

Citigold Private Client



# ALTERNATIVES

4Q 2014

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# Technology

## Internet - The Mobile App Economy

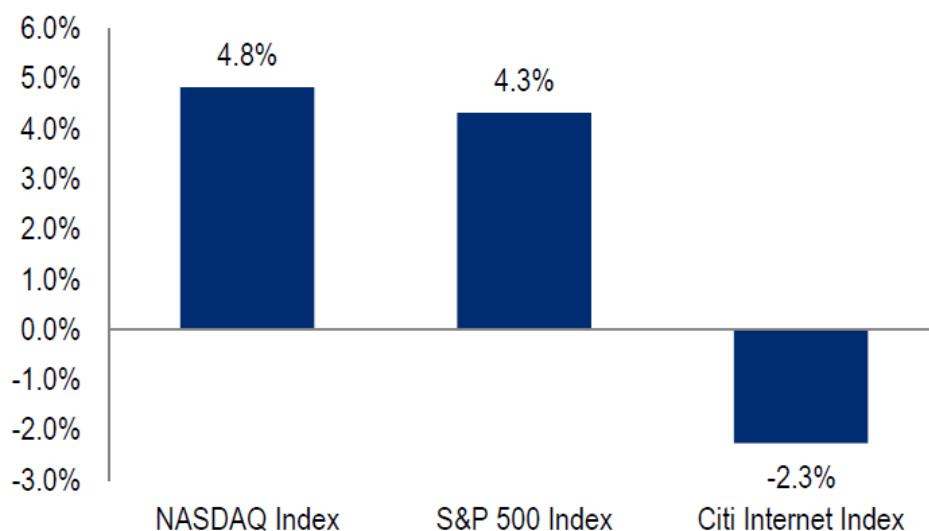
“Selection is key...”

After generating over 120% returns in 2013, Citi's Internet index of 79 companies is down 2.3% YTD through 10 October 2014, as compared to +4.8% for the NASDAQ index and +4.3% for the S&P 500 index. Given the cyclical nature of this sector, the underperformance has largely been driven by markets becoming increasingly worried about the possibility that global growth may be faltering. Going forward, we believe selection will be key and that a focus on central growth themes is important.

Against this backdrop, we are focusing on the Mobile sector – the proliferation of mobile Internet devices and increasing mobile Internet usage as an incremental revenue opportunity.

In only a handful of years, the emergence of mobile Internet devices has had a material impact on the Internet sector. Today, it is not uncommon to hear of established Internet companies generating 20-30% of their revenues from the mobile channel and of mobile growth in excess of 50% YoY. In particular, Mobile apps have dominated mobile Internet usage. While apps have existed since 2007, they really burst onto the scene in 2013 when bookings from Apple's and Google's app stores accelerated 222% YoY to \$16.6bn. App marketing, from the likes of Facebook, to drive that activity added another \$3.4bn.

