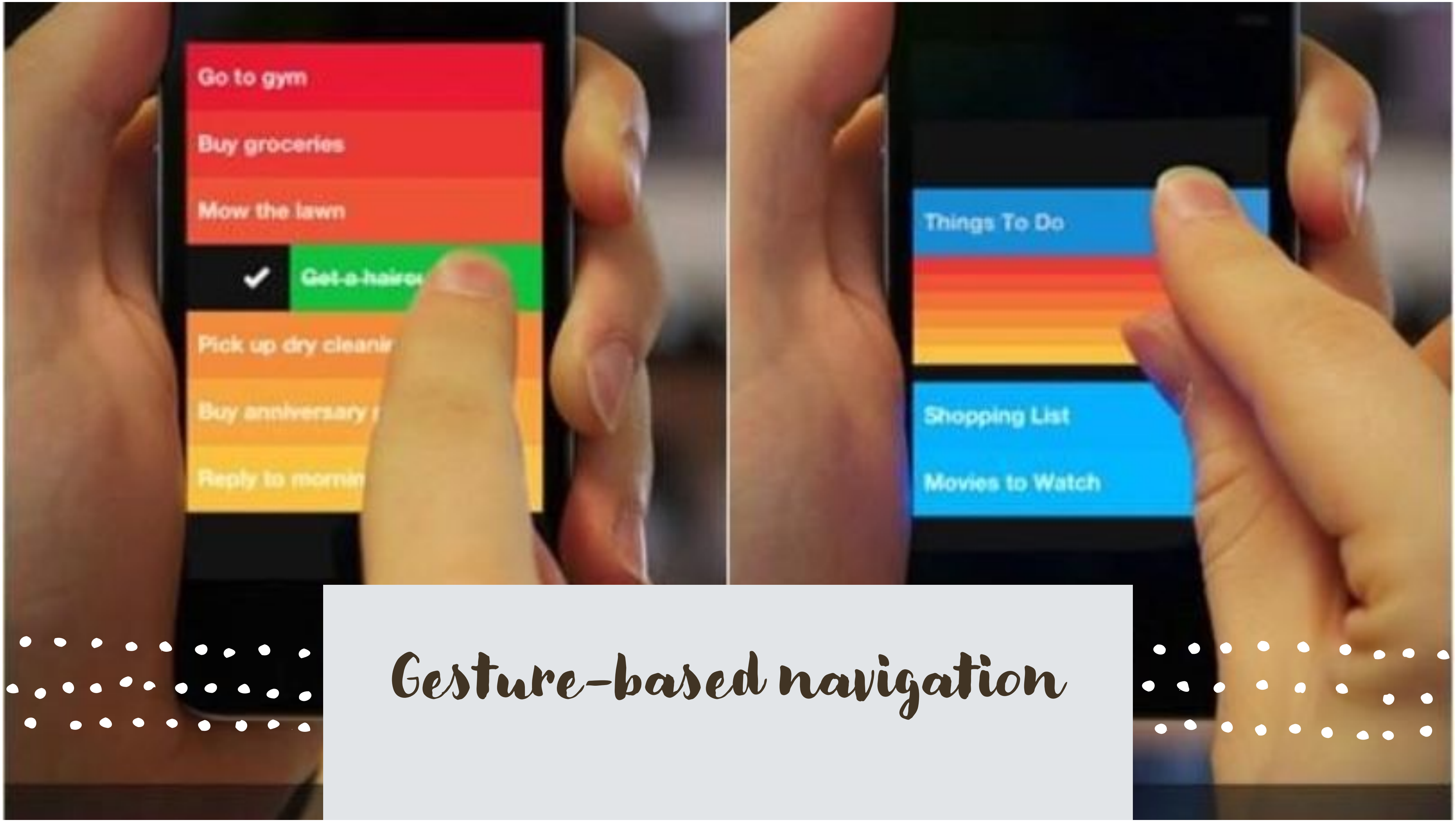
Progressive disclosure

https://www.nngroup.com/articles/progressive-disclosure/



	Progressive Disclosure
Initial display	**Core** features
Subsequent display(s)	**Secondary** features
Do users access subsequent displays?	**Usually not** — most users get what they need on the initial display
Navigation between displays	**Hierarchical**: users start at the initial display and, if necessary, move to the secondary display and then (often) return to the initial display
Main usability benefit	**Learnability**: novice users are focused on the most useful features and confusingly advanced features are hidden





Gesture-based navigation

Gesture-based navigation

https://xd.adobe.com/ideas/principles/app-design/essential-patterns-mobile-navigation/

Gestures immediately became popular among designers, and many apps were designed around experimenting with gesture controls.

