# Google<sup>™</sup> 09

## Building a Business with Social Apps

Chewy Trewhella, Google Gerardo Capiel, MySpace Shawn Shen, Google 5/27/2009

Post your questions for this talk on Google Moderator: code.google.com/events/io/questions

http://bit.ly/mCqkQ



#### Who We Are

Chewy Trewhella, Developer Advocate, Google

Shawn Shen, Developer Advocate, Google

Gerardo Capiel

Vice President, Product Management, Open Platform, MySpace

Founder of Gydget Co-founder of Digital Impact



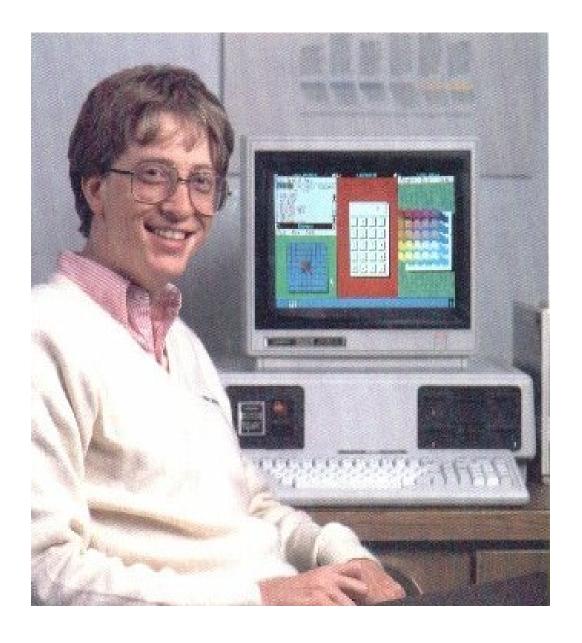
### A Developer's Profile



Some 30+ years ago when most people thought freedom of sharing led to innovation in software, this fellow developer of ours demanded that people should pay, and in so doing he became...



## A Billionaire's Profile



### Agenda

- Open for Social Business
- Social Apps Landscape
- Revenue Models for Social Apps
- Costs and Operation
- Best Practices
- Stats (\$\$\$) and Summary



## Open for Business





But how to get customers?

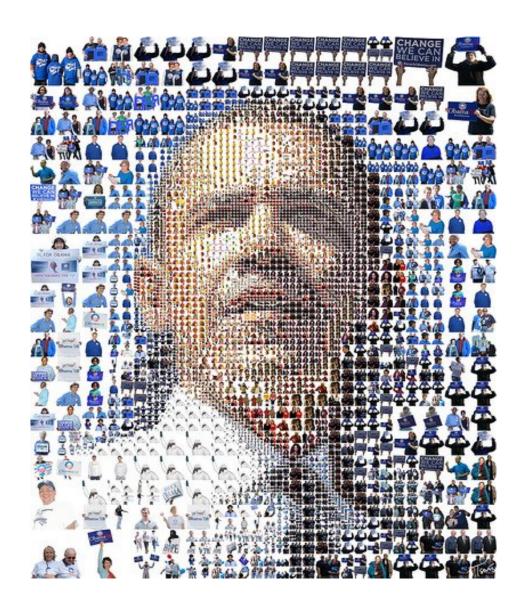


## Open for **Social** Business

To get customers...



Be Social!





### Disadvantages of a Brick 'n Mortar Business

- Lots of sales pitch
- Build one stand at a time
  - Build one is fun, two is a bore, three or more a chore
- Delivery of tangible goods

A better mouse trap?

Social Apps...



Advantages of a Business with Social Apps

- Grow traffic on social network
  - Users and friends
  - Communication Channels



- Build once and use it everywhere
  - Scale from 1 to 1000 servers
  - OpenSocial standard







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## Social Networks and Application Platforms

#### Social Networks



#### **Facebook**

















- Application Platforms
  - OpenSocial
  - Facebook



Facebook Developer Platform



## Social Apps Ecosystems

App Developers













- Dozens of independent developers (>\$1M dollars rev)
- Advertising Networks and Offer Aggregators
  - Social Media, RockYou, OfferPal, SuperRewards
- Payment providers
  - PayPal, Playspan/Spare Change, Zong
- Tool providers
  - Sometrics, Kontagent,



## Social Apps by Category and \$\$\$ (OfferPal)



- \$400 Card games
- \$200 MMORPG
- \$175 Racing
- \$150 Owning
- \$100 Pets
- \$75 Green
- Others













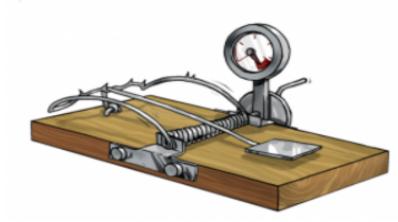


#### Mouse Hunt App: A Better Mouse Trap



- 470K MAUs
- Courtesy of HitGrab, Inc.
- Game Play:

You are a hunter, hired by the king to trap the mice that infest his kingdom. For each mouse you catch, you'll receive a unique reward, with the aim of being the best in the land!



