Spotlight on connected devices:

Welcome to your wired life

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Connected devices: Top Apps by downloads

iOS & Google Play combined - United States, August 2014

Rank	Арр	Company	Subcategory
1	Chromecast	<u>Google</u>	Media
2	<u>Fitbit</u>	<u>Fitbit</u>	Health & Fitness
3	DIRECTV	<u>AT&T</u>	Media
4	HP ePrint	<u>Hewlett-Packard</u>	Productivity
5	KODAK Kiosk Connect	<u>Eastman Kodak</u>	Productivity
6	Square Register	Square	Productivity
7	<u>GoPro</u>	<u>GoPro</u>	Media
8	ATST U-verse	<u>AT&T</u>	Media
9	DISH Anywhere	<u>DISH</u>	Media
10	HP All in One Printer Remote	Hewlett-Packard	Productivity

App Annie intelligence

Note: These connected device apps were identified and categorized by App Annie. Detailed category definitions are available in the notes at the end of this report.

The market for connected devices is thriving, and it's blurring the line between our physical and digital worlds. Commonplace objects like refrigerators, TVs and cars are now online, seamlessly passing data and communicating as nodes on an ever-expanding network. As these devices collect contextual data about our behaviors and preferences, everyday tasks become automated and streamlined.

Gartner forecasts that <u>26 billion</u> connected devices will be installed globally by 2020. In this report, we investigate the mobile apps that access and control this technology. Because most connected devices, particularly those that are consumer-facing, interface with mobile apps, we look to app downloads to shed light on device usage and adoption.

We identified six major subcategories of mobile apps within the connected devices landscape: Health & Fitness, Media, Productivity, Car, Home and Watch. For this study, we created a custom dataset consisting of five of the top apps in each subcategory. The report highlights the leading sectors (Media, Productivity, Health & Fitness) and explores the key innovators shaping those markets. This is followed by a deep dive into the smaller emerging subcategories of Car, Home and Watch. Details about the 30 apps in the dataset, including definitions of each subcategory, are available in the notes section at the end of this report.

I. Media and Productivity apps take the lead

The 30 connected device apps profiled in our study showed rapid growth over a short period of time. From August 2013 to August 2014, the 27 apps available last year grew roughly 50% in aggregate downloads for iOS and Google Play combined in the United States. By comparison, all apps outside of games grew 2% in the United States over the same time frame.

In August 2014, the largest connected device subcategory in our study was Media. Its five apps accounted for roughly 40% of downloads in the dataset. All five apps also ranked in the top 10 for the overall connected devices category. Productivity was the second largest subcategory with about 30% of downloads and four apps in the overall top 10. Health & Fitness came in third, followed by Car, Home, and Watch. It's interesting to note that although connected cars, homes and smartwatches receive a lot of buzz, app downloads are still low. Combined, the top apps in these subcategories accounted for about 15% of downloads.

These download figures reflect the relative maturity of the connected device sectors. Productivity and Health & Fitness are rapidly maturing and have considerable app store penetration. On the other hand, Car, Home and Watch are still nascent with significant room for growth.

II. Chromecast hits the spotlight





Connected devices: Top Media apps by downloads

iOS & Google Play combined - United States, August 2014

Rank	Арр	Company
1	Chromecast	Google
2	DIRECTV	<u>ATST</u>
3	<u>GoPro</u>	<u>GoPro</u>
4	AT&T U-verse	<u>AT&T</u>
5	DISH Anywhere	<u>DISH</u>

App Annie intelligence

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In August 2014, the <u>Chromecast</u> app ranked #1 in downloads for the Media subcategory. It was also the most downloaded connected device app overall. Google's popular dongle enables users to stream HD content to TVs from mobile devices and web browsers. Available for \$35, the device is priced below many of its <u>competitors</u>, which suggests a pricing strategy designed to quickly build a critical mass of users. Google pursued a similar strategy with Android.

GoPro ranked third in the Media subcategory and has been trending upwards in downloads over the last two years. Advancements in smartphone technology have slowly phased out digital cameras as people utilize their phones for taking and managing photos. However, GoPro, the "world's most versatile camera," has thrived with its compelling adventure branding and user-generated media platform. Flying drone cameras such as the Phantom 2 Vision, which can stream aerial HD video and pictures straight to mobile devices, may drive future growth for this sector.

Gaming apps are also making waves in the Media subcategory. Apps from PlayStation and Xbox enable players to use mobile devices to browse and purchase games that download directly onto their console. Users can record and share their gameplay, follow friends, and post to activity feeds right from their phones and tablets. Additionally, exclusive app content and game mechanics help consoles provide differentiated gaming experiences. For example, in Dead Rising 3, the Xbox One Smartglass app brings a player's smartphone into the game as a tool. It can deploy special weapons and receive phone calls and texts from in-game characters. Mobile capabilities stand to be a critical factor as hardware gaming companies battle for market supremacy.

