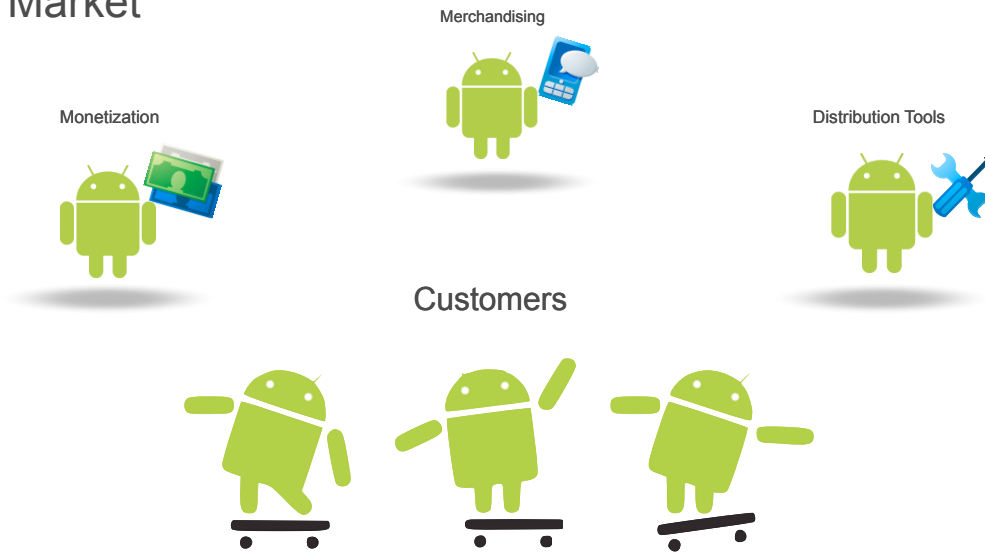


# Android Market For Developers

Eric Chu (Android Developer Ecosystem)  
2011.5.11



# Android Market



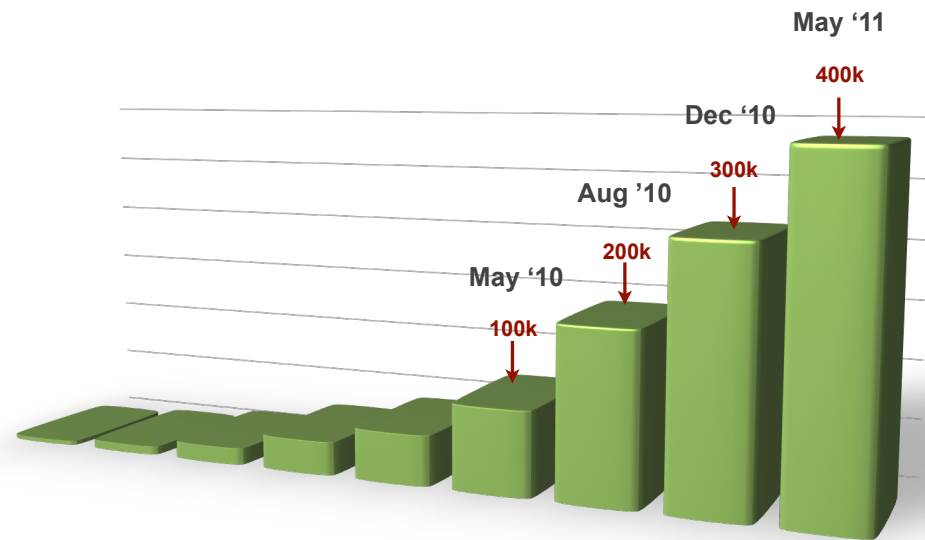
This even holds true for a game that uses 3D graphics...