- What can be bought?
- Real dollars? How?



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## Social App Business: Revenue Streams

- Advertising
- Virtual economy
- Offers and Surveys
- Branding
- Others

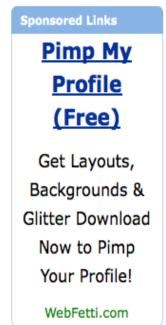


#### Revenue Streams: Advertising

- Display and text link ads
  - CPM: Cost Per Mille (thousand)
  - CPC: Cost Per Click
  - CPA: Cost per Action (email/referral/affiliate purchase)
  - CPI: Cost per Install (specific to installing social apps)



Banner & Skyscraper







#### Advertising: Code/Tag samples

#### **AdSense**

```
<script type="text/javascript"><!--</pre>
google_ad_client = "[publisher_id]";
google ad width = 468;
google_ad_height = 60;
google_ad_format = "468x60";
//-->
</script>
<script type="text/javascript"</pre>
src="http://pagead2.googlesyndication.com/pagead/show_ads.js">
</script>
```

#### Right Media Exchange

<!-- BEGIN TAG - 728x90 - [publisher\_id] - DO NOT MODIFY -->

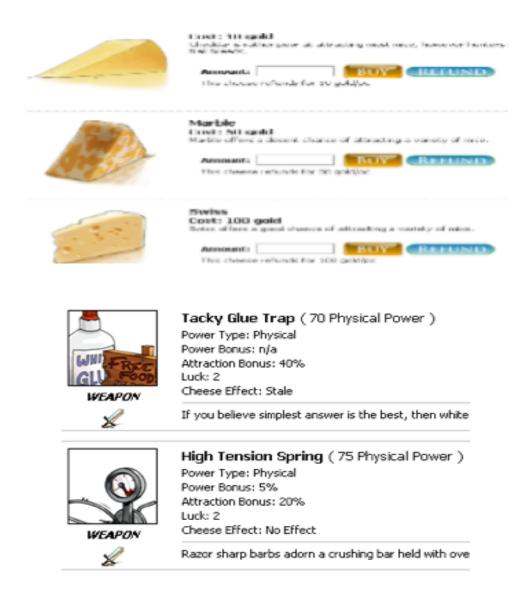


## Advertising: Challenges / Opportunities

- Challenge: Declining eCPMs (\$0.10 \$2.00)
  - Demand / Supply
  - ROI for advertisers
  - Canvas view ads ONLY for most networks
- Opportunity: Provide contextually relevant ads
  - Music app => downloads, ringtones and concert tickets



#### Revenue Streams: Virtual Economy



#### Mouse Hunt App

- Goal: Catch mice
- Virtual currency: Gold
- Virtual goods to buy
  - Cheese
  - Trap
- How to get Gold
  - Catch mice
  - From King
  - Loot and trade
  - Or buy gold via...

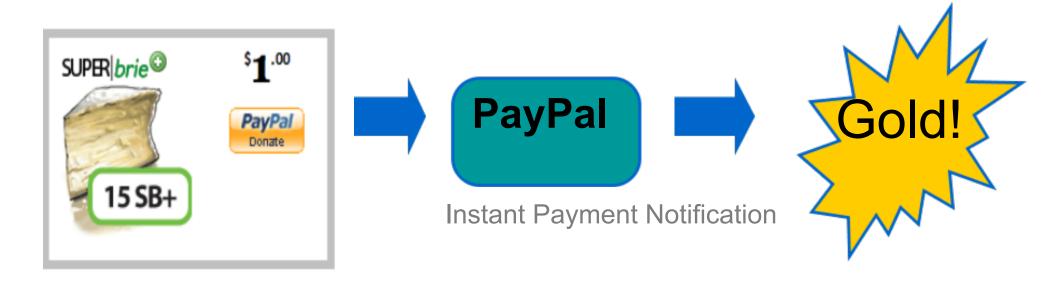


Revenue Streams: Virtual Economy (Buy Gold)

## **Mouse Hunt App**

- Buy Gold via CC/PayPal
- Or Earn Gold via...

