

Native vs React Native vs Flutter: A Comparison

Factor	Native	React Native	Flutter
COST	This is the most expensive option, since you have to have two separate teams for iOS and Android. (In our experience, it usually costs approx. 50% more than cross-platform alternatives.)	Somewhere in between native and Flutter-built apps.	The least expensive choice, because the development process is faster than with React Native apps (so you save costs).
PRODUCTIVITY (=speed of development)	Slower than Flutter, but around the same level as React Native.	...Again, slower than Flutter, but similar to native apps – they have different issues, but the overall speed of development can be the same.	Flutter is the clear winner here: it's faster because it has a large set of out-of-the-box widgets and really good developer tools like hot-reload and debugger.
FEATURES AND THIRD PARTY INTEGRATIONS	Feature-wise, you can't beat native mobile apps. They're the benchmark. Everything else builds on top of their technology, so it's definitely a winner here.	React Native lies in the middle because it's (as of today) more mature than Flutter, has more community support and software libraries.	Since Flutter's community hasn't been around as long, and it's not as popular as the other two frameworks, it definitely has less features and integrations.
PERFORMANCE	Native is still the benchmark here. That said, cross-platform technologies have evolved so much that any performance issues (even though they do happen) usually go unnoticed by users.	Performance-wise, React Native is last in line. Because of its technology, React Native has been known to have occasional performance issues.	Flutter is definitely an improvement compared to React Native, because Flutter is compiled into the native code, so it runs pretty seamlessly.
SECURITY	Obviously, native apps are the most secure, since they have ingrained access to all security features the platform provides.	React Native doesn't come bundled with security-related libraries, which means developers have to rely on community-created code. Community-provided libraries can experience issues with quality and support.	Feature-wise, the situation is the same as with React Native. However, Flutter has one interesting security benefit: reverse-engineering Flutter apps isn't as easy as other cross-platform solutions, as it compiles into native code.
DEVELOPER EXPERIENCE	Native app building is pretty good when it comes to developer experience because of Kotlin, which has a modern strongly typed language, reasonably good tools, and stable libraries.	Objectively speaking, React Native might be the least developer-friendly alternative; then again, it's also a matter of personal preference, so there could be developers who disagree!	Flutter app development can be really fun, because it's easier than the other two technologies: you're abstracted away from native details (which can be really frustrating!), leaving more time to focus on, say, features. Flutter also has great documentation and good developer tools, especially when compared to React Native.

COMMUNITY	Native app building doesn't need that much community support, since there are already lots of well-maintained, high-quality tools, libraries and documentation provided by Google and Apple.	Owing to its newcomer status, React Native's community is large and active (even if the quality of support can vary).	Flutter's community is, without question, smaller than the one surrounding React Native; however, it's also growing faster than its competitor, thus becoming a more and more enticing choice for developers.
AVAILABILITY OF DEVELOPERS	Finding available native app coders lies somewhere between the challenges of finding React Native and Flutter coders: obviously, you need both Android and iOS developers, meaning two product teams and more people overall. But it's still easier to put together than a Flutter team...	It's definitely easiest to find a JavaScript team to write React Native code, because it's really easy for web developers to pick it up and get started!	As mentioned before, finding Flutter developers is a real challenge because of its Dart language. (But while it's harder to kick off work, ultimately you still only need one Flutter team, and with fewer developers...)
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