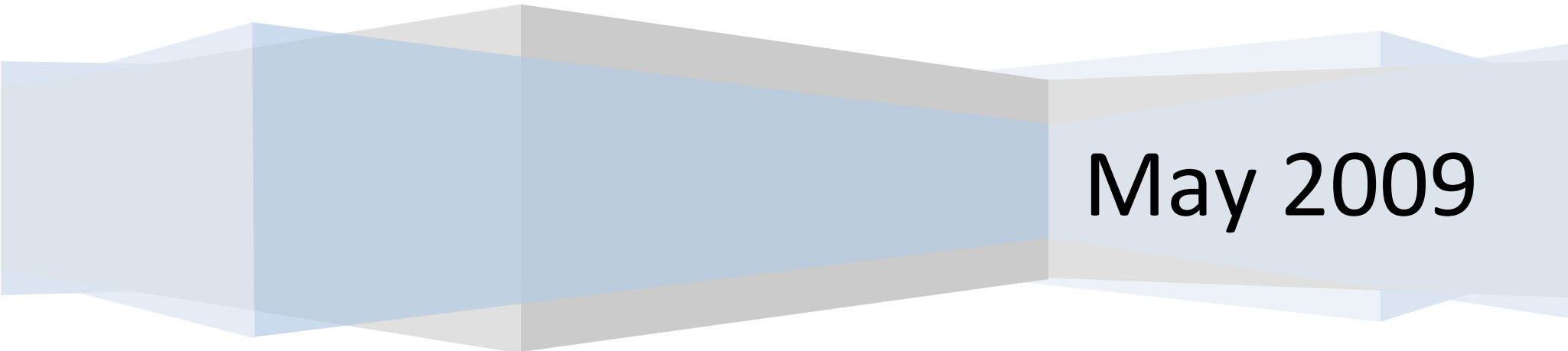




Skyhook Wireless

Location Aware App Report

Review of location-aware apps from the iPhone, Blackberry and Android App Stores

A decorative graphic consisting of several overlapping, semi-transparent rectangular blocks in shades of light blue and grey, arranged in a horizontal line. The text "May 2009" is centered within the rightmost block.

