Mobile App Advertising and Monetization Trends 2012-2017:
The Economics of Free

March 2014
AGENDA

1. The revenue opportunity for publishers
2. How do app publishers monetize their apps today?
   a. Freemium
   b. Paid
   c. Paidmium
   d. In-App Advertising
3. App Monetization by Country
4. Looking Ahead
5. Key Takeaways
Mobile apps are outpacing both mobile and PC browser-based ads in revenue growth

Worldwide Online Advertising and Mobile App Revenue: 2012 to 2013

- PC Online Search Advertising: 1.1x growth from 2012 to 2013
- PC Online Display Advertising: 1.1x growth from 2012 to 2013
- Other PC Advertising*: 1.5x growth from 2012 to 2013
- Mobile Display Advertising: 1.5x growth from 2012 to 2013
- Mobile Search Advertising: 1.6x growth from 2012 to 2013
- Mobile In-App Advertising: 2.3x growth from 2012 to 2013
- Mobile App Store Revenue (iOS App Store & Google Play): 3x growth from 2012 to 2013

Device: PC

Source: App Annie & IDC

* Other PC Advertising includes online rich media, video and classified advertising

- Mobile in-app advertising revenue is likely to continue taking share from PC advertising revenue as advertisers allocate their budgets for maximum return
Mobile app revenue growth is driven by gains in device adoption and revenue per device

- Massive growth in smart mobile devices dramatically expands opportunity to reach consumers
- As revenue per mobile device is also increasing, mobile devices represent an increasingly powerful avenue of monetization

*In-app advertising across all app stores; app store revenue across iOS App Store and Google Play*
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## Business Models to Generate Revenue

### Freemium
- **How it Works:** Free download with in-app purchases
- **Top Apps:**
  - Puzzle & Dragons
  - Candy Crush Saga
  - Clash of Clans

### Paid
- **How it Works:** Paid download with no in-app purchases
- **Top Apps:**
  - Minecraft – Pocket Edition
  - Pages
  - WhatsApp Messenger**

### Paidmium
- **How it Works:** Paid download with in-app purchases
- **Top Apps:**
  - FIFA 13
  - Grindr Xtra
  - Bloons TD 5

### In-App Advertising
- **How it Works:** Contains ads (banner ads, video ads, etc.)
- **Revenue:** N/A

### Dynamic
- **How it Works:** Business model shifts depending on certain factors (app shifts to an ad-supported model if the user does not make in-app purchases, etc.)
- **Revenue:** N/A

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*Based on [App Annie Intelligence](http://www.appannie.com) estimates

**WhatsApp Messenger ranked as the #3 paid app based on its iOS revenue up until early August 2013, when it went from paid to freemium on iOS.*
The opportunity for apps also extends beyond direct monetization in the app stores

<table>
<thead>
<tr>
<th>App Name*</th>
<th>Monetization Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>eBay</td>
<td>Drive online shopping conversion</td>
</tr>
<tr>
<td>Netflix</td>
<td>Allow current subscribers to stream content on the go</td>
</tr>
<tr>
<td>Walgreens</td>
<td>Drive shoppers to brick-and-mortar stores via coupons, inventory information and pharmacy chat</td>
</tr>
<tr>
<td>Bandsintown Concerts</td>
<td>Brings users to musical performances through local concert notifications and recommendations</td>
</tr>
<tr>
<td>IKEA Catalog</td>
<td>Offers consumers the ability to test how IKEA products would look in their homes without traveling to the store through the use of augmented reality</td>
</tr>
</tbody>
</table>

*Additional information on these apps available on App Annie Store Stats
Freemium and In-App Advertising tower over other app business models

Freemium and In-App Advertising allow publishers the opportunity to cast a wider net and better monetize in the long-run through a potentially more consistent revenue stream.

Paid and Paidmium revenue both shrunk from 2012 to 2013.

