

Mobile App Stores



Michael Curran

Computer Science Department, Letterkenny Institute of Technology, Ireland

Nigel McKelvey

Computer Science Department, Letterkenny Institute of Technology, Ireland

Kevin Curran

School of Computing and Intelligent Systems, University of Ulster, Northern Ireland

Nadarajah Subaginy

School of Computing and Intelligent Systems, University of Ulster, Northern Ireland

INTRODUCTION

Applications stores such as Apples (App store) and Androids Google Play (formally known as the Marketplace) are online stores where customers can purchase and download thousands of different mobile applications otherwise known as apps to use on their mobile devices such as a handheld mobile device. These are also known as digital distribution platforms for applications for popular mobile operating systems and online electronics and digital media stores, operated by both Apple and Google. The services allows users to browse and download applications developed with the Android & iOS SDKs as well as music, magazines, books, movies, and television programs. Users can also purchase hardware, such as headphones, iPods, iPhones, iPads, ChromeBooks, Google Nexus-branded mobile devices, Chromecasts, and accessories, through both stores. Applications are available either free of charge or at a cost. Android apps can be downloaded directly to an Android or Google TV device through the Play Store mobile app, or by deploying the application to a device from the Google Play website. App store apps can be downloaded to iPod, iPhone and iPad devices.

Many applications can be targeted to specific users based on a particular hardware attribute of their device, such as a motion sensor (for motion-dependent games) or a front-facing camera (for online video calling). Apps can either be downloaded at a cost or downloaded for free. According to the Nielsen Company (2011), “*The most commonly known apps that are used are Facebook, weather channel and Google maps.*” In July 2013, the

Google Play store reached 1 million apps published and over 50 billion downloads. Apple to date, it has handled over 15 billion app downloads. Apple takes 30 percent of all revenue generated through apps while 70 percent goes to the app publisher.

Application stores are cloud-based markets in that users can access the content through most web devices e.g. iPod, iPad, tablet, Xbox or Smartphone (Hollister, 2014). Apps are extremely popular among Smartphone users, and are developed for thousands of different uses including weather, budgeting, gaming, and others. The iPad and iPhone can be credited with the subsequent success of these app stores. The smart move made by Apple was to insist on a credit card being input into each device upon setup. This simple move encouraged a previously hesitant public to trust a device with their credit card details. It also helped that subsequent purchases were carried out by simply entering a password. The password also sufficed within a fifteen minute period. This has led to controversy however.

In early 2014, Apple announced that it was refunding over £20m sterling to customers whose children made in-app purchases without their permission when using the parents’ iPhones or iPads. Apple was forced to reach a settlement with the US Federal Trade Commission (FTC). It was the FTC who made the complaint that many of Apple’s child-friendly apps offered virtual goods and other chargeable items within the apps. In truth, before the final ruling, Apple in 2013 had emailed just over 28 million of its customers to solicit their complaints. It received 37,000 claims, which it

DOI: 10.4018/978-1-4666-5888-2.ch561

refunded (Walker, 2014). Despite setbacks like this however, the app stores for both Apple and Google are becoming real “cash cows.”

BACKGROUND

The arrival of app stores has come through the arrival of mobile devices for consumers. Mobile devices are outnumbering PC'S and laptops around the world. Apps are simply becoming more beneficial for businesses to reach their consumers. Now a days when a car breaks down and a person does not have breakdown insurance, they simply reach for their mobile, type “car breakdown” or “garage” and the nearby listed breakdown services will appear. Those who advertise on Google are more likely to get that new temporary customer.

In general, mobile industries have two main services which are voice and messaging. However with both of these services are seeing revenues falling. This has been expected in the mobile industry and is a reason behind the quest for the killer app. Ringtones becoming popular between 2004 and 2006 showed the mobile industry an insight into what content a customer might demand on mobiles devices. But this demand became a fad, and the popularity of ringtones began to decline. Many mobile service providers are still trying to emulate the success of the ringtone downloads.