Citi Internet Index vs. NASDAQ and S&P 500 – 2014 Performance



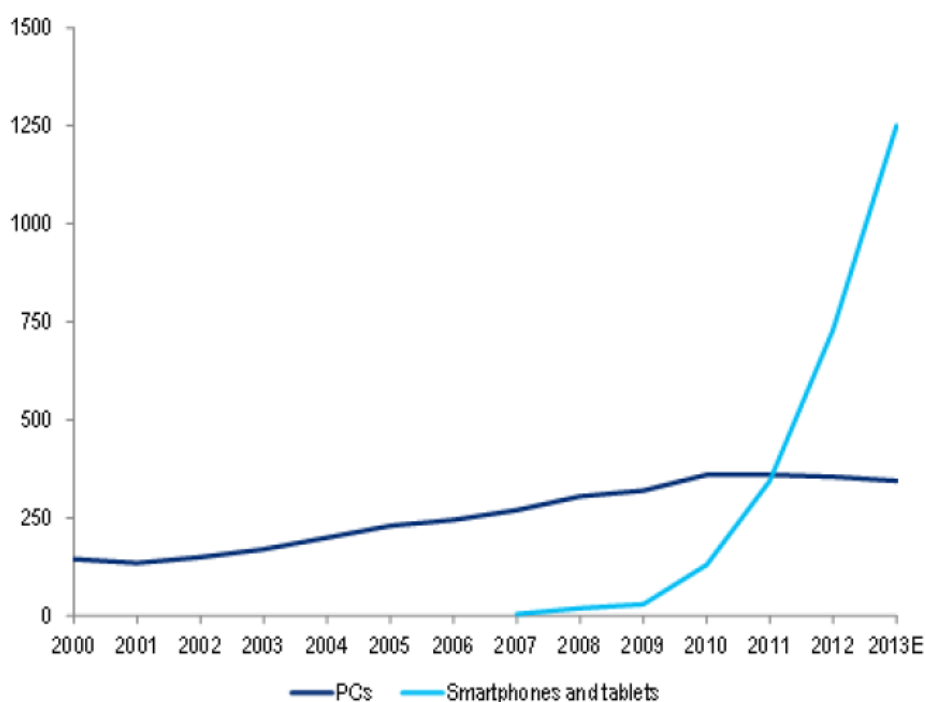
Source: Citi Research, Factset, Datacentral - Weighted Return. As of 10 Oct 2014.

## Why Mobile Matters

“The rise of a new computing platform...”

The rapid and widespread adoption of mobile computing devices (i.e., smartphones and tablets) has arguably been the most important influence on the Internet economy over the last 5-7 years. As shown below, the proliferation of smart mobile devices themselves has been fast and meaningful, and they now represent the largest installed base of computing devices from an incremental units basis and from a usage basis.

Global annual unit sales for PCs and Smart devices (millions)



Source: Citi Research, Enders Analysis. As of 18 September 2014.

Growth in the installed base of smart mobile devices and usage has had a profound impact on a number of industries. Indeed, the time spent on mobile devices is second only to TV today and appears poised to eventually eclipse TV. According to comScore, mobile app usage increased 52% YoY in June 2014 and now represents more than 50% of time spent consuming digital media. ■

“We have identified some main contributors to revenue for the entire mobile app economy...”

## How Mobile Apps Make Money

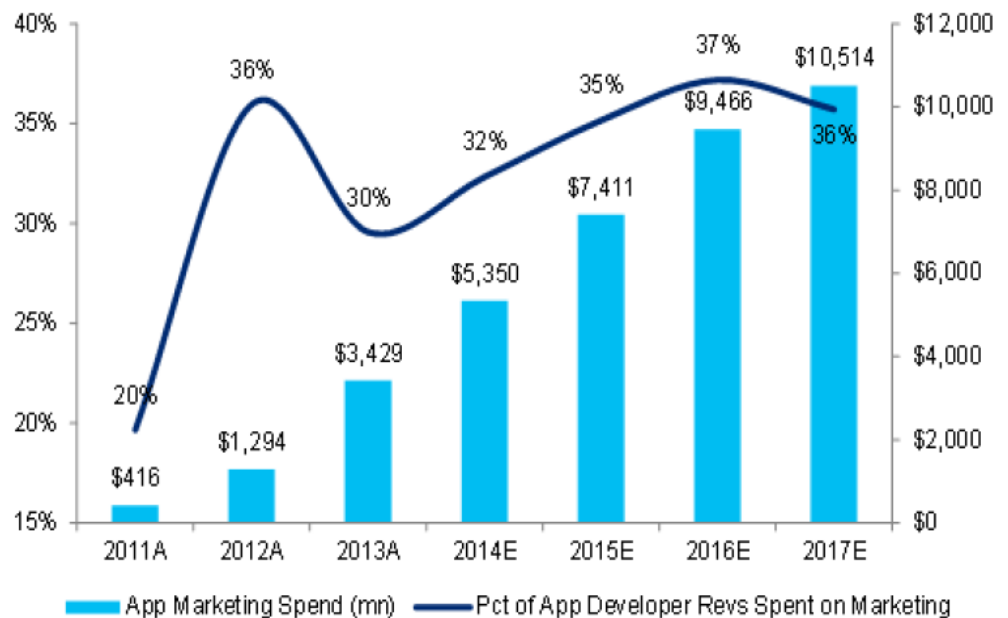
**Paid Downloads** – Some apps require users to pay in order to download the app (typically between \$2-6). The paid download app segment has been declining as a percent of total downloads for some time as business models that incorporated in-app transactions and advertising have matured.

