

Mobile

Kick-off

T7 - MSc Pool

T-POO-700

Facts and figures

world population owning a smartphone

65% (versus 23% in 2012)

Internet connections from a smartphone

75% (versus 40% in 2012)

average daily mobile usage time

3h15 (versus 20 minutes in 2008)



Applications

native application

application developed specifically for a platform (iOS, Android ...)
language specific to the operating system.

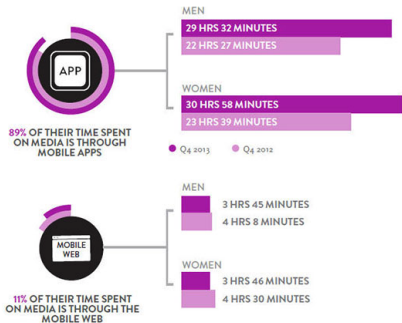
web app

browser-accessible application
cross-platform
do not have access to the specific functionalities of the operating systems



Native VS web app

MONTHLY USAGE OF APP AND MOBILE WEB



Why mobile users spend 90% of their time on apps?

- Ergonomics
- Rapidity
- Native features (notif, geoloc,...)
- Storage of data
(allowing for example a one-click payment)



PWA

The **Progressive Web App** has the specificity of being installed: a **service worker** will cache all the pages needed for offline use.

They have several advantages:

- Accessible regardless of connection status
- Fast
- Behaves almost like a native application



Hybrid Application

- between a native application and a web app
- work through native *WebView* operating systems
- cross-platform.
- need an installation (unlike web apps)
- **hybrids frameworks** based on web languages give access to native features



Mobile Design

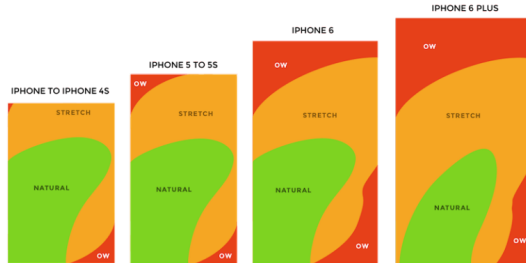
Keypoint. Based on some simple principles:

- optimize the user journey
- purify the interface, avoid irrelevant information
- make intuitive navigation
 - Avoid “hidden” navigation, based on gestures for example
 - Keep a consistent navigation
 - Let the user know where they are
- differentiate interactive and static elements



Example of constraint: thumb zone

Users use their thumbs most of the time
It must be taken into account when designing an app.



Offline mode

Internet connection on the phone is very unstable depending on an individual's use and where they are.

That's why it's important to think about using your application offline to avoid frustrating users.

Implementing off-line usage on your app provides several benefits :

- There is no unexplained data loss
- The app **seems** to work in any conditions
- Updates and synchronizations are done automatically in the background without additional user action

These benefits may allow your application to stand out from another.



An example: SNCF

Previously, a long and tedious process enabled us to get a train ticket:

- search and select a trip on the website,
- enter contact information,
- buy a ticket,
- collect the ticket at the station

Today, the mobile app shortens the process
(no website to browse, automatic authentication, QRcode scanner,...)
In 2018, the SNCF application became the first sales channel
in terms of the number of orders placed.



Any questions

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