In today's world, the success of a mobile app can largely depend on how well gestures are implemented in the user experience.

When to use

- This mobile navigation pattern is good when users want to explore the details of particular content easily and intuitively.
- **Users will spend more time with content than they will with navigation menus**.
- So, one of the reasons to use in-context gestures instead of a standard menu is **that it's more engaging.** For example, as users view page content, they can tap on a card to learn more.

Gesture-based navigation

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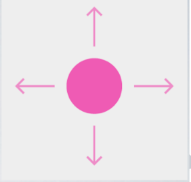
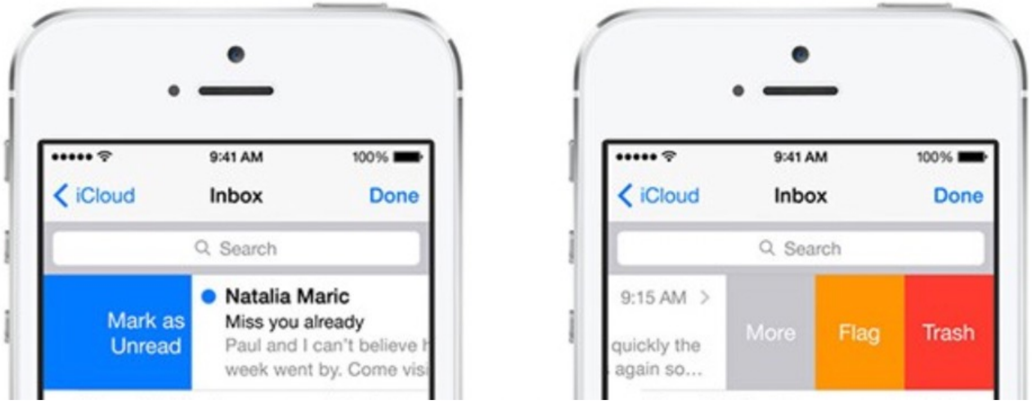


Pros

- **It removes UI clutter**. Building gestures into the heart of your design allows you to make your interfaces more minimal and to save screen space for valuable content.
- **The UI is more natural.** Luke Wroblewski talks about a study in which 40 people in 9 different countries were asked to create gestures for 28 different tasks, such as deleting, scrolling and zooming. He found that gestures tend to be similar across culture and experience. For example, when prompted to “delete,” most people—regardless of nationality—tried **dragging the object off-screen.**
- **Gestures can be a distinctive feature of a product.** Tinder has massively popularized the concept of gesture-based navigation and basically made those swipes a product-defining gesture.

Gesture-based navigation

https://xd.adobe.com/ideas/principles/app-design/essential-patterns-mobile-navigation/



Cons

The navigation is invisible. One important rule in designing a UI is visibility: through the menus, all possible actions should be made visible and, therefore, easily discoverable. An invisible UI can be seductively beautiful, but because it's invisible, it will likely have many usability issues.

User effort increases. Most gestures are neither natural nor easy to learn or remember. When designing gesture-based navigation, be aware that every time you remove UI clutter, the application's learning curve goes up.

Tips

Make sure you don't have to teach people a whole new way to interact with an interface. Design a familiar experience. In order to design good gesture-based navigation, start by looking at the current state of gestures in the mobile world.

Link

- https://www.nngroup.com/articles/mobile-navigation-patterns/
- https://xd.adobe.com/ideas/principles/app-design/
- https://xd.adobe.com/ideas/process/wireframing/guide-to-creating-mobile-app-wireframes/
- https://xd.adobe.com/ideas/principles/app-design/11-screens-youll-find-many-successful-mobile-apps/
- https://xd.adobe.com/ideas/principles/web-design/what-makes-good-ux/