

# **Google Play's Top App Developers: Are They Really Safer than Other Apps in Regard to Consumer Privacy and In-app Purchases?**

## **Abstract:**

The Google Play app market contains over 1.2 million applications and has had over 80 billion downloads. A significant risk to consumers that download and install mobile applications is malware. Mobile malware is illegal and has been on the rise with over 5 million variants found in 2014. Other significant threats to consumers, but often overlooked because they are not considered malware, are consumer exploitation from in-app-purchases (IAP) and personal data collection. Apps with IAP may have limited functionality unless consumers purchase expensive add-ons, potentially fleecing consumers. Personal data may be collected and sold to advertising networks or analytics companies. These revenue sources for developers pose serious risks for consumers. To help protect consumers, Google identifies top app developers as creators of apps to be given an additional level of trust and confidence. This study investigates top app developers as compared to non-top app developers. In regard to IAP and privacy, this study analyzes app permissions of Google Play's top 100 free and paid non-game apps and the top 100 free and paid game apps, as well as the top app developers in those categories. Editor's choices are also investigated. Results indicate that when it comes to IAP and privacy, top app developers and the editor's choice apps are no safer than other apps and are actually less safe. Implications for Google's new permission categories are also discussed.