Video and mobile TV were among some of the services previously hailed as the next killer app, but the content and service market had been in a state of decline until the industry was reinvigorated by the arrival of the app store in the summer of 2008. The app store was easy to navigate with an iPhone or iPad. The app store presented content in a clear and orderly manner that immediately highlighted the fundamental flaws previously demonstrated by operator portals in particular. User reviews and ratings, trials and the visualisation of available content provides users with the finest purchasing experience on mobile (Webpagefx, 2011).

There is over 20 content categories available on the App Store, ranging from games, entertainment, music and social networking. According to (Khanna, 2009)

...the App Store has delivered new hope to the developer community, providing an opportunity beyond the established content producers and publishers, and opening

the door for “garage developers”. This is spurring new levels of innovation and having a very positive impact on the rest of the mobile industry.

Apps allow customers to interact with the world, get information, social communication such as Facebook or Google+ (Islam et al. 2010). Many mobile devices come preloaded with apps. E.g. Gowalla, Foursquare, Facebook or Google + which can allow users to share link posts with their friends. People can use messenger for chatting or make a low cost call using VoIP applications. The use of GPS can be used to provide crucial location awareness for apps, road navigation, and/or vehicle tracking (Hornjack et al., 2011; Kim et al., 2008).

When using mobile applications for business we can view product information, select and order a product. We can also use a mobile application such as “Google Wallet” for payments through a mobile device without using a credit card. Mobile banking and eTicketing are other features becoming popular on mobiles. Sometimes we can use mobile apps for controlling a home device from a remote location for example connecting to a home PC from a remote location in a train or car (Lange et al., 2011). We can watch videos and movies from YouTube using an app. As a rule of thumb currently, *games are the most popular categories of apps for mobile applications with approximately sixty percent reporting using a game app in a 30 day period. Weather apps are the next most popular category with the Weather Channel being the top weather app. Social media apps are next with Facebook & Instagram being very popular. Other popular apps are Google Maps, Spotify and Vine.*

People are using mobile devices increasingly to do daily tasks like checking email more so than using say a laptop or desktop (Nielsen, 2011).. The use of mobile VOIP has resulted in people making long distance calls more cheaply. More and more are switching to viewing content on a mobile device (Grace et al., 2012). The apps of course to facilitate all this come from the respective app stores. A common pricing model now is the freemium model. This is where the app itself is free to download and use but to get additional features, one has to pay to unlock those features. Most games are moving to the freemium model as a result and it is a powerful strategy.

5 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

www.igi-global.com/chapter/mobile-app-stores/113023

Related Content

An Update on Bitcoin as a Digital Currency

Cecilia G. Manrique and Gabriel G. Manrique (2018). *Encyclopedia of Information Science and Technology, Fourth Edition* (pp. 2861-2868).

www.irma-international.org/chapter/an-update-on-bitcoin-as-a-digital-currency/183997

Integrated Design of Building Environment Based on Image Segmentation and Retrieval Technology

Zhou Li and Hanan Aljuaid (2024). *International Journal of Information Technologies and Systems Approach* (pp. 1-14).

www.irma-international.org/article/integrated-design-of-building-environment-based-on-image-segmentation-and-retrieval-technology/340774

A Unified Platform for the Dynamic Evolution of Context-Aware Highly Agile Services

Xiaodong Liu, Zakwan Jaroucheh, Sally Smith and Huiqun Zhao (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 2806-2815).

www.irma-international.org/chapter/a-unified-platform-for-the-dynamic-evolution-of-context-aware-highly-agile-services/112700

3D Media Architecture Communication with SketchUp to Support Design for Learning

Michael Vallance (2015). *Encyclopedia of Information Science and Technology, Third Edition* (pp. 2410-2423).

www.irma-international.org/chapter/3d-media-architecture-communication-with-sketchup-to-support-design-for-learning/112657

Challenges in the Digital Transformation Processes in Higher Education Institutions and Universities

Marco A. Coral and Augusto E. Bernuy (2022). *International Journal of Information Technologies and Systems Approach* (pp. 1-14).

www.irma-international.org/article/challenges-in-the-digital-transformation-processes-in-higher-education-institutions-and-universities/290002