

Apple's Monopolistic App Store and its Effect on Less Powerful Entities

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On my honor as a University Student, I have neither given nor received
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STS Prospectus

Introduction

An iPhone user opens their phone and checks a few apps without any issues. Something they most likely do not account for is how or where they got such apps. This research about Apple's App Store is motivated by the fact that it is such an advanced system of software glanced over by many due to its innocence and utility. It is vital to understand the effects of such a prominent part of modern humans' lives, as humans evolve interdependently with mobile computing. Along with the social appreciation surrounding Apple products and their valuable aesthetics, examining Apple and their App Store offers insight into setting unprecedented socio-technical standards. Apple's App Store regulations affect several parties of people, displaying intertwinement of technology and society that currently favors the producer of such technology.

Research Questions

This topic rose to national prominence after the Antitrust Hearing in Congress (Feiner, 2020), and it was of interest because of the genuine debate over the ethics and motives of the parties involved. Of course, Apple is involved, but there are thousands of development companies and independent developers that suffer from Apple's regulations. This topic is STS-related in that it involves a complex debate over how engineers/developers should control certain aspects of how the public interacts with their products. Likewise, it is unclear whether or not Apple is wrong for their practices, as the App Store is their business and property.

Ultimately, this problem is a result of engineering an ecosystem of software for which there are no concrete regulations upon. Along with the major shapers of this system, Apple and app developers, the system's users will be analyzed. The input of governmental regulators also offers insight into how the institutionalized economic practices at the highest levels justify or condemn the App Store regulations. Overall, I seek to determine how each party involved suffers or benefits from the App Store to discern which stakeholder is truly being treated unfairly.

Namely:

- What does “monopoly” mean in today’s digital age?
- What makes the App Store a monopoly?
- How does Apple justify their regulations surrounding the App Store?
- How do such regulations affect other social groups?
- How can other groups respond, if they choose to?

Literature Review

A monopoly in the digital age is said to occur when a company dominates a sector perpetually, harming consumer flexibility and preventing competition. In response, antitrust laws exist as checks on potential monopolies to “prevent persistent market dominance from undermining consumer welfare” (Bourne, 2020). Without antitrust laws, the chance of higher prices for consumers, decreased innovation, and worse user experience increases. Apple has been said to heavily control intellectual property rights and externalize costs to suppliers: app developers (Clelland, 2014). Apple forces their users to download applications from their proprietary App Store, so developers are also forced to use the App Store to distribute their products. Apple takes a 15% cut of all application income, decreasing the monetary gains that

developers can potentially gain. (Jhonsa, 2019). Since there is no easy alternative for iOS developers to combat Apple, they are left in a state of regret and forced to face the tax.

App companies must take extra measures to evade consequences of Apple's App Store monopoly (Oremus, 2020). For example, Netflix users must sign up on a non-iOS device before logging in. Netflix is not allowed to provide any instructions to the user, such as a URL, as Apple's prohibits this. This is necessary for companies that seek their full profits by avoiding the App Store tax, although it is a hassle for the user. Other companies follow the same strategy, such as Spotify. Nonetheless, the market share dominated by the App Store and implicit exposure are a necessity for software publishers, as it is "suicidal" to not use the App Store (Oremus, 2020).

After the U.S. Antitrust Hearing, the House Judiciary shared recommendations to combat anti-competitive practices by big technology companies, including Apple. Cited directly by the judiciary themselves, companies such as Apple are abusing their "monopoly power" to prevent competition (Espósito, 2020). Apple was proposed to detach from their App Store operations and place that within another company. The European Union also investigated Apple in June 2020 and claimed them to be "crushing potential competitors" (Yen, 2020). In response, Apple details that they built the App Store from scratch "to be a safe and trusted place for users to discover and download apps and a supportive way for developers to create and sell apps globally" (Espósito, 2020). Apple continues to justify their App Store practices by emphasizing their high "privacy, security, and quality".

Apple has launched a website that lists the benefits of using the App Store, while ignoring the restrictions placed upon developers and users (Leswing, 2019). Such restrictions are even abstract, meaning developers may have their app rejected from the App Store based on

situational criteria from Apple. For example, Apple has removed apps that compete with their own software, yet they claimed the apps raised security concerns. Intentional or not, occurrences like this reduce competition even more on iOS. Facebook's Mark Zuckerberg claimed Apple rejected features from a Facebook update just because Apple said no (Peterson, 2020). Zuckerberg says Apple's hold on this market prevents "innovation that could really improve people's lives".

