Chapter 27
The Future of Apps:
A Smart Investment for Business

Cathrine Linnes
Østfold University College, Norway

Brian R. Metcalf
Hawaii Pacific University, USA

Milad Kalantari Shahijan
Universiti Teknologi Malaysia, Malaysia

ABSTRACT

Apps have the solutions for many things and consumers have them right in their pocket. Just think about a holiday. From the booking of flight tickets, making a hotel reservation, sharing it with your friends, ordering a rental car, paying for apparel, and so on. You can use your smartphone for almost everything these days and most apps are connected with social media sites. Even though many users do not want to pay lots of money for apps, experts still forecast huge growth. There is a big different on how consumers used apps 5 years ago and how they use apps today. Today consumers are demanding apps that can fulfil many different needs and are much more individualized. This high and consuming demand forces the developers the use large amounts of data before they can be able to meet these needs.

INTRODUCTION

The word "application" is so ubiquitous. What is an application, or app for short? An app is a type of software that allows the end user to perform particular tasks. Applications for desktop or laptop computers are sometimes referred to as desktop applications, and those for mobile devices are known as mobile apps (GCFLearnFree.org, 2015). The end user task can be as simple as a traditional calculator or as complex as a word processing software system. Nevertheless, the core mission will be the same, to perform a specific task for the end user. Applications have a rich history. Specifically, apps are being developed for mobile devices in conjunction with aspects of Big Data. Many mobile applications are free but are they truly at no cost to the end user? The cost must be absorbed elsewhere. Privacy is also a concern which is often overlooked when selecting a mobile app.

DOI: 10.4018/978-1-5225-7909-0.ch027

Today's Millennials are very clever at computer usage. The majority of the millennials have always had internet access. The concept of using applications is as second nature as riding a bicycle. However, the rise of applications in a mobile environment is a relatively new venture. The Apple App Store launched in July 2008, a year after the first iPhone was released. The App Store had 500 apps and, to many, this was an eye-opener. It also signaled the dominance of the native mobile application. An astonishing 10 million applications were downloaded during the first weekend (Rowinski, 2012). Today Android users are able to select between 2.2 million apps, followed by the App Store at 2 million apps and Windows Store at 669,000, Amazon App store at 600,000 and BlackBerry World at 234, 500 (Statista, 2016b).

Not long after, Google Android followed this successful scheme. Research In Motion, the manufacturers of the Blackberry, and Microsoft, producers of the Windows Phone, also adapted the app store concept. The idea itself is simplistic genius. It allows the delivery of software without the need for any physical medium that requires a store front and/or mailing and distribution costs for installation. The app store concept was not the first interpretation. First generation mobile phones were designed and developed by the handset manufacturers (Clark, 2015). The software and apps for these early models were written in-house. As the usage and concept of a mobile phone changed so did the deployment or development of applications.

Moreover, applications are created for a specific task. To many users, apps are simply useful and entertaining tools. As well as providing users with information, however, these mobile software applications are also limitless data-gatherers. Even the most mundane apps often collect a surprising amount from handsets just to do the work (Guess, 2011). The data that is subsequently created and analyzed can of course be used to enhance the experience of the app. By analyzing feature usage, the developers can determine the more popular items. This information can be used to determine retention rates within the same category of apps. It can also be used to conclude how the app is performing to a comparable competitor's app (Business Insider, 2013). Long term usage will reveal unique patterns which may show the developers the ways in which the app is being used. The app may be used in a way which is unintended thus spurring further development of the app or a new application entirely. These factors are important development tools for an alarming reason. For all their flexibility app users are a very fickle bunch. The average user spends 70% of app time in their three most-frequently-used apps. Most users have approximately 30 apps installed and only three are getting prime time usage. Of those apps that are actually used about 52% lose at least half of their peak users after three months. The most shocking statistic is less than 0.01% of mobile apps will be considered financially successful by 2018 (Gartner, 2014; Hickman, 2015; Varshneya, 2015).

Cell phones have enacted a dynamic change. Going back a few years, in 2010 fully eight in ten adults (82%) were cell phone users, and about one-quarter of adults (23%) lived in a household that has a cell phone but no landline phone. Of that 82% who own cell phones, 43% of them have apps. Often these apps cannot be uninstalled without resorting to rooting the device. This is not limited to cell phones. Tablets, smart watches, and other items which belong to the genre of the Internet of Things (IoT) are also preconfigured with apps. Twenty-nine percent of mobile device owners download new apps to the device. Twenty percent of owners under the age of thirty download apps habitually. It is estimated that 53% of these individuals download an app within the past 30 days, while 33% of those may have installed a new app within the last seven days. These statistics are reflective of the United States population. Taken upon a global scale the end result is obvious; a lot of data is being generated by these apps (Purcewll, Entner, & Henderson, 2010).