III. Top 5 Health & Fitness apps from August 2014 grow 2.3x year-over-year





Connected devices: Top Health & Fitness apps by downloads iOS & Google Play combined – United States, August 2014

Rank	Арр	Company
1	<u>Fitbit</u>	<u>Fitbit</u>
2	<u>Up by Jawbone</u>	<u>Jawbone</u>
3	Garmin Connect	<u>Garmin</u>
4	Nike+ FuelBand	<u>Nike</u>
5	Misfit Shine	Misfit Wearables

ADD ANNIE intelligence

Note: These connected device apps were identified and categorized by App Annie. Detailed category definitions are available in the notes at the end of this report.

The top Health & Fitness apps in August 2014 all connect to health and activity trackers that consumers wear to improve their fitness, sleep and quality of life. The five ranking apps collectively grew over 2.3x in monthly downloads since August 2013 – a much greater increase than top apps in other subcategories. Despite their rapid growth, connected devices in Health & Fitness face the challenge of maintaining long-term engagement.

It will be necessary for these wearables to continue improving the user experience to sustain interest and long-term utility.

Over time, these devices continue to become more sophisticated. As health trackers evolve to measure more complex vitals like glucose and blood oxygen levels, respiratory rates and more, consumers will be able to better understand and take control of their health. Potentially life-saving advancements are also underway. Google and Novartis have teamed up to develop smart contact lenses that measure glucose levels in tears. This would allow diabetics and their doctors to monitor glucose levels continuously in real-time. First Warning System's cancer-detecting bra monitors temperature changes in breast tissue to identify abnormalities earlier, non-invasively and more accurately. In China, where restaurants sometimes cook with recycled gutter oil to cut costs, products like Baidu's smart chopsticks help eaters determine the quality of oil in their food. Implantables and other in-body sensors are down the line, yet they are currently subject to more stringent FDA approval and may remain experimental in the near-term.

IV. Printers and card readers boost business productivity





Connected devices: Top Productivity apps by downloads iOS & Google Play combined - United States, August 2014

Rank	Арр	Company
1	HP ePrint	<u>Hewlett-Packard</u>
2	KODAK Kiosk Connect	<u>Eastman Kodak</u>
3	Square Register	<u>Square</u>
4	HP All in One Printer Remote	Hewlett-Packard
5	PayPal Here	<u>eBay</u>

App Annie intelligence

Note: These connected device apps were identified and categorized by App Annie. Detailed category definitions are available in the notes at the end of this report.

The Productivity subcategory primarily consisted of credit card reader and printer apps. It ranked second in aggregate downloads after Media. Printer apps enable users to send commands directly from mobile devices to printers. HP ePrint, the #1 ranked app in Productivity, provides a seamless and convenient printing experience that integrates with cloud applications such as Evernote, OneDrive and Dropbox. In the United States from January 2013 to August 2014, the iOS app had a rating of 4.6 stars from over 7.000 reviews.



Many reviewers emphasized HP ePrint's ease of use.

Apps like <u>Square Register</u> and <u>PayPal Here</u> connect to credit card readers that plug into smartphones and tablets. These dongles convert mobile devices into powerful Point of Sale (POS) systems that are widely embraced by retailers. Small and medium-sized businesses have particularly <u>high usage rates</u> as they look to these devices to improve operational efficiencies.

One interesting trend on the horizon for this subcategory is Near Field Communication (NFC) technology, which allows for contactless payment. While already established in several countries internationally, it has not yet taken off in the United States. As Apple continues to push Apple Pay as an alternative to card readers, we'll be keeping an eye on downloads in this subcategory.

V. One step closer to the Jetsons: connected cars, homes and watches

Much of the technology the Jetsons enjoyed is coming to market, and the future looks <u>rosy</u> for connected cars, homes and watches. For cars, connected devices will make the driving experience safer, cheaper and more efficient. Information collected from in-vehicle and external sensors will help circumvent traffic, reduce risky driving and lower insurance premiums. Apps from devices like the Cruise RP-1 allow users to monitor their surroundings while a pod mounted to the roof of their car enables hands-free driving.

Proprietary in-car systems, like those from <u>Toyota</u> and <u>Nissan</u>, will also keep drivers connected and entertained while on the road. Third party in-car systems like Apple's CarPlay and Google's Android Auto will offer users an even broader selection of apps while integrating easily with familiar operating systems. These third party platforms will likely accelerate adoption of in-car systems as they lower R&D costs significantly for automakers.

At home, new devices are being designed for seemingly every room and purpose. The <u>ADT Pulse</u> app allows homeowners to use mobile devices to remotely watch video feeds, arm and disarm security systems, and control thermostats and lights. The <u>Honeywell Lyric</u> app enables users to remotely control heating and cooling systems, with geofencing capabilities that adjust settings depending on user location. Connected home devices are

expected to drive more than \$61 billion in revenue this year and grow at a compound annual rate of 52% over the next five years. The largest contributors to this growth are predicted to be from energy and home security devices.