Customers



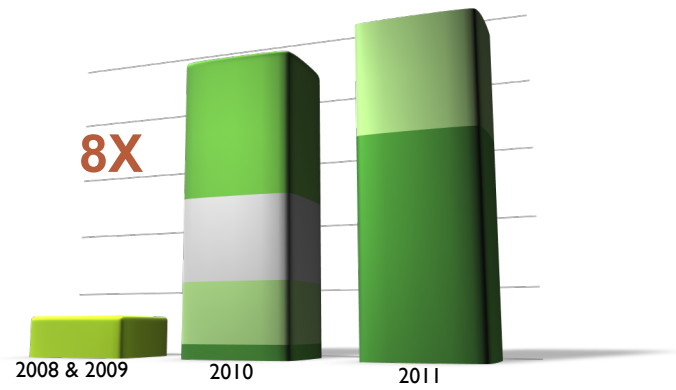
## Rapid Growth in Activations



# Rapid Growth in Apps Consumption

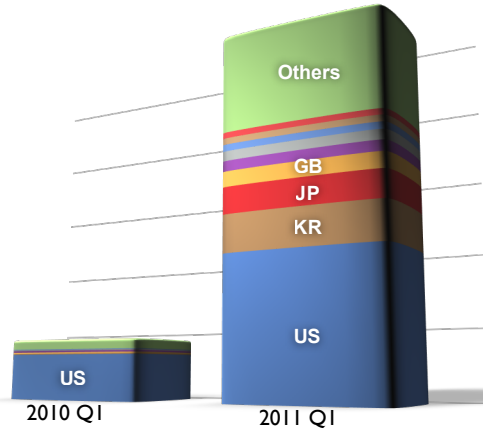
Aggregate installs (unit billion)

■ Q1 ■ Q2 ■ Q3 ■ Q4 ■ 2008 & 2009

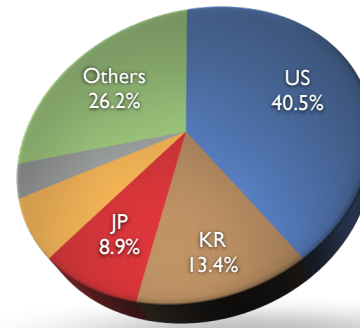


# Growth By Country

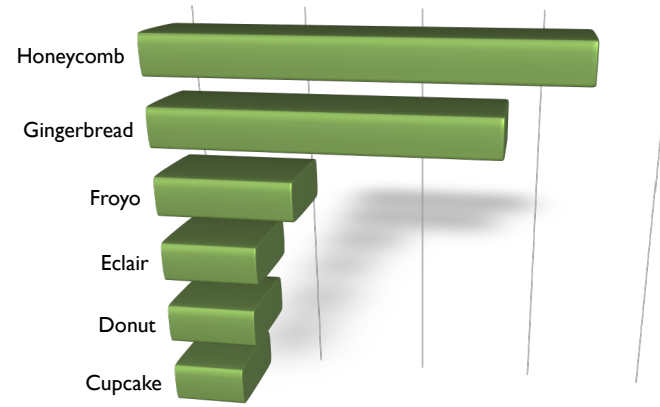
Activations



Installations



## Installs Per User by OS Version



# How do the Categories Stack Up?

Overall	
Products	Recent Installs
<b>Highest</b> Entertainment Games Tools Books & Reference This	Games Entertainment Tools Media and Video Travel and Local Transportation Business Medical



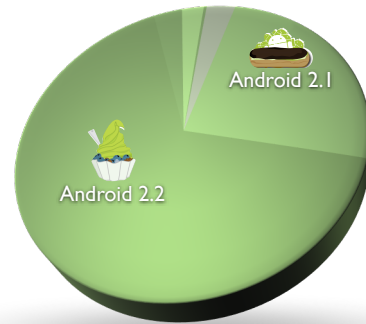


## Distribution tools

# Too Many Platform Versions?

Devices accessing Android Market, last 30 days

- Android 2.2
- Android 1.6
- Android 1.5
- Android 3.0
- Android 2.3.3
- Android 2.1



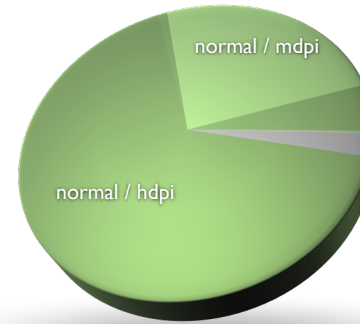
- Android 2.1, 2.2, & 2.3 represent 94+%
- Industry commitments to upgrade devices for 18 months
- Single binary can
  - Run across multiple OS versions
  - Use newest APIs and maintain support for older versions

# Too Many Screen Sizes?

Devices accessing Android Market, last 7 days

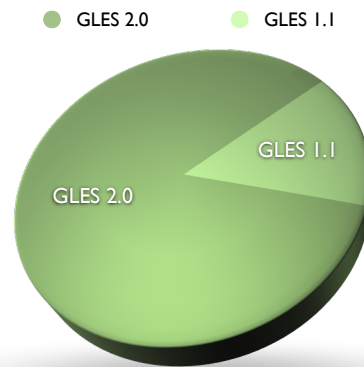
- Two sizes represents 93% of the volume
- Apps can support multiple screen sizes with
  - A single binary and resource
  - A single binary and multiple resource bundles