Industry wide \$1-10 per 100 DAUs Daily Active Users

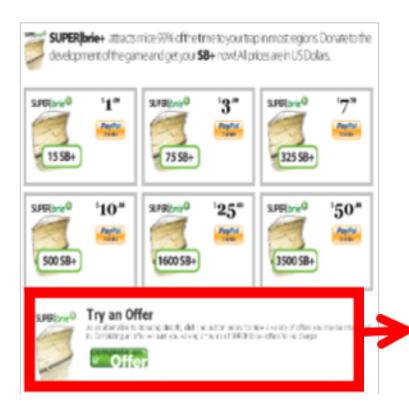


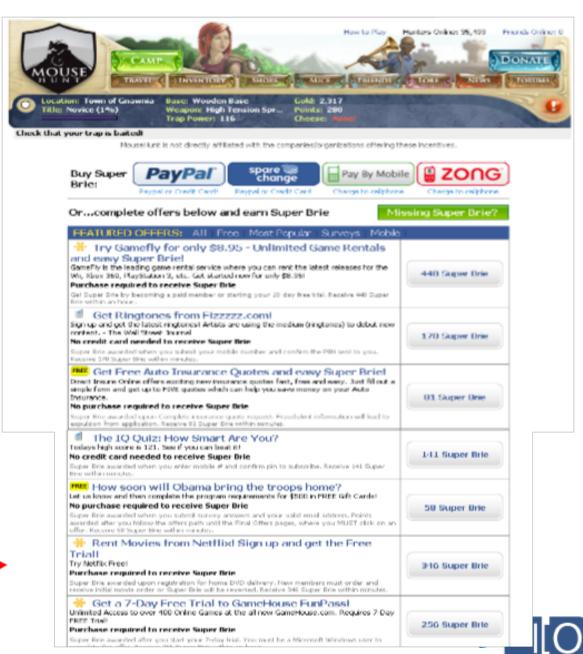


### Revenue Streams: Offers/Surveys (Earn Gold)

## **Mouse Hunt App**

- Earn gold by filling out
  - o Offers
  - Surveys





### Revenue Streams: Virtual Economy (Earn Gold)

## **Mouse Hunt App**

Earn Gold via offers





## **OfferPal**

Callback within seconds to hours





## Revenue Streams: Offers/Surveys (Code)

#### Offer iframe

```
<iframe src="http://pub.myofferpal.com/[publisher id hash]/
showoffers.action?snuid=[user_id]"
frameborder="0">
</iframe>
```

#### Callback URL

http://www.myserver.com/offerpal\_callback.php

```
if( isset($_GET['snuid']) && isset($_GET['currency']) ) {
    $u = $_GET['snuid'];
    $q = $_GET['currency'];
    $q = "update USER set gold = gold + $q WHERE u = $u";
}
```



#### Revenue Streams: Branding

- Branding apps
  - Coca Cola on Xiaonei
  - Sony/Ericsson/MTV on orkut
  - Heineken on Netlog



source: Interbrand

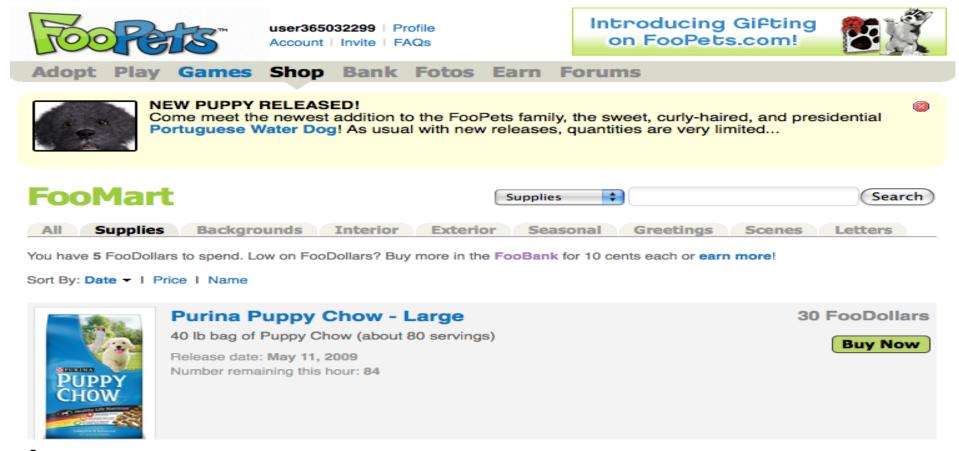
- Branding elements/campaigns
  - Purina Dog Foods in FooPets
  - National Geographics in Where I've been
  - o iCue by NBC/Appssavvy for Lexus on Facebook



## Branding App: New Year's Coca Cola



## Branding App: FooPets & Purina



Appssavvy: "connects many of the most popular social media applications found on Facebook, MySpace, the iPhone... with leading brands and agencies"



#### Revenue Streams: Others

- Free/Freemium apps
  - Box.net Files (LinkedIn)
  - Huddle Workspace (LinkedIn)
- Premium apps for fee
  - Fanbox
- Donation
  - Causes
- Custom development
  - Contracting and consulting
- 3rd Party versus 2nd Party Apps
  - Develop container apps



#### Box.net Files

by Box.net

Add the Box.net Files application to manage all your important files online. Box.net lets you share content on your profile, and collaborate with friends and colleagues.