* Brazil, Canada, France, Germany, India, Japan, Russia, South Korea, United Kingdom & United States

* In-app advertising across all app stores; app store revenue across iOS App Store and Google Play

Source: App Annie & IDC
Freemium is more prevalent and outperforms other app store monetization models

**App Store Composition by Business Model**

*Worldwide, December 2013*  

- **Composition By Number of Apps**:  
  - Freemium: 8%  
  - Paid: 9%  
  - Paidmium: 4%  

- **Composition By Revenue**  
  - Freemium: 4%  
  - Paid: 4%  
  - Paidmium: 4%

*Business model percentages are based on the combination of the Top 1,000 apps on the iOS App Store and the Top 1,000 apps on Google Play from App Annie Intelligence*

- Freemium drives a disproportionate volume of app revenue across both stores
- Freemium apps are even more common on Google Play than on iOS App Store
It's never too late to switch business models!

<table>
<thead>
<tr>
<th>App Name*</th>
<th>Change in Monetization Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>WhatsApp Messenger</td>
<td>In a Forbes article**, the WhatsApp founders revealed that they would switch the app price &quot;from free to paid so they wouldn't grow too fast&quot; with a freemium business model in place since July 2013</td>
</tr>
<tr>
<td>Skype</td>
<td>Though app stores take a percentage of consumer spend, Skype began allowing users to purchase Skype credits through app stores in late 2012 to limit purchase friction</td>
</tr>
<tr>
<td>FIFA 14</td>
<td>FIFA 13 was the #1 paidmium app for 2013, and Electronic Arts still switched over to a freemium business model for the even more successful FIFA 14</td>
</tr>
<tr>
<td>Real Racing 3</td>
<td>Real Racing 2 utilized a paidmium business model, but the success of the series skyrocketed with the release of freemium Real Racing 3</td>
</tr>
</tbody>
</table>

* Additional information on these apps available on [App Annie Store Stats](http://www.forbes.com/sites/parmyolson/2014/02/19/exclusive-inside-story-how-jan-koum-built-whatsapp-into-facebooks-new-19-billion-baby/)
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There are many freemium value propositions that can appeal to different types of users

<table>
<thead>
<tr>
<th>Freemium Monetization</th>
<th>Value Proposition</th>
<th>App Examples*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Usage</td>
<td>Free app offers limited usage, bandwidth, hours or storage space. Pay to raise or remove those limits.</td>
<td>NYTimes Dropbox</td>
</tr>
<tr>
<td>Time</td>
<td>Free trial of full functionality for a limited amount of time. Pay to continue using after time period is up.</td>
<td>WhatsApp Messenger SwiftKey Keyboard</td>
</tr>
<tr>
<td>Functionality</td>
<td>Pay for virtual items, speed-ups, content, add-ons, upgrades, services or capabilities.</td>
<td>Clash of Clans LINE Skype</td>
</tr>
<tr>
<td>User Experience</td>
<td>Free app is ad-supported. Remove ads by paying in-app or through a separate paid download.</td>
<td>Say the Same Thing SoundHound</td>
</tr>
<tr>
<td>Combination</td>
<td>The app uses a combination of the above.</td>
<td>Evernote (Functionality and Usage)</td>
</tr>
</tbody>
</table>

* Additional information on these apps available on [App Annie Store Stats](https://www.appannie.com/store-stats)
Functionality is the most common value proposition used by freemium app publishers

Among the apps you manage or publish, how do the freemium apps monetize (select all that apply)?

- Usage
- Time
- Functionality
- User Experience
- Combination

Percent of Respondents

Source: App Annie Survey
February 2014 (n = 1694)

• Publishers need to select the right freemium technique to match each app’s function and user base
The freemium model is very successful, even with a small proportion of users making in-app purchases.