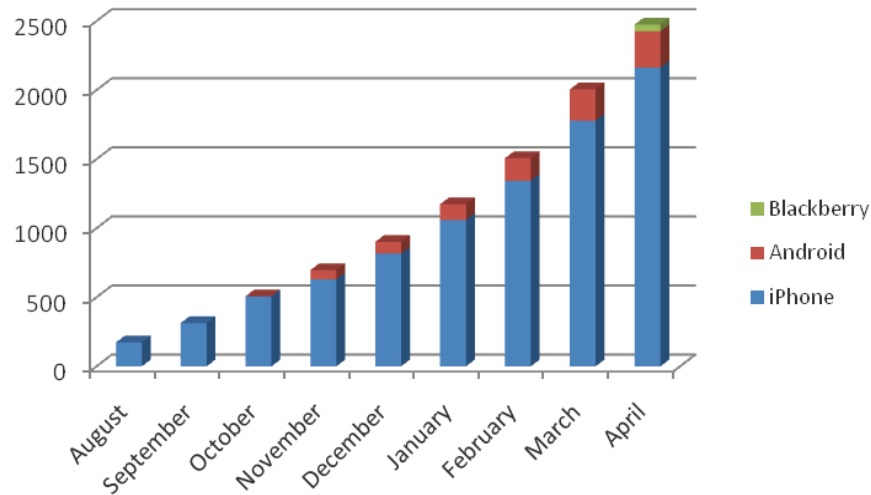
May 2009



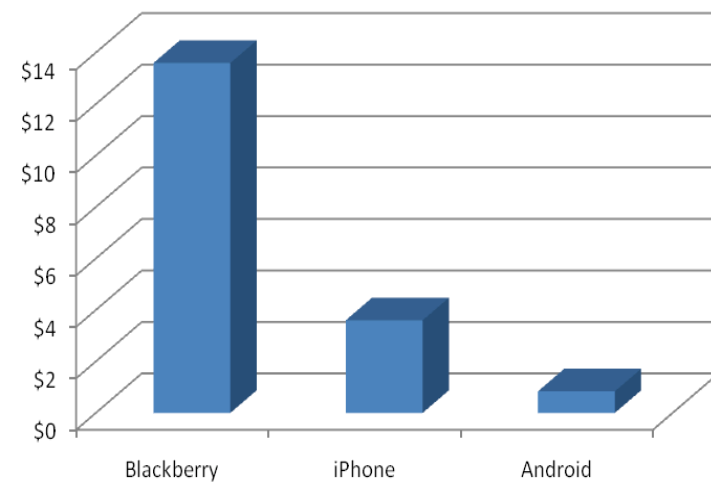
Skyhook Wireless provides the patented Wi-Fi positioning system and XPS, the world's first hybrid location system. Skyhook's database includes the location of over 100 million Wi-Fi access points and 700,000 cell towers. In addition, it supports over 2,300 location-based applications across 50 million devices. This results in over 200 million location requests a day with 15 billion requests in 2008, and 25 billion requests in 2009 to date.

For the Location Aware App Report, Skyhook systematically researches location-aware applications in Apple's App Store, Google's Android Marketplace and Blackberry's AppWorld, and will publish the results of this research monthly. This report will include data on location-aware apps from new stores as they are released (e.g. Nokia's Ovi Store, Microsoft's Windows Mobile Marketplace).

Total number of location-aware apps added by month



Average LBS App Prices (in USD)





Skyhook Wireless Featured Data

Skyhook has seen considerable growth in location requests in the last six months. Based on the publicly available data for devices running on the Skyhook network, we see that the average number of location requests per user per day has increased from 5.4 in October to 6.1 in April.

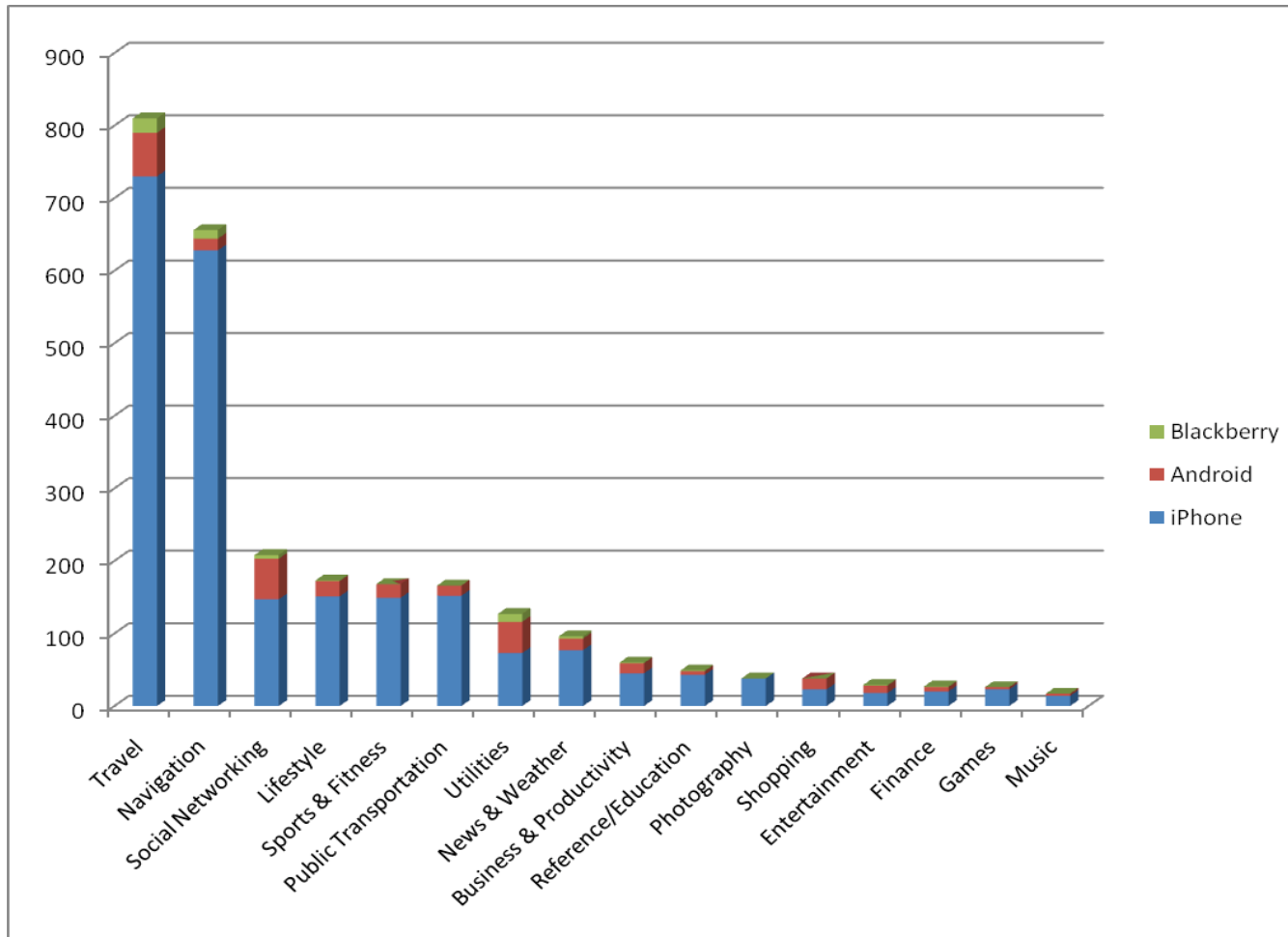
Most apps have a fairly short lifespan for users. App usage drops off considerably after the first 14 days of use, as [Pinch Media](#) shows in “App Store Secrets.” This suggests that users may quickly abandon individual apps as novelty wears off. But location lookup data from Skyhook suggests that users are replacing these abandoned apps and downloading new apps, many of them location aware. Location lookups have increased by almost one per day in just six months. Location is a consistently accessed feature across thousands of applications, and a core functionality key to daily device usage.

