

Social Media in Accelerating Mobile Apps

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ABSTRACT

Mobile application stores have become very popular, and the two most popular, Google Play and Apple App Store, both have over a million applications (apps) available. Social media is extensively used for marketing products and services; but, its true potential, in service and product acceleration, has not been researched much. This paper studies the differences in actions between successful and less successful app developers and especially their social media use in accelerating applications and its impact on success. In this study, a longitudinal analysis is performed on 682 applications, from four Google Play categories, at three data points. This study concludes that almost 50% of the analyzed applications use some form of social media to promote their app, and that successful apps use social media more actively than less successful ones. The qualitative analysis of the apps sheds some light as to why some apps succeed without social media use, and why some fail while using it.

KEYWORDS

Acceleration, Apps, Google Play, Mobile Applications, Ratings, Social Media, Updates

INTRODUCTION

Online marketplaces, such as Google Play and Apple's App Store, have become the main channel for selling mobile applications and they currently provide millions of applications. The popularity of these stores among developers can be explained by three reasons: they provide all competitors an equal chance to succeed (Cuadrado & Dueñas, 2012), they provide an instant delivery channel to a large customer base, and that entering the app stores is free or reasonably cheap. Unfortunately, due to the huge number of applications, making a popular application has become very difficult (Müller, Kijl, & Martens, 2011). Only a few of the 1+ million applications get the most downloads (Zhong & Michahelles, 2013; Cuadrado & Dueñas, 2012).

Social media has become a global channel for reaching global audiences. Facebook and Twitter, in particular, have become popular for delivering information and engaging consumers with brands and products. Social media also provides a tool for app developers to use to accelerate their apps, in other words, to increase the speed of getting their apps to the market and better meeting users' needs and expectations.

This paper studies whether social media is helpful in accelerating applications in Google Play, and what kinds of differences can be found between successful and less successful applications. Google Play has been used as a data source, as it is the biggest marketplace and provides access to relevant data.

The research questions are:

RQ1: What forms and how widely do mobile application developers use social media to promote and accelerate their apps?

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RQ2: Do the activities of successful and less successful app developers differ, and do using social media play a significant role in achieving success?

The paper is structured as follows: Section 2 presents the three key elements of the study, Section 3 presents the study design and data collection, and Section 4 the results. The final section includes the discussion and conclusions, as well as the limitations and directions for further research.

KEY CONCEPTS AND RELATED LITERATURE

Since their launch in 2008, applications marketplaces, the digital stores for delivering mobile applications, have become very popular. With the huge number of apps, the key challenge for app developers has become to have their app stand out from the masses. For the application marketplaces, the challenge is to be able to present the apps so that users easily find interesting apps, which leads to their being downloaded and tested. How the apps are presented to the users, has a clear impact on their chances of becoming discovered and successful, as proven by Lim and Bentley (2013) with the help of simulations.

Google Play is very much of a superstar market, where only a few apps receive the most downloads, as shown by Zhong and Michahelles (2013). Their findings suggest that the mobile app market may follow a different market structure than the other online markets, where niche content has become popular. They speculate that one reason for this may be that user needs and preferences for a utility app, e.g., navigation, tend to be more objective than for music or literature, leading users to download only a few top apps.

Apps exist in three formats: free, for pay, or as a freemium strategy, where some free use is possible; but, the full experience requires payment. Liu, Au and Choi (2014) studied the effect of the freemium strategy on Google Play, in a longitudinal study of 711 apps. They concluded that offering a free version is positively associated with increased sales of its paid version. The free version gives visibility, which seems to be more beneficial than its cannibalization effect.

Update frequency provides information on the developers' interest in improving their apps. McIlroy, Nasir and Hassan (2015) studied the update frequency of apps in Google Play. According to their study, users do not seem to be annoyed by frequent updates, when measured as an increase in negative ratings, so updating apps frequently, seems to be a good strategy.

App descriptions are an important source of information, but users also want to access the opinions and recommendations of other users. The marketplaces typically publish user ratings and reviews, and more may be found in users' blogs and on various social media services. Oh, Baek and Ahn (2015) have studied how electronic word-of-mouth (eWOM) influences users' decisions to download an app, and if there is a difference in impact between free and paid apps. According to their findings, the cumulative user rating and the number of ratings positively influence app downloads. The role of eWOM outside the marketplace has an influence specifically on paid apps. Ahmad, Mohamed and Hussain (2016) confirm in their qualitative study that user ratings and reviews play a role in users' decision making on whether to download an app or not. Pan, Aharony and Pentland (2011) captured the social networks of graduate dormitory members, including social networks outside online applications, and showed that there are strong network effects in app installations patterns.

Kaplan and Haenlein (2010) define social media as an umbrella term referring "Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allow the creation and exchange of user-generated content." Social media's key elements are technologically supported communication, and user networks and communities (Kangas, Toivonen & Bäck, 2007; Näkki et al., 2011).

Social media is easy to use and messages can quickly reach global audiences, setting agendas and trends (Asur & Huberman, 2010). Successful adoption of social media can increase companies' turnover (Tsimonis & Dimitriadis, 2014), and it may impact their reputation, even survival (Kietzman,

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