If your apps offer in-app purchases, please estimate the percentage of your apps’ monthly average users (MAUs) who make at least one in-app purchase:

- **0% to 1%**
- **2% to 5%**
- **6% to 10%**
- **11% to 20%**
- **21% to 100%**

Source: App Annie Survey
February 2014 (n = 1169)

- Publishers can structure their apps to target the whales who make repeated purchases
- Are your in-app purchases structured in a way that caps revenue? Can your users purchase repeatedly?
Freemium model now dominates games, while growing steadily outside of games

- Although more prevalent in games, the freemium business model has successfully expanded into other categories such as messaging, music, news and dating
- This is partially driven by “gamification” of apps, but may also reflect natural limits to what consumers will pay for up front

<table>
<thead>
<tr>
<th>App Category</th>
<th>Top App by iOS and Google Play Revenue in 2013</th>
<th>Examples of In-App Purchases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Messaging</td>
<td>LINE</td>
<td>Stickers</td>
</tr>
<tr>
<td>Music Streaming</td>
<td>Pandora Radio</td>
<td>No ads, unlimited listening</td>
</tr>
<tr>
<td>News</td>
<td>NYTimes</td>
<td>Unlimited articles</td>
</tr>
<tr>
<td>Dating</td>
<td>Zoosk</td>
<td>Subscription, respond to suitors</td>
</tr>
</tbody>
</table>

Source: App Annie Intelligence
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Paid apps appearing in the Top 1000 grossing apps on iOS and Google Play most commonly in the $2-$6 range

**Download Price* of Apps in the Top 1000 Grossing Apps on iOS App Store and Google Play, December 2013**

- **Source:** App Annie

- App store revenue is not directly correlated to app price, and publishers must select an appropriate price for their app and category

* Download price as of December 31, 2013 from App Annie Intelligence
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There is still opportunity for monetization of users following a paid download

Source of Paidmium App Revenue in 2013 for Key Countries*

- In-App Purchases: 39%
- Paid Downloads: 61%

* Brazil, Canada, France, Germany, India, Japan, Russia, South Korea, United Kingdom & United States
* App store revenue across iOS App Store and Google Play

Source: App Annie Intelligence

- Paidmium apps primarily generated revenue from their downloads, but users were still willing to spend a sizeable amount on in-app purchases
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Over 40% of surveyed publishers used paid advertising within their apps

Do you display paid advertising with any of your apps?

- Yes: 42%
- No: 58%

Source: App Annie Survey
February 2014 (n = 2039)

- Publishers must strike the right balance between monetizing through app stores and monetizing through in-app advertising
In-app advertising revenue rides on the back of popular hits with desirable ad-placements

If you display paid advertising, how much revenue do you earn from in-app advertising per month across all of your apps?

- Breakout apps can make over $100K per month
- Developers in the 75th to 90th percentile can make up to $10K per month
- This illustrates the uniqueness of Flappy Bird reportedly making over $50K per day in in-app advertising

Source: App Annie Survey
February 2014 (n = 658)
If you display paid advertising within your app, how many in-app ad impressions do you fill each month across all apps?

- Apps need usage to generate advertising impressions, which is where downloads, engagement and user retention play a critical role.
Publishers also have to find the in-app advertising format that best fits their users

In 2014, how often will you use these in-app ad formats?

- Interstitial Video Ads
- Interstitial Non-Video
- Native Ads
- Incentivized Ads
- Pre/Mid/Post-Roll Video
- Banner Ads

Source: App Annie Survey, February 2014 (n = 807)

- Interstitial ads, incentivized ads and native ads appear set for the largest gains in 2014
Ad networks are the primary channel for selling in-app ads

Through which channels do you sell your in-app ads (select all that apply)?

- Ad Networks
- Mediation Platforms
- Direct to Advertisers
- Agencies
- Real-Time Bidding Exchanges

Source: App Annie Survey
February 2014 (n = 781)

- Ad networks are still the most commonly used platform for publishers to fill ad inventory
- Mediation platforms and real-time bidding exchanges are gaining traction
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United States and Japan lead in mobile app revenue; revenue growth occurred across key countries

- When developers’ target countries to enter, they should first analyze the monetization potential of the market
- Japan and South Korea benefit from historically leading edge mobile technology and service environments
Selecting the mobile app business model that fits the target region is of paramount importance.