General interest and comfort with location is on the rise. We will continue to monitor this trend over time.

Skyhook Location Lookups Per Device Per Day	
October 2008	5.4
January 2009	5.0
April 2009	6.1

iPhone, Android and Blackberry App Types

Standardizing app types across the three reviewed stores found that the iPhone has the greatest diversity of apps. Contrary to expectations, Business & Productivity is not the most popular category on Blackberry and there are far more Blackberry apps in Travel, Navigation and Utilities. Android apps are concentrated in similar areas. Many applications in unexpected categories are also using location – like Music, Finance, Health, Shopping and Games. Location has become a key feature in 17 different types of mobile apps.



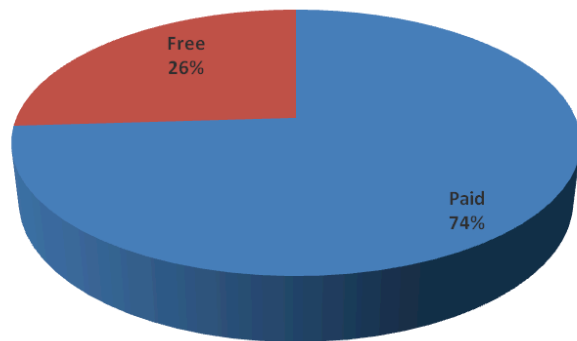
Apple App Store

The [App Store](#) serves Apple’s iPhone and iPod Touch devices. It was launched in July 2008. It currently has over 35,000 apps in the US, and over 2,300 are location-aware. There is about a 75/25 split between paid and free LBS apps. The average price of a location app is \$3.60. The number of apps added each week has steadily increased since the store’s launch.

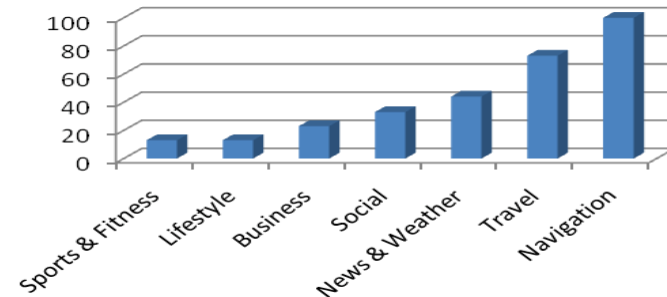
Apple App Store Key Finding:

- The App Store has the greatest number of apps (2,300), the greatest variety of apps (17), released over the shortest period of time.
- The App Store has the greatest amount of paid location-aware apps (74%).