**App marketing** – App developers market their apps by advertising on mobile websites and within other apps. These ads are meant to drive mobile users to the app store in order to drive app installs (downloads).

**App commerce** – App commerce includes in-app purchases such as virtual items in mobile app games as well as transactions such as purchasing an item via its app. We note that some in-app purchase revenue is shared with the app store operators.

**App advertising** – Some apps generate revenue by placing ads within the app. Advertising within apps is often associated with free-to-download apps, but can also occur within paid apps. Mobile app advertising can include banner or video ads at various places within the app experience (e.g., interstitial ads, banner ads, etc.). Roughly 40% of app developers say that they display advertising within their apps. This category can include ads promoting other apps, so there can be some overlap with the app marketing category. ■

### Marketing Spend by App Developers



Source: Citi Research. As of 18 September 2014.

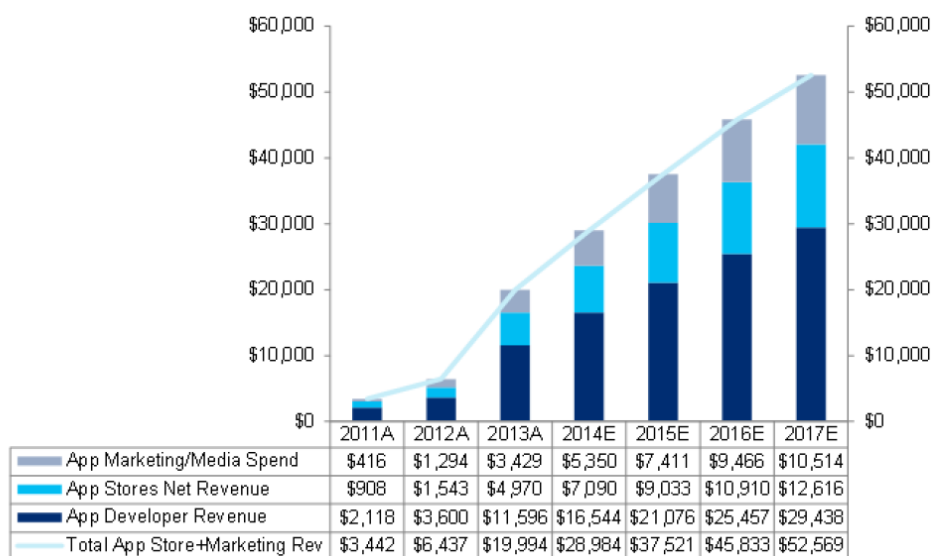
## The Next Big Thing?

“Total App Store-Related Spend May Grow 45% This Year to \$29bn...”

We forecast continued strong growth in the mobile app store market, driven by 1) continued growth in installed smart devices; 2) entry into the app market by new innovative developers; 3) monetization gains in developing markets; 4) and greater adoption of mobile app marketing.

As shown in the figure below, Citi analysts forecast total app store related spending may grow 45% to \$29bn this year. In addition, we estimate that app marketing spend was \$3.4bn in 2013, \$5.4bn in 2014 and likely \$10.5bn in 2017 – representing a 32% 4-year Compound Annual Growth Rate (CAGR).

### App Store Revenue by Net Recipient



Source: Citi Research, company reports. As of 18 September 2014.

## Sector Overview

Although the technology sector trades at a 7% premium to the market (14.9x consensus 2015E PE), balance sheets appear strong and earnings momentum remains intact. Consensus anticipates double digit EPS growth of 13% in 2014 and 12% in 2015.

On an overall industry preference, Technology remains one of Citi's favourites. Indeed, given that Citi economists forecast an acceleration in the world economy, it makes sense to maintain a pro-cyclical tilt as cyclical sectors are more likely to outperform defensives in such environment. ■

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