

How to choose the right technology for your mobile app

The technology you choose will define many things about your final app and directly impact your users' experience. At ThinkUp, we are experts in developing mobile apps and can help you. Let's talk about the pros and cons of both technologies.

Native

Native mobile technology refers to creating apps suited to work on particular mobile operating systems. Examples: Objective-C or Swift for iOS and Java or Kotlin for Android.

+ Pros

Responsive applications with high performance
Able to interface with native libraries

Work offline

Usability: users find them easier to navigate because they look and feel consistent with most of the other native apps on the device

Security: high levels of control and authorization over API calls to and from the server are

Better discoverability in app stores because of their better distribution

Can access all the advanced native device features

Testing is easier for developers

It is more efficient to use cell phone hardware because it is accessed and used through the device's native functions of the operating system

Better performance and speed: they are faster than hybrid apps

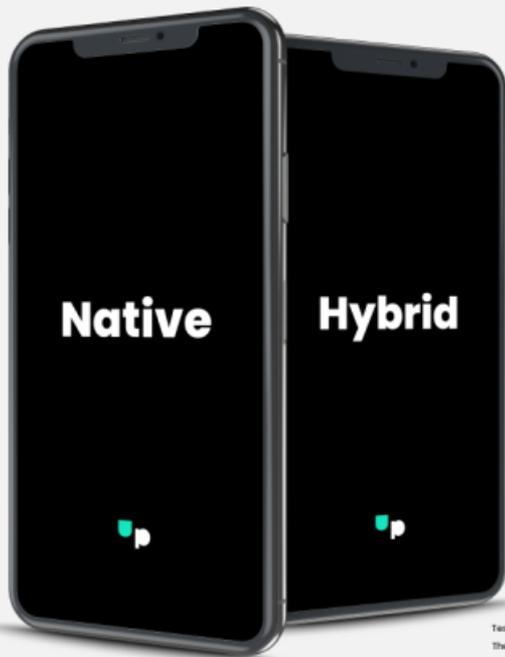
- Cons

An expensive development
It only runs on one platform
Require more developer resource intensive
Lower code reuse

Time-consuming development
They require frequent upgrades

It must be re-coded in a different language to port to a diverse device ecosystem

Their expenses are more costly upfront compared to hybrid apps
They are not the best option when developing simple applications



Hybrid

Hybrid apps are a mix of native apps and web apps. Their development uses front-end technologies and languages like JavaScript, HTML5, and CSS and is usually accomplished with a hybrid app framework, such as Flutter, React Native, Ionic, Xamarin, or Cordova.

+ Pros

Achieve greater developer productivity through cross-platform compatibility
Lower development costs

Don't need a web browser (like for web apps)

Have access to a device's internal APIs and device hardware

Only need one codebase for multiple platforms

Reach a broader audience across many platforms
Easy to launch and update

- Cons

The user experience is never as good as a native app
Lower performance
Slower speed
Less flexibility
More UI design time
Limited tools

Test complexity because they share much code between platforms
They depend on a third-party platform to deploy the app's wrapper
They are not convenient when you need more customization