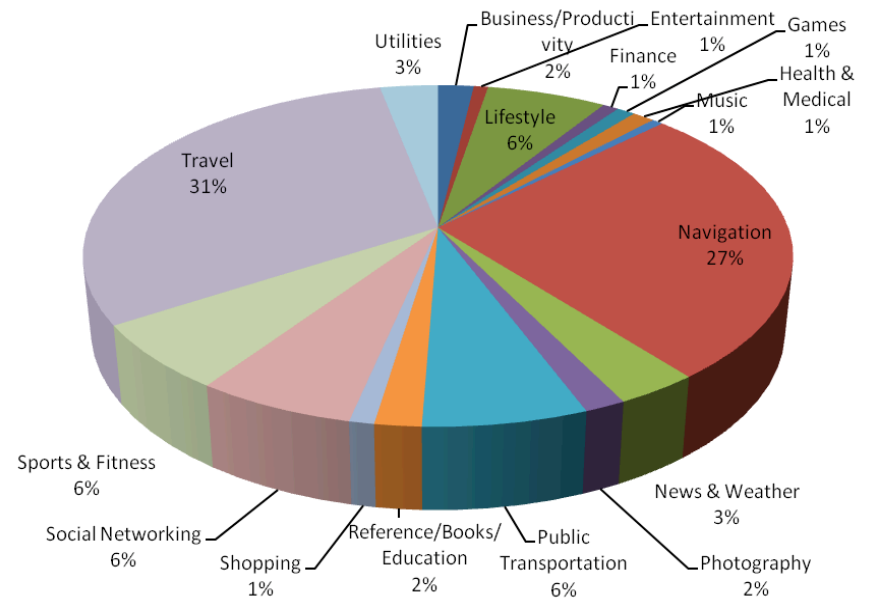
Paid vs. Free Apps



Percentage of Location-Aware Apps in Each Category



Percentage of Location Apps by Category



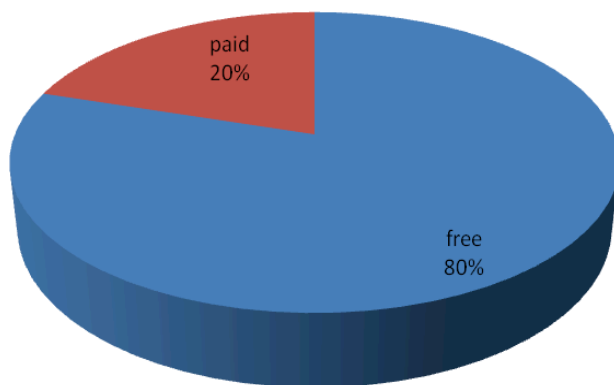
Android

The [Android Marketplace](#) serves Google's Android devices. It was launched in October 2008. It currently has over 3,000 apps (excluding games), and over 300 are location-aware. There is about a 20/80 split between paid and free LBS apps. The average price of an Android location app is \$0.84. The number of apps added each week has increased sporadically since the store's launch. Some weeks launching many location apps are launched, some weeks only a few are launched.

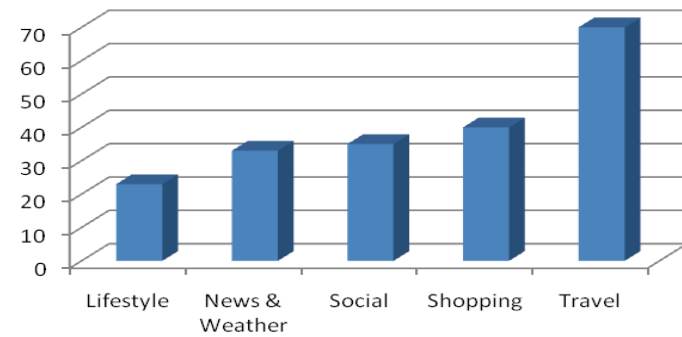
Android Marketplace Key Findings:

- The Marketplace has the greatest percentage of free apps of all three app stores (80%).
- While the iPhone released 805 location-aware apps in the first 6 months of its launch, Android has only released 193.

