

# Digital demystified: What SDKs mean to app developers

## Understanding SDK

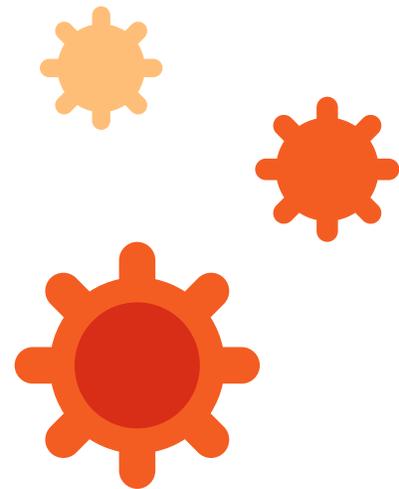
SDKs provide developers with the tools they need to make their apps even better by leveraging the functions of existing platforms. App developers use them to power data analytics, push notifications, payments, ad serving, debugging, Twitter, and more. Let's discuss, in plain English, what SDKs mean to today's app marketplace.

A software development kit (SDK) is just as it sounds--a set of software development tools. SDKs help developers interface with, control, and access enhanced capabilities for a specific platform. They can include everything programmers need to develop an application, freeing them from having to build that functionality themselves, from scratch.

App developers use SDKs to monetize their apps, as well as to add new functionalities and improve the user experience. There are SDKs for running analytics, offering customer support, monitoring app usage, running security reports, enabling push notifications, and more.

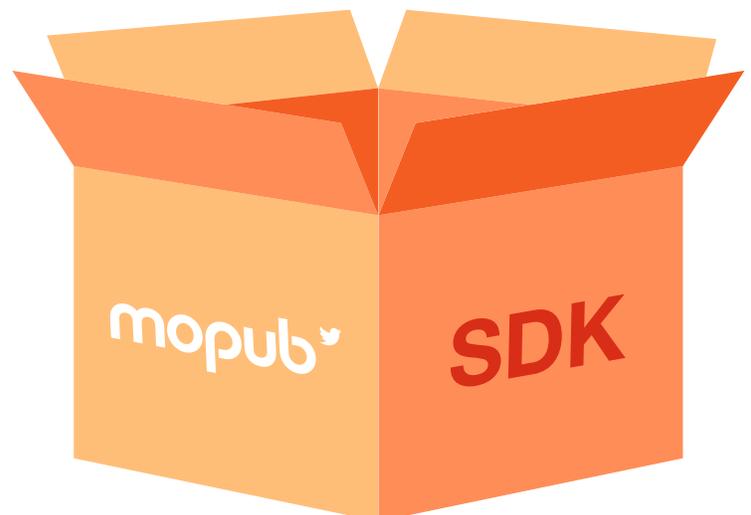
## SDKs + app monetization

For app developers, SDKs are a shortcut to money-making. Digital advertising marketplaces offer SDKs, usually for free, so developers can connect to demand sources and begin monetizing their app more easily. Some SDKs specialize in a particular ad format, such as native or mobile video. More comprehensive SDK options include everything developers need to serve advertising to their audiences, from understanding user behavior to displaying ads and measuring their results.



## What's the difference between SDKs and APIs?

SDKs are often discussed in the same breath as application program interfaces (APIs), and like many concepts in the digital realm, their differences and interconnectedness can cause some head scratching. An API is the library of routines, protocols, documentation, and tools needed to perform a particular action. APIs dictate how software components should interact with one another. SDKs are a more robust toolset for app developers and usually include an API, in addition to other tools needed for developing an application.



<sup>1</sup> <https://www.emarketer.com/Article/Smartphone-Apps-Crushing-Mobile-Web-Time/1014498>

## How to choose an SDK

Wading through the sea of SDKs and their corresponding benefits can be challenging. Some SDKs are absolutely necessary to app development, whereas others facilitate additional features--non-essential but certainly useful capabilities, such as payments or ad serving. App developers need to be mindful of SDK overload, or “SDK bloat,” a term for the negative implications of partnering with too many third-party connections. SDK bloat can cause technical difficulties and slower load times, and drain user data.

When assessing potential SDKs, app developers may consider the following:

- 1 Purpose**  
What purpose is the SDK serving? How does it benefit your app, specifically your users, advertisers, and your own ability to achieve your goals?
- 2 Size**  
What purpose is the SDK serving? How does it benefit your app, specifically your users, advertisers, and your own ability to achieve your goals?
- 3 Transparency**  
If an SDK is closed, developers can't see its code, which makes troubleshooting challenging. If something goes wrong, publishers are at the mercy of the SDK developer to fix it. With open-source SDKs, app developers can access the SDK's code, which makes it easier to work with and, when necessary, troubleshoot.
- 4 Flexibility**  
Many SDKs, particularly closed ones, can be quite rigid in terms of function and a publisher's ability to make changes and tackle problems.  
  
Modular SDKs allow publishers to select only the particular features they want to use, minimizing how much space the SDK takes up. This is especially important in areas of the world where bandwidth is limited and data is expensive. A modular SDK is customizable and makes it easy to experiment, adding and taking away functions to fit your needs. This can lead to more app downloads at faster speeds and leave you with more room to add other third-party features to enhance your app.
- 5 Licensing**  
Read the SDK licensing agreement! Not every SDK is compatible with every type of app. What are you agreeing to by downloading this SDK? Are there any costs associated with it?
- 6 Safety**  
With an SDK, you are injecting a third-party code into your app. Malicious SDKs can damage your app, compromise your users' privacy, or even get you banned from app stores. Make sure you are working with a reputable and secure SDK, and establish a system for continually monitoring its performance.

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People spend 86 percent of their time on mobile in apps. This poses an exciting marketing opportunity for publishers and advertisers alike. SDKs make it possible for developers to create and monetize new apps and take advantage of in-app mobile advertising's potential. SDKs can enhance an app's function and usability, drive downloads and engagement rates, and facilitate a turnkey monetization strategy. But publishers should make sure they are partnering with the best SDK for their needs and considering how it will affect key metrics like load time and data use.

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