



Insight

Developer Dynamics in the App Store Market

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Executive Summary

- App stores operate in a multisided market, which requires that antitrust analysis simultaneously consider app stores' relationships with developers and end users; recent analyses have potentially mischaracterized both relationships.
- Some have alleged that the iOS and Android consumers are separate markets based on differences in average spending per user, but averages conceal the presence of high-spending consumers on each operating system.
- While developers have multiple alternatives to monetize and distribute their product, most arguments in favor of regulation focus on the sale of digital goods and services through app stores.

Introduction

App stores, particularly those on smart phones, have faced continuous scrutiny by policymakers and regulators. Much of the attention focuses on complaints that Apple and Google have created monopolies or a duopoly in the app store and mobile operating systems market and are abusing their market power at the expense of developers and consumers. A key argument is that these two companies have been able to establish monopolies because users and developers face so-called “[switching costs](#)” that prevent them from changing platforms. This insight will examine the claims made by some policymakers and industry leaders regarding the mobile operating system and app store markets, as they claim developers face a lack of competition and substitutability.

Defining the Market: App Developers and Consumers

A central topic in the antitrust allegations against both Apple and Google is the definition of the market in which these companies compete. These platforms act as a “middleman” to connect users and developers. The nature of this market adds another layer of complexity in the process of defining the market, as any market definition must consider the existing relationships among platforms, –developers, and consumers, and developers and consumers simultaneously, not separately. Assessing the relevant market and characterizing it is a [vital element of antitrust enforcement](#), as policymakers, judges, and regulators have to be able to establish that a company is both a dominant market player and conducting anticompetitive action in order to advance antitrust action.

Advocates for regulation of app stores and operating systems have more closely scrutinized the platform-consumer dynamics, but there have been some instances where the platform-developer relationship has been addressed. Two prominent examples are [the report](#) by the House Judiciary Committee on app stores and the [ongoing antitrust litigation](#) between Epic Games and Apple. Both contend that developers are being harmed by the lack of competition and alternatives in terms of the operating system they can design apps for, and the app stores they can distribute them through.

In the case of *Epic v. Apple*, Epic sought to define the market as the iOS app distribution and in-app payment processing markets. This is a crucial point in Epic's argument against Apple: It claims that iOS users are particularly vital for developers, as the average iOS user spends double on in-app purchases in comparison to the average Android user, which makes iOS a market of its own. According to Epic, the studios' success is highly tied to their presence in iOS, as iOS users are more likely to spend their money on apps. This is a similar argument to those found in [federal and state level proposals](#) for app store regulation, which are being brought forward under the assumption that iOS and Android are markets of their own due to the alleged difficulties for users to switch platforms. In the ruling of the *Epic v. Apple* case, the [judge defined the relevant market](#) as digital mobile gaming transactions.

Is the iOS Userbase a Different Market?

As mentioned above, Epic sought to characterize iOS users as a separate market because they spend twice as much on their apps compared to Android users. Multiple studies back the statistics cited by Epic. According to [Statista](#), 66 percent of app consumer spending was on iOS, in comparison to Android's 34 percent. A [survey conducted](#) by the shopping platform Slickdeals indicates that the iOS users self-reported monthly spending on technology was double the amount of Android users. The survey also indicates that the iOS user's average salary is \$26,000 higher than the average Android user's salary.

Nonetheless, these facts do not prove that these are different markets. There can be high-spending consumers on both operating systems, but the Android average could be potentially dragged down by the presence of low-spending users as well. This can be seen by looking at device costs, as at the low end the iPhone starts at \$399 manufacturer's suggested retail price (MSRP) while Android phones can be found for as little as \$59 MSRP. At the high end, the flagship models for both brands have an MSRP of roughly \$1,200. It is evident that Apple targets a more homogenous, higher-income demographic. Meanwhile, Android focuses a more heterogenous demographic with a broader range of incomes, as it offers both low-cost and high-end devices. Tech-interested individuals, which are more likely to spend money on in-app purchases, tend to also acquire higher-priced devices. These users are present on both operating systems.

Alternative Options for Developers to Succeed

Arguments regarding app stores focus on spending on in-app purchases and the role of app store commission fees, as these supposedly harm developers. This is at the heart of the argument by Epic Games, for example.

These arguments not only ignore how these fees are equal or even less than the [industry standard](#), they also disregard how developers can opt for different monetization strategies which do not rely on the selling of digital goods.

While most digital transactions are subject to these commission fees, advertisements usually are not. This monetization strategy is often implemented by offering free or "freemium"—apps that are free to download but include paid content— gaming apps that allow for developers to reach those demographics that do not normally spend money on apps. In some cases, developers include a mix of both in-app purchases and advertisements to maximize their revenue. Outside of the gaming genre, it is more common to see apps that rely exclusively on advertisements for their monetization instead of opting for a subscription fee or charging for downloads. This practice provides developers with a cost-free method of monetization, which is not subject to any type of commission by Apple or Google.

Even when focusing on the market for the sale of digital goods and in-app purchases, developers still have multiple options to compete in this market beyond the Google and Apple app stores. For example, in Android-based systems, users can opt for other app stores such as the Amazon Appstore or the Samsung App Store. Developers can also opt to offer sideloading options, which allows them to bypass the controls and fees imposed by app stores. Nonetheless, this comes at an [increased security risk](#) for users and is heavily restricted on iOS. Developers can also opt to offer their services over the web, without having to offer an app which would be subject to app store guidelines.

Developers can also cater to competing devices such as tablets, gaming consoles, or personal computers. As stated above, the target demographic for in-app purchasing is highly likely to have another device, as they tend to have higher incomes and interest in tech. When users opt for other devices, they are provided with a robust offering comprised of various operating systems and app stores, such as the PlayStation Store, the Xbox Store, or the Roku Store. And while consumers can opt for another device from the same brand, they can also choose a competitor, especially if it feels that the brand of their smartphone can be overly limited or restricted for its intended use.

Conclusion

While most of the discussion regarding app stores and mobile operating systems tends to center around end-users as the main consumer, it is important to highlight the role of developers as well. There have been instances where both policymakers and industry insiders have brought attention to the definition of this market for developers, but they have often done so with an inaccurate metric and ignoring alternative methods of monetization available.