● normal / hdpi   ● normal / ldpi   ● normal / mdpi  
● small / hdpi   ● xlarge / mdpi   ● large / mdpi



## 3D Graphics?

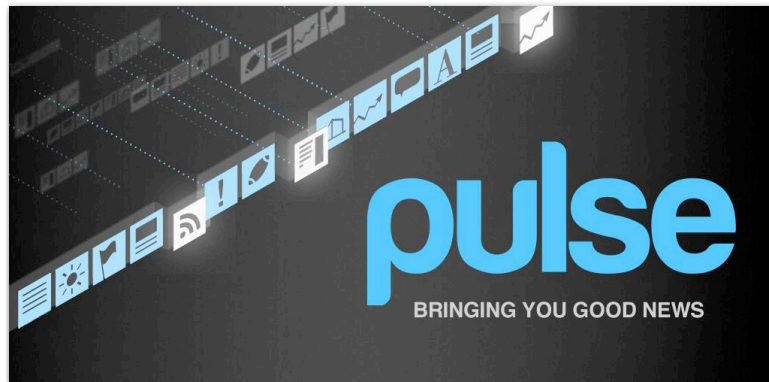
Devices accessing Android Market, last 7 days



- 90+% of devices support OpenGL ES 2.0
- Apps can supply code or resources for both versions in a single APK

## One Binary: Pulse News

- Platform versions:
  - Android 1.5 and higher
- Screen sizes and densities:
  - Small, normal, large, extra large
  - Low, medium, high
- Device profiles:
  - Phone and tablet
  - 99% of devices..



## One Binary: Angry Birds Rio

- Platform versions:
  - Android 1.6 and higher
- Screen sizes and densities:
  - Small, normal, large
  - Low, medium, high
- Device profiles:
  - Phone and tablet
  - 97% of devices



Here's Angry Birds, a game that uses 2D graphics.  
They deliver a great game to 99% of devices using a single .apk.

## One Binary: Gun Bros

- Platform versions:
  - Android 2.0 and higher
- Screen sizes and densities:
  - Normal, large, extra large
  - Medium, high
- Device profiles:
  - Phone and tablet
  - 94% of devices



This even holds true for a game that uses 3D graphics...

## Designed for Flexibility

- Single APK for wide distribution
  - Worldwide installed base
  - Broad range of hardware capabilities
  - Support newest APIs & maintain support for older versions
- Multiple APKs for different markets or device capabilities



## Distribution Flexibility

- Business targeting
  - Countries
  - Carriers
- Capabilities targeting
  - Platform version
  - Screen size and density
  - OpenGL ES version
  - Hardware and software features
  - GL texture-compression format
  - ABI

2-slide build

Note: We are introducing two new capabilities to improve how you target...

## Device Availability

- Based on Application's manifest
- Show all supported devices
- Published or draft apps
- Option to exclude specific devices if needed
- Available starting today....

2-slide build

Note: We are introducing two new capabilities to improve how you target...

## Multiple APK Support

- Multiple custom APKs for specific segments
  - Platform versions
  - Screen sizes & densities
  - Texture compression formats
- Available as one product listing
- Market delivers the appropriate apk
- User ratings, comments, and billing are aggregated
- Available in June

2-slide build

Note: We are introducing two new capabilities to improve how you target...

## Support for Large Apps

- Support up to 4 GB
- Publish code & large assets in separate archive
- 50MB app package + Up to two 2GB archives
- Android Market hosting
- Market manages download & install of archives
- Available in June

2-slide build

Note: We are introducing two new capabilities to improve how you target...

## AdMob Integration

- Streamlined access to the biggest mobile ad network
- One-click entry to AdMob campaign setup from Developer Console
- Quickly build campaign for audience profiles significant to your products
- No impact on APK
- Available starting yesterday...

2-slide build

Note: We are introducing two new capabilities to improve how you target...

## Application Statistics and Sales Reporting

- Comprehensive view of app's performance
- Details include
  - Country, language, Screen size, OS version
- Per-app stats and comparison against all apps in the same category
  
- Monthly sales reporting
  - Downloadable spreadsheet each month
  - Detailed transaction record
  - App purchase and in-app payments
  - Payout in developer currency
  - Reports available for sales from Jan 2010