#### **Huddle Workspaces**

by Huddle.net

Huddle gives you private, secure online workspaces packed with simple yet powerful project, collaboration and sharing tools for working with your connections.





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#### Social App Business: Cost

#### Development

Engineering, graphics, product/project management

#### Hosting and Operations

Servers, bandwidth, storage, tuning and scaling

#### Marketing/Advertising

Ad spend to grow traffic, campaign tuning and monitoring

#### Community Management

Users support and management, feature request feedback

#### Others

- Sales (better ads/offers and direct)
- BizDev (e.g. rev share)
- Legal, Office, etc.



#### Cost: Development

#### Development

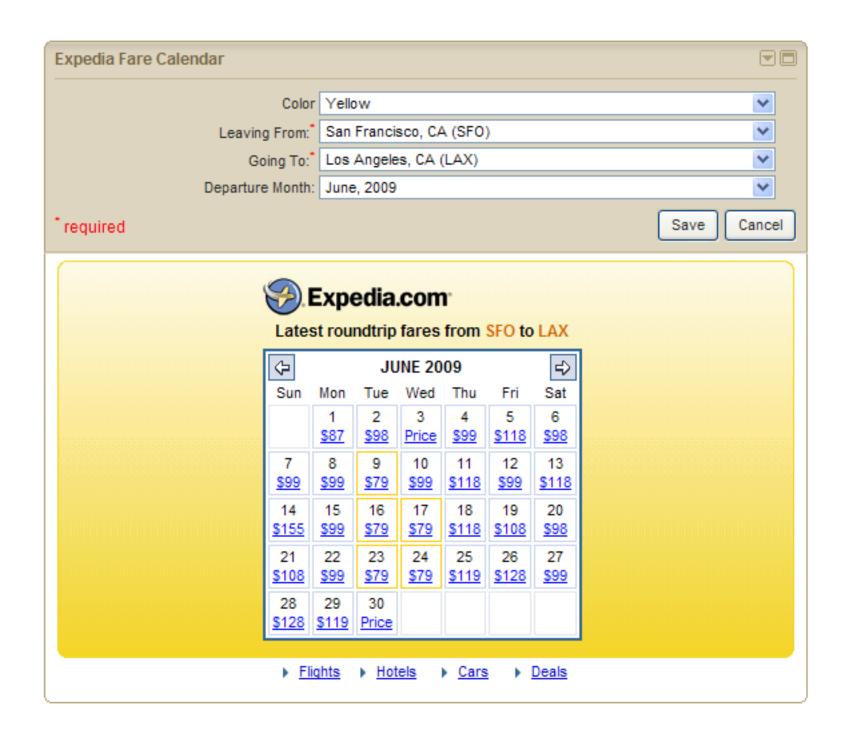
- 1-5 developers
- 1 Product manager
- 0-1 Graphics designer
  - contractor or FT
  - project based
  - creative commons can help



#### Tips

- Keep feature sets small
- But a strong theme
- Iterate more often
- 1-3 months dev. cycle





## Cost: Hosting and Operations

## Manage your own LAMP stack

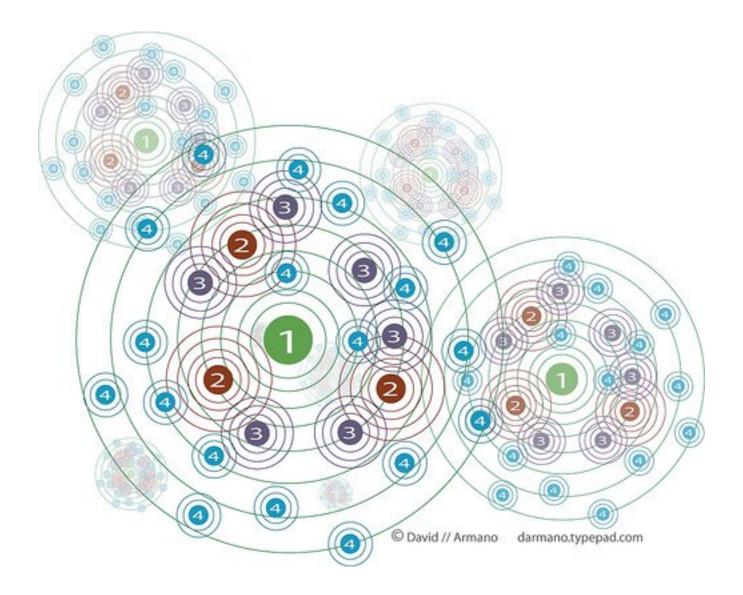
- Lease your own servers
  - ~\$100/month per server (Web and DB)
- Joyent/Sun
  - From free to paid (on-demand servers)