ADT Pulse remotely controls home lights, cameras, thermostats, locks and security systems.

Up to this point, smartwatches have primarily been used for hands-free viewing of push notifications. However, Apple's recently announced watch may be a game changer. Unique features like built-in speakers and a high-resolution retina display will open up new use cases for these devices. Haptic feedback and the scroll wheel will also enhance navigation experiences and improve usability. The watch's integration with Apple Pay, Apple's mobile payment service, is another interesting addition.

VI. So, what's next?

Growth in the connected devices market will continue to be reflected in the app stores and app store downloads. While this report profiles August's six largest subcategories, we fully expect to see new sectors emerge as technologies advance and consumer adoption increases.

As we look to the future of connected devices and the overarching architecture of the Internet of Things, an intriguing question remains: What will be the central hub that will inter-connect and control all of these devices? The hub, whether it takes the form of a security system, thermostat or mobile phone, will be critical for the Internet of Things to reach its full potential. This central software platform would have access to the historical and real-time data necessary to support context awareness and full automation across devices.

Naturally, there are some fundamental problems that accompany these great technology advancements. Various studies have pointed to the loss of privacy as a primary barrier to the growth of the Internet of Things. There are also concerns about data usage and ownership, as well as a general lack of standards regulating security. Regardless, the automation and conveniences from the Internet of Things will gradually and inevitably transform our lives. The benefits will extend far beyond the home and address larger issues that have the power to impact the world in substantial, meaningful ways. Supply chain logistics are optimized for more efficient manufacturing and distribution of goods. Public safety is improved as bridges, buildings and other city infrastructure are monitored for structural safety. Real-time data about water, trash and air quality keep

us healthy and inform decisions about environmental change. Clinicians in developing countries can offer life-saving tests at a lower cost while better monitoring patient treatment.

In time, the revolution will affect every industry and community.



Notes

- For this report, connected device apps were defined by App Annie as apps that connect mobile devices to physical devices and hardware. Only apps published by connected device brands were included. The following apps were not included:
 - O Apps that connect mobile devices to other mobile devices
 - Apps from third party publishers
 - O Apps from connected device brands if the main function of the app does not require device integration
- O The report's dataset includes five apps each from the following connected device subcategories: Health & Fitness, Productivity, Media, Car, Home and Watch. Download estimates reflect data for the month of August 2014 for the United States across iOS App Store and Google Play combined. Subcategories are defined as follows:
 - Productivity: Apps identified by App Annie that connect users to devices that assist with personal and business productivity
 - Media: Apps identified by App Annie that connect users to devices that provide media and entertainment content through audio, visual, or other means
 - Health & Fitness: Apps identified by App Annie that connect users to devices that support healthy living and fitness
 - Car: Apps identified by App Annie that connect users to in-car systems that enable communication and entartainment
 - Home: Apps identified by App Annie that enable users to control household devices, appliances and other sustems throughout the home
 - O Watch: Apps identified by App Annie that connect users to smartwatches
- For the larger categories of Productivity, Health & Fitness and Media, the profiled apps are the five most downloaded apps in the subcategoru.
 - Productivity: HP ePrint, Kodak Kiosk Connect, Square Register, HP All in One Printer Remote, PayPal Here
 - O Media: Chromecast, DIRECTV, GoPro, AT&T U-verse, DISH Anywhere
 - Health & Fitness: Fitbit, UP by Jawbone, Garmin Connect, Nike+ FuelBand, Misfit Shine

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- For the smaller categories of Car, Home, and Watch, the profiled apps are a selection of top ranking apps.
 - Car: OnStar RemoteLink, Toyota Entune, UConnect Access, NissanConnect, Ford Sync Destinations
 - O Home: ADT Pulse, Vivint Sku, XFINITY Home, Nest Mobile, Dropcam
 - Watch: Pebble Smartwatch, Android Wear, SmartWatch, Martian Notifier, Ouglcomm Toa
- The app rankings reported in the report are based on the download and revenue estimates available through App Annie Intelligence. The daily rank history charts and the home page feature app data are available to all users through App Annie's app tracker solution, Store Stats.
- O The apps in this report are ranked based on unified apps made possible by App Annie's exclusive <u>DNA</u>. In unified apps, similar versions of the same app with different names and on different platforms are unified. For example, CNN Breaking US & World News on Google Play, CNN App for iPhone on iOS and CNN App fo iPad on iOS are aggregated and ranked as a single CNN News unified app.
- All apps and publishers are reported under their parent company, where available; for example, the HBO GO app is reported under its parent company Time Warner, rather than its direct publisher Home Box Office, Inc. Note that if you view the Time Warner parent company page on Store Stats, you will see the publishers under the parent company <u>Time Warner</u> including <u>Home Box Office Inc</u>. The HBO GO app will be listed under the Home Box Office Inc, publisher page.
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