

TECHNICAL RESOURCES

Best Practice #4: Optimize Interaction Time to Create Delightful User Experiences

Search technical resources...

Q

Examples: *Apple Watch*, *Userflows*, *Android Crash*

Best Practice #4: Optimize Interaction Time to Create Delightful User Experiences

August 29th, 2016 | Rob Kwok

[f](#) [twitter](#) [G+](#) [in](#)

This is part four in a seven part series on how to use Aptelligent to implement a collection of best practices from industry leaders called: “[7 Best Practices for Optimizing Mobile Apps](#).”

Does your app frustrate users?

Part three of this series discussed how decreasing app load time to less than two seconds was key to increasing engagement, adoption, and conversions in mobile apps. In addition to app load time, slow interactions (e.g., waiting for search results or for a screen to load after a button tap) can also frustrate users. According to Jakob Nielsen’s [Powers of 10](#) research in user interface design, if the UI takes more than 0.1 seconds to respond to an interaction, users will perceive the UI as delayed and not “instantaneous.” If the UI takes over 1.0 second, users will start to lose their train of thought and lose the feeling of being in control of their interactions, leading to frustration.

The top companies will monitor the key flows in their app (typical key flows are “login” or “purchase”), and ensure the speed of user interactions meet user expectations. The table below (Figure 1) highlights a few common interactions to track and their expected interaction times. There are two types of interactions: **immediate** interactions where a user is expecting an instantaneous response, and **working** interactions where the user expects a slight delay.

Userflow	User Expectation	Time
App load (time to availability of first user-interaction)	App is “working”	1.0 s
Login (not including data entry)	App is “working”	1.0 s
Registration (not including data entry)	App is “working”	1.0 s
Search	App is “working”	1.0 s
Screen transitions	Immediate	0.1 s
Browse	Immediate	0.1 s
Add to shopping cart	Immediate	0.1 s
Check-out	App is “working”	1.0 s
Locate (e.g. locate store)	App is “working”	1.0 s
Barcode scan	App is “working”	1.0 s

Figure 1: Common User Interactions and Target Interaction Times

Identify three critical flows to monitor in Aptelligent

Set up a Userflow in Aptelligent to monitor these critical interactions in the app. Most customers start by identifying the three most critical flows in the app. The most common flows that customers monitor are interactions such as “login,” “register new account,” or “purchase.” However, the most critical flows can also vary by the type of app as well.

It’s important to choose flows that have a large impact to business metrics such as engagement, conversions, or adoption. Figure 2 shows an example of common critical flows customers monitor by the type of app.

All Apps	Retail	Travel	Finance	Gaming	Insurance
App Load	Checkout	Book Flight	Deposit a Check	In-App Purchase (IAP)	View Policy
Login	Search for Item	Select Seat	Pay a Bill	Complete Level	Pay Bill
Register New Account	Add Item to Cart	Check-in	Transfer Money	View Leaderboard	File Claim
Search	Scan Barcode	View Reservation	View Balance	Invite Friend	View Balance
Purchase	Store Locator	Modify Reservation	View Transaction History	Use Item	View Payment History