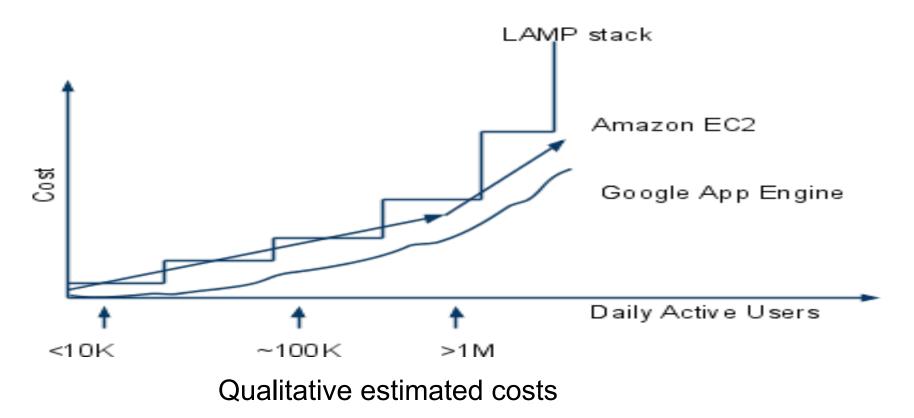
#### Cloud Solutions

- Amazon EC2
  - FamilyLink (~36M users on Facebook)
- Google App Engine
  - BuddyPoke app: (~40M users on dozens of networks)





#### Cost: Hosting and Operations



• LAMP: DIY everything

• EC2: Procure/configure servers on demand

Google App Engine: Focus on app and we do the rest!

Python and Java (beta)



## code.google.com/appengine

From Spark Plug to Drive Train: Life of an App Engine Request	App Engine
Building Scalable, Complex Apps on App Engine	App Engine
Offline Processing on App Engine: a Look Ahead	App Engine
The Softer Side Of Schemas - Mapping Java Persistence Standards To the Google App Engine Datastore	App Engine
Transactions Across Datacenters (and Other Weekend Projects)	App Engine
App Engine Nitty-Gritty: Scalability, Fault Tolerance, and Integrating Amazon EC2	App Engine
JRuby and loke on Google App Engine for Java	App Engine
App Engine: Now Serving Java	App Engine
A Design for a Distributed Transaction Layer for Google App Engine	App Engine

#### Cost: Marketing/Advertising

## Advertising

- Gallery Sponsorship (CPM, CPI, Rev Share)
- App Ad Networks (e.g. Rock You, OfferPal, Social Media)

# Organic Growth

- Activity Streams
- Profiles
- Invites

Notifications



#### **Texas Hold'em Poker**

by Zynga

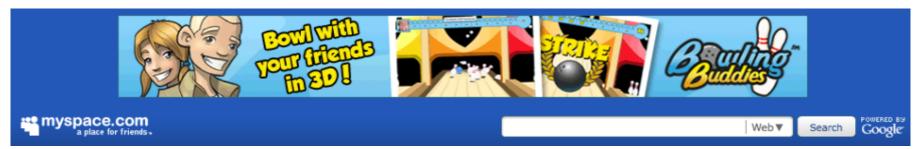
Play against your buddies & other players in MySpace's biggest poker game. Collect your daily bonus!



Mafia Wars

by Zynga

Top Crime Game on MySpace! Do jobs, embezzle cash, & fight your rivals until YOU are the GODFATHER.





