

Updates Management in Mobile Applications. iTunes vs Google Play

KEYWORDS: mobile applications, updates, downloads, iTunes, Google Play, visibility, minor updates, major updates.

BACKGROUND

- We are in a new technological era and need to understand the economic incentives and the challenges that users and developers of mobile applications are facing.
- Practitioners and developers are well aware that managing app updates (i.e. releasing new versions of an existing app) is critical to increase app visibility and to keep users engaged, disguising a hidden strategy to stimulate downloads.
- Updates are used as strategic variable to stimulate demand, often without making substantial changes to existing products.

METHODOLOGY

- We develop a stylised theoretical model to describe why and when updates should be released.
- We then use an unbalanced panel with characteristics on the top 1,000 apps on iTunes and Google Play stores for five European countries to empirically test our theoretical predictions.
- We estimate the relevant equations using a dynamic linear panel model that deals with various sources of endogeneity.

KEY FINDINGS

- We find evidence that updates have a strategic flavour developers use them as a tool to increase the “buzz” surrounding their apps, in an attempt to improve users’ engagement, and increase or maintain high app visibility.
- On iTunes, updates trigger further growth in the number of downloads; by contrast, on Google Play their effect is not significant. This result is consistent with the prediction of our theoretical model which suggests that the lack of quality control by Google Play can lead to “excessive updating”: developers release both high and low quality updates which, on average, do not impact on downloads.
- We find evidence of complementarities among apps.

POLICY ISSUES

- A general underlying issue is how developers of software applications profit from their innovative products. The app economy is one of the most dynamic segments of today’s ICT sectors and understanding the mechanisms for appropriating the returns of innovation is crucial for any policy option.
- While the objective of the article is more to study updates as developer’s strategies, an interesting policy question to be asked is whether updates have behavioural implications. Do users know what happens when an update takes place? Do users receive incorrect signals on the underlying quality of the app when an update occurs? While this is not the core of the research of this article, it is an idea that can be developed in future research.

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June 2015

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working paper 15-4

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