

Public summary of PhD-thesis of Joey van Angeren

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The choice of business model and market positioning are crucial to the performance of mobile apps

Over the last decade, the emergence of mobile platforms such as Apple's iOS and Google Android has been among the biggest developments in the digital economy. Over two million mobile apps are now on offer for both Apple's iOS and Google Play, earning billions of dollars in annual revenues. Because the costs for producing and distributing apps are low, hundreds of comparable apps compete often for the same customers. Moreover, most apps can be downloaded for free, causing app developers to routinely choose for business models that are based on free offerings. In his PhD project, Joey Van Angeren addressed these challenges by investigating how apps' positioning and choice of business model affect their performance in the iOS App Store.

By now, almost all of us own at least one platform-powered mobile device, such as a smartphone, smartwatch, or tablet. The majority of our time using those devices is spent on mobile apps. We use mobile apps for almost any aspect of our social and business lives, from communicating and playing games to navigating and reading. Software developers keenly observed the tremendous demand for mobile apps, and thousands of them started building their businesses exclusively around mobile platforms, giving rise to an industry in and of itself. Over two million mobile apps are now on offer for both Apple's iOS and Google Play, earning billions of dollars in annual revenues.

While the opportunities of the mobile app industry seem virtually endless for prospective individuals and entrepreneurs, there lie a number of unique challenges in successfully navigating this industry that require more attention. Because the costs of producing and distributing apps are low, it is not uncommon for hundreds of comparable apps to compete for the same customers. Moreover, most apps can be downloaded for free, causing app developers to routinely choose for business models that are based on free offerings, such as freemium, in which a basic version of the app is made available for free while customers pay for additional features. In his dissertation, Van Angeren addressed these challenges by investigating on a large-scale how apps' positioning and choice of business model affect their performance in the iOS App Store.

Concerning the latter, Van Angeren showed that choosing the right business model for a mobile app is a complex task that strongly contributes to its performance and that therefore deserves careful consideration by app developers. The optimal business model for an app depends on numerous factors in complex ways. Deciding on the optimal business model involves answering questions such as whether the app will be targeted towards mass and niche markets, and what sources of revenue (e.g., advertisement, consumable purchases, subscriptions) will be combined. For example, Van Angeren found that freemium business models are merely optimal for mass market apps, and even then, performance is highly dependent on whether the app also includes advertisement.

Concerning the former, his findings advance an app's positioning as another critical driver of its performance. In general, those results suggest that app developers should strive for intermediate levels of differentiation when positioning their app relative to their rivals in the market. However, more or less differentiation might be favored depending on the market conditions, such as the share of apps with customer ratings or the share of free apps, in an app developer's target market.

Title of PhD-thesis: Creating and Capturing Value from Digital Products: Implications of Business Model Choice and Product Positioning in the Mobile App Market. Supervisors: prof. dr. Fred Langerak (Eindhoven University of Technology), dr. Ksenia Podoyntsyna (Jheronimus Academy of Data Science)