Sponsored App

Sponsored App

Subscriptions

Videos

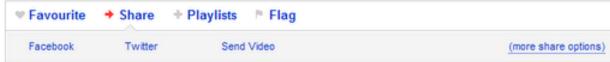
Channels

#### **Buddy Poke!!!**

Home



★★★★☆ 8 ratings 7,786 views



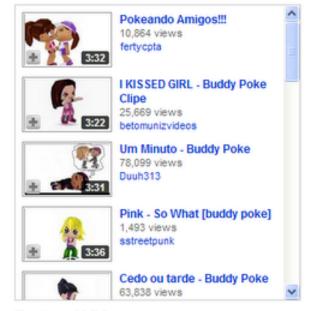
- Statistics & Data
- ▶ Video Responses (0)
  Post a Video Response
- ▼ Text Comments (4) Options Post a Text Comment

lilallie89 (4 months ago)
OMG THEY LOOK LIKE MY SIMS! =D





- More From: jeffaopji
- Related Videos



Featured Videos

## Cost: Community Management

## Community Management

- Support user forums within applications
- Network itself will likely have discussion areas
- User requests to product roadmap
- Security issues
- App/game play loopholes
- Confused, malicious, novice users
- Tips: Scale by leveraging your users
  - Invite power users to co-manage forums
  - User Generated Content e.g. graphics, polls, quizzes



#### Other Costs: Sales and BizDev

- Ad Sales
  - Best ad networks/offers
  - Direct sales force



- Partnerships e.g. rev sharing
- Track and optimize revenue e.g. tools
- Fixed cost e.g. office, legal



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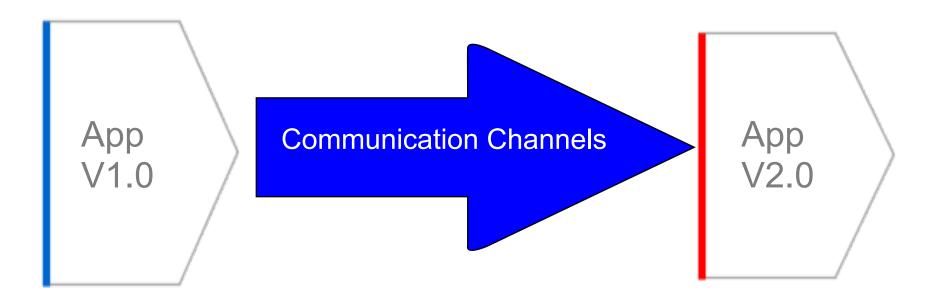
#### Iterative Process: Monitor 3R's



- Reach: conversion to installs (e.g. 1-10% invites)
  - o Time of install
- Retention: conversion to active users (1%-40%)
  - Last login tracks repeat users; Google Analytics
- Revenue: conversion to paid users (0.2-5%)
  - Average Revenue Per User (\$1-15 per 100 DAU)



#### **Tuning Communication Channels**



#### Communication Channels

- DO NOT spam users
- A/B testing for invites, notifications and activity stream/feed
  - Use dynamic text
  - Keep curiosity factor in mind
  - Make them timely and relevant e.g. birthday calendar



#### Tuning: A/B Testing Example



#### 22% Conversion:

"I just sent you a secret gift! I know you will love it. I will give you a hint, it is {food.hint\_description}"

#### 8% Conversion:

"John is hungry. Are you hungry?"

Source: Kontagent





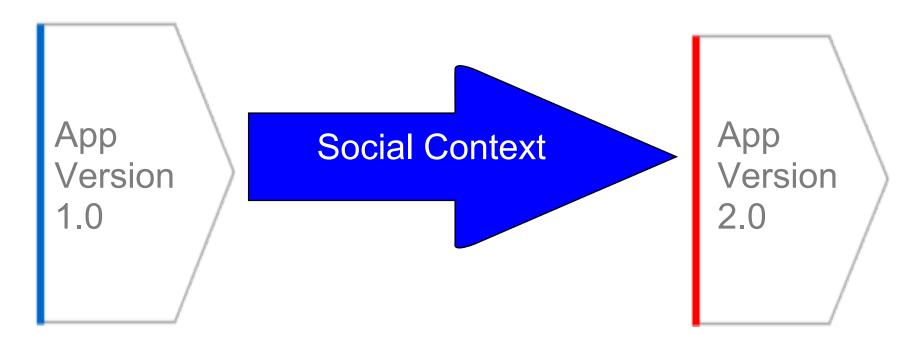
#### Tuning: A/B Testing with Ads/Offers



Source: Sometrics Virtual Currency Manager



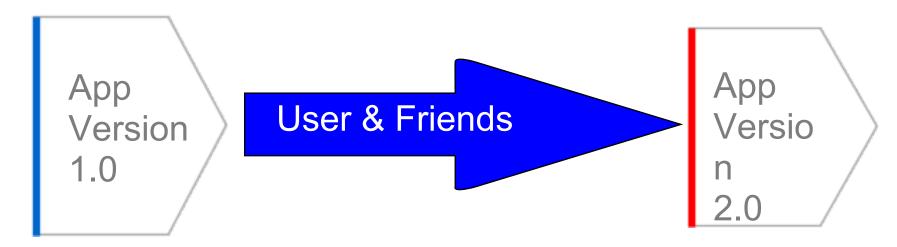
#### Provide Social Context for Engagement



- Use game design pattern to provide context
  - Leaderboard, leveling up, points system
  - Locked items, daily unlocking code



#### Users/Friends for Product Roadmap



"At Playdom,...we don't assume what they will or won't like; instead we look to them to actively enhance our games...we listen, really listen, to them. If our players don't like something, we phase it out. And we give them more of what they want. It's that simple."