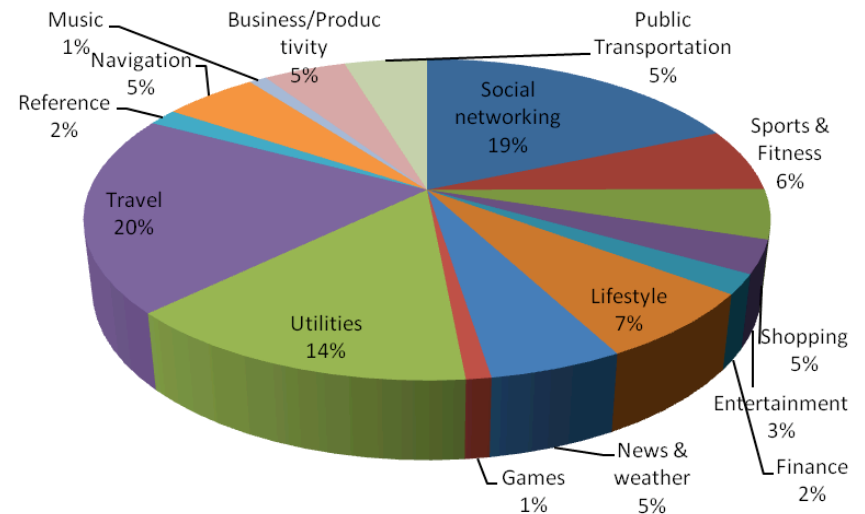
Paid vs. Free Apps



Percentage of Location-Aware Apps in Each Category



Percentage of Location Apps by Category



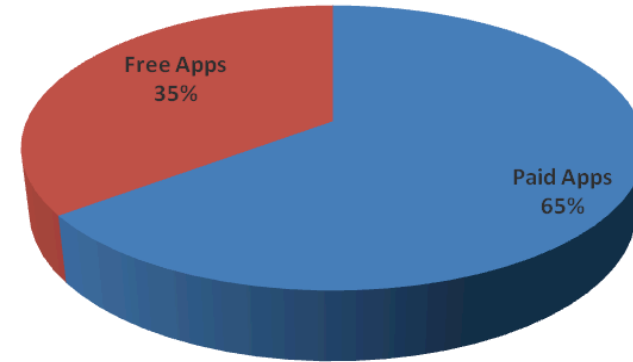
Blackberry App World

The [Blackberry App World](#) serves Blackberry smartphones. It was launched in April 2009. It currently has 57 location-aware apps. There is a 65/35 split between paid and free apps. The most popular categories are currently Travel and Productivity & Utilities. The average price of an app is \$13.60. Blackberry App World is the most recently released app store.

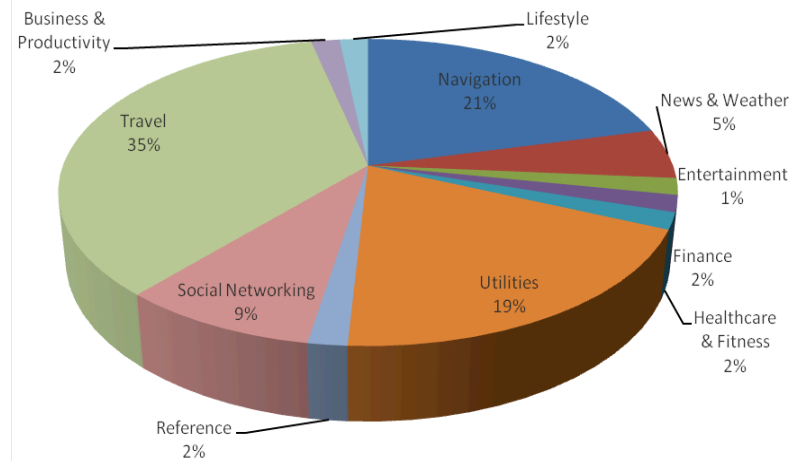
App World Key Findings:

- Blackberry apps have the highest average price of those reviewed (\$13.60).
- App World has the smallest variety of app categories.
- The number of Blackberry LBS apps has not increased significantly since App World's release (57 apps total).

Paid vs. Free Apps



Percentage of Location Apps by Category





Conclusion

The three app stores reviewed in this report all serve as very different distribution platforms for mobile applications. Blackberry App World offers the most expensive and least varied apps. Apple sells inexpensive apps across an array of different types. Android sits somewhere in the middle, with mostly free apps in a growing variety of categories. We expect to see a growing variety of location applications in all stores, and we will monitor changes in pricing closely to see if Blackberry app prices come more in line with the other less expensive stores. It will be interesting to see if Android can establish a market for paid apps, or if the Google Checkout system continues to hinder paid apps.