Google's Play Store offers alternative software distribution regulatory standards. Because Google does not regulate app quality as thoroughly as Apple, there are much more apps of lower quality on the Play Store. Google also allows sideloading applications (downloading from third-party sources), which pleases some users and developers by providing flexibility in software distribution (Viswanathan, 2020). Although Google does take a 15% cut of Play Store application revenue, the presence of third-party app sources allows developers to have options to avoid this tax.

In response to Apple's restrictions on software distribution sources on iOS, a developer, Riley Testut, has launched an alternative app store, hence "AltStore" (Testut, 2019). The AltStore is obtained by users bypassing some loopholes in Apple's software and utilizing another computing device, which involves some extra hassle on behalf of the user. Nonetheless, this alternative store allows for less restriction upon an application's features, providing more utility to the user. Additionally, there are no fees to be paid by developers in order to have an application on the AltStore, pleasing developers (Testut, 2019).

In Apple's defense, there are reasons for users to not use third-party app stores; that is, users should only use their devices' proprietary pre-installed app stores in order to keep their privacy and security intact (Symanovich, 2018). Because third-party sources can be unverifiable,

there could be malware that preys off a user's device and their information. Although it may not be the most flexible and accommodating process for developers and users, the fear of security threats is considered by Apple. They virtually eliminate this for their users, creating a lack of concern amongst the public when using an Apple device.

STS Framework & Research Method

The SCOT framework is utilized to discuss the relevant social groups' interests and conflicts. When dealing with different social groups, there will be bias when detailing what benefits whom; thus, when considering factors of the system, all of that factor's implications are considered, as certain social groups may neglect certain aspects. Because Apple's App Store and their debatably monopolistic practices involve multiple parties with differing motivations, the perspectives of each party are analyzed and motivations are abstracted. Document analysis of reports of parties involved and witnesses is employed. The data sources are reports about how such parties interact with one another to solve the system's issues and descriptions of the system itself. The data collected is mainly qualitative, as the motivations of each party are composed of opinionated factors.

Primarily, the users of the App Store are a major input into its development. Apple is well-known for attracting users of technology who desire simplicity. Thus, Apple's mobile offerings are good fits for non-technical people. Apple, knowing that their users desire a simple computing experience, places a range of restrictions on their users. Their users then are trapped in this seemingly benevolent space that is not too complicated. These means of restrictions and simplicity allow Apple to justify monopolizing software distribution.

Mobile application developers create the products presented by Apple and depended upon by users. Because they create software for use on Apple's proprietary mobile hardware, they are coerced into commercializing their product through the App Store, as Apple does not allow distribution of applications elsewhere. This forced-marketplace platform allows Apple extensive oversight into the software on their devices. Apple is able to judge, by inconsistent criteria, whether or not an application is approved. Developers must also pay Apple 15% of their app's earnings.

Apple is the creator and owner of the App Store, allowing them to regulate the App Store according to their standards. Apple has created an ecosystem of mobile computing devices and garnered the support of millions of users. Such users could not really care less about Apple's App Store restrictions, as they benefit from its ease and effectiveness. Because the majority of users remain unaffected by Apple's monopoly and Apple can only benefit from it, most of the detriment falls upon the developers. Apple may call it mutualism, as they provide a platform and developers provide a product. Such a fact is used by Apple to deny the accusation that they are a monopoly.

Timeline

This research began around the time that the repercussions of the U.S. Congressional Antitrust Hearings were coming out. In particular, I had never considered Apple to be monopolistic until the antitrust hearings brought it to my attention, and it made me realize that what they are doing involving the App Store is not as justified as it is pretty (in terms of user interface and user experience). Thus, with the assistance of the structure provided by my STS Professor Ku, I was able to hit weekly milestones in my research plan by tackling different STS

frameworks to allow me to figure out how to dissect my research topic in the best fashion. This culminates into my final product, as I have considered what viewpoints to account for while knowing the system of the App Store and its inputs and outputs quite thoroughly. Because the phenomenon surrounding the App Store is a very recent and modern development, information to research was fairly accessible, as the situation is ever-developing.

Conclusion

By analyzing how the broad technological system of the App Store works, the effects of it upon societal groups including everyday people (users) and creators (app developers) were extracted. Because most developers lack the legal and monetary firepower to combat Apple for such monopolistic practices, this issue has gone on rather untouched. Although the U.S. Congress recently investigated Apple for holding too much digital market-power, it is fairly likely that Apple will not face much backlash or intervention from the government on this issue, making this burden fall, again, on the shoulders of developers. With technology ever-evolving, it is not uncommon for other companies, such as Facebook, Amazon, and Google, to face similar backlash for becoming too powerful. Nonetheless, if such regulations are not in place already, it is up to those in the present, such as lawmakers, to establish proper rules on these powerful entities.

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