Courtesy of Playdom



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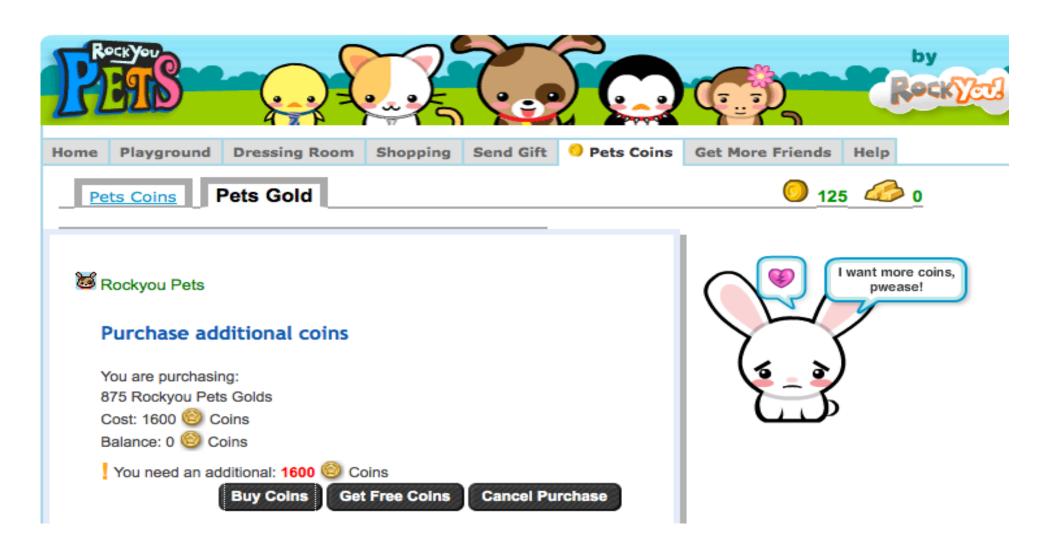
#### Market Size in \$\$\$

- Annual revenue \$500-700M (estimated)
- Top 10 app developers ~65% (estimated)
- Revenue split (estimated)
  - Ads 20-25%
  - Virtual payments 30-35%
  - Offers 30-35%
  - Others 5-10%



### OpenSocial Virtual Currency API (5/15)

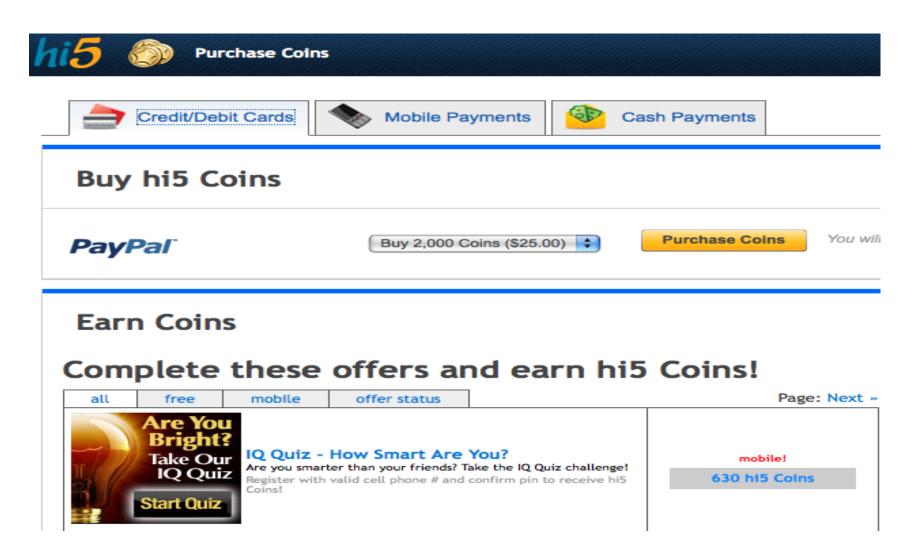
http://code.google.com/p/opensocial-virtual-currency/





## OpenSocial Virtual Currency API (5/15)

http://code.google.com/p/opensocial-virtual-currency/





## Sample App #1: 10K Daily Active Users

Avg Publisher Payout: \$75/day per 1,000 DAU (Source: Offerpal)

Revenue

Daily (\$25/1000 DAU) x 10K = \$250

O Annual:

\$91.2K

Cost

Hosting: server@\$200/month

O Annual:

\$2.4K

Gross Profit

O Annual:

\$88.6K

Good for 1-person team?!