- India and the United States skew towards in-app advertising, while Japan, Brazil and Russia lean towards app store revenue.

-Mobile App* Revenue Composition in 2013

*In-app advertising across all app stores; app store revenue across iOS App Store and Google Play

Source: App Annie & IDC
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Increasing mobile devices and app-related revenue per device create a huge opportunity in mobile by 2017

**Combined iOS and Android Smartphone and Tablet Device Installed Base in Key Countries***

- **2013**: 0.5B
- **2017**: 2.0B

**Indexed App Store and In-App Advertising Revenue per Device in Key Countries***

- **2013**: 100
- **2017**: 150

*Brazil, Canada, France, Germany, India, Japan, Russia, South Korea, United Kingdom, & United States

*In-app advertising across all app stores; app store revenue across iOS App Store and Google Play

- Growing device adoption and increasing revenue per device will grow the opportunity for mobile app publishers almost three-fold by 2017
Key countries expected to show significant app revenue growth, creating a range of opportunities for publishers

*Projected Mobile App Revenue* by Country

- United States: 3.5x
- Japan: 1.8x
- United Kingdom: 3.2x
- Germany: 3.5x
- South Korea: 1.5x
- France: 3.0x
- Canada: 2.2x
- India: 8.7x
- Russia: 2.7x
- Brazil: 3.2x

*In-app advertising across all app stores; app store revenue across iOS App Store and Google Play

Source: IDC

- While the United States is set for phenomenal growth, other markets such as India and Germany also offer key opportunities for app monetization growth in the future
Most key countries expected to move even more toward in-app advertising by 2017

Proportion of App-Related Revenue Contributed by In-App Advertising

*In-app advertising across all app stores; app store revenue across iOS App Store and Google Play

- Outliers are Japan and South Korea, where in-app purchases are expected to remain the main source of revenue
Aside from business model, what are other key publisher consideration points for app monetization?

Recommendations from app publishers:

• **Start Early** – Determine how to monetize up front, not after building your app

• **Value Proposition** – Make sure your app provides value to users

• **App Discovery** – Ensure people can find your app

• **User Acquisition** – Need a large user base to bring in enough revenue

• **App Usage** – Keep users engaged to drive monetization

• **Ad Sales Channel** – Be sure to find the right ad network for your app

• **Ad Content** – Show ads that are relevant to your users

• **User Experience** – Do not let monetization strategy degrade user experience

• **Track, Analyze, Research, & Optimize** – Measure, iterate and improve your monetization strategy constantly; keep an eye on market trends

(See App Annie Analytics, Advertising Analytics, Store Stats & Intelligence)
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Key Themes & Takeaways

- Mobile app stores (iOS and Google Play) and mobile in-app ads grew revenue by 2.3x and 1.6x, respectively, from 2012 to 2013.

- The above channels outpaced mobile and PC browser-based ads, which grew revenue by 1.5x and 1.1x, respectively.

- Mobile apps monetize especially well through freemium and in-app advertising.

- Mobile in-app advertising revenue is projected to pass PC online display advertising revenue by 2017 when looking at combined revenue across key countries.*

* Brazil, Canada, France, Germany, India, Japan, Russia, South Korea, United Kingdom & United States
• United States will remain the leading source of mobile app-related revenue, with 3.5x growth from 2013 to 2017

• Remarkable 8.7x revenue growth from 2013 to 2017 is expected for India’s mobile app-related revenue, driven largely by rapid smartphone adoption

• Publishers should consider different business model strategies depending on the geographic region; India skews toward in-app advertising, while Japan skews toward app store revenue

• Ad networks are still the most commonly used platform for publishers to fill ad inventory; mediation platforms and real-time bidding exchanges are gaining traction
QUESTIONS?

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