## Sample App #2: 100K DAUs

Revenue

Daily (\$25/1000 DAU) x 100K = \$2.5K

O Annual:

Cost

Hosting: servers@\$5000/month

O Annual:

Gross Profit

O Annual:

Expense

O Annual:

Operating Profit

\$912K

\$60K

\$852K

\$202K

\$650K

Good enough to staff a team of 5+ developers



### Sample App #3: 1M DAUs

<ul> <li>Revenue         <ul> <li>Daily (\$25/1000 DAU) x 1000K = \$25K</li> <li>Annual:</li> <li>Cost</li> </ul> </li> </ul>	\$9.13M
<ul><li>Hosting: servers@\$20K/month</li></ul>	ФО ООВ <b>4</b>
<ul><li>O Annual:</li><li>● Gross Profit</li></ul>	\$0.23M
o Annual:	\$8.9M
<ul><li>Expense</li><li>Annual:</li></ul>	\$1.9M
Operating Profit	

Good enough to staff a team of 20-40 developers

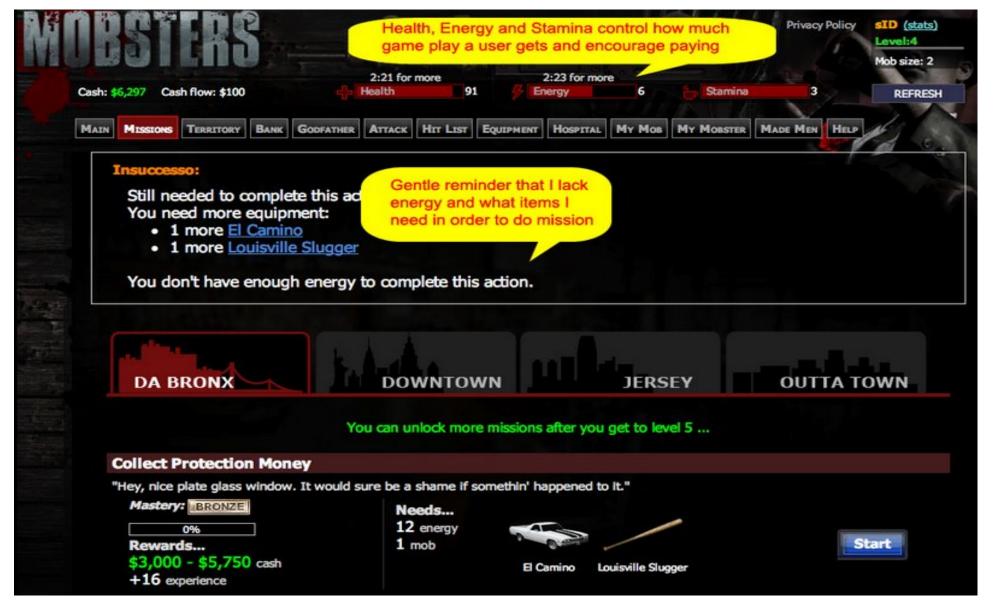


## Social Apps Market in Perspective

	Annual Revenue	Daily Active Users	Annual Revenue per DAU
Social Apps (estimated)	\$500-700M	50-70M	\$5-12
Yahoo Public data: Google Finance Alexa	\$7,200M	130-160M	\$45-55
Google Public data: Google Finance Alexa	\$21,800M	160-200M	\$100-135



#### One More Example App: Mobsters





#### Summary

- Business Opportunity with Social Apps
- Landscape, Revenues, Costs, Best Practices
- Dollars and Sense





#### **Attributions**

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http://www.flickr.com/photos/tsevis/2279253649/

http://www.flickr.com/photos/gettheshot/1047513424/

Mouse Hunt, courtesy of HitGrab Inc.

RockYou SuperPets, courtesy of RockYou

Quote from Playdom, courtesy of Playdom



#### Q&A

#### Resources and links

**Google Code** 

http://code.google.com

**OpenSocial APIs** 

http://code.google.com/apis/opensocial/

OpenSocial.org

http://www.opensocial.org/

**Google App Engine** 

http://code.google.com/appengine/

Post your questions for this talk on Google Moderator: code.google.com/events/io/questions

http://bit.ly/mCqkQ



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