22



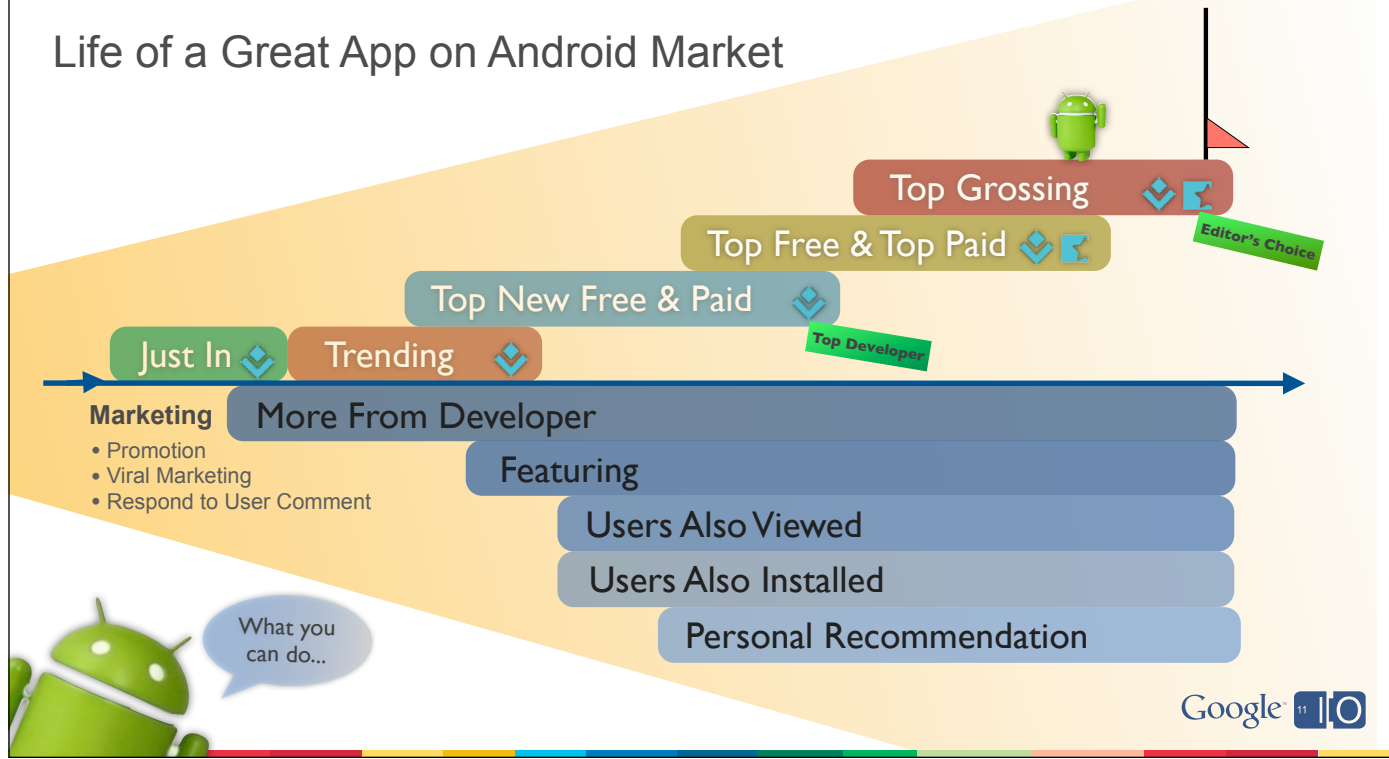
2-slide build

Note: We are introducing two new capabilities to improve how you target...



Merchandising

# Life of a Great App on Android Market





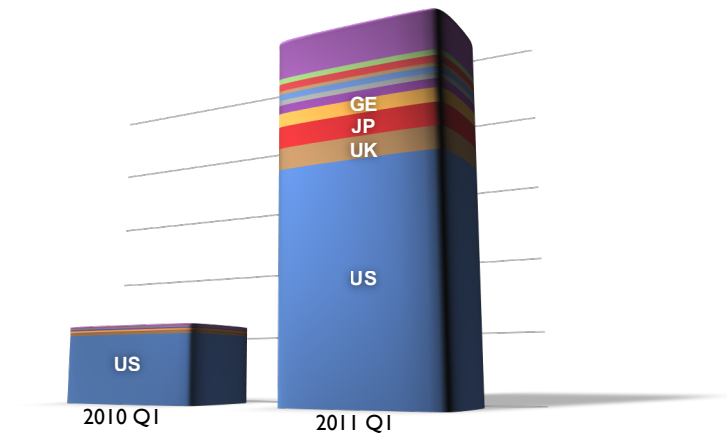
## Merchandising on Android Market

- More real estate
  - top lists,
  - cross-selling lists
  - recommendations
- Fresher, more relevant lists
- Advertising integration
- Recognition of great apps and developers
  - Editor's Choice
  - Top Developer



Monetization

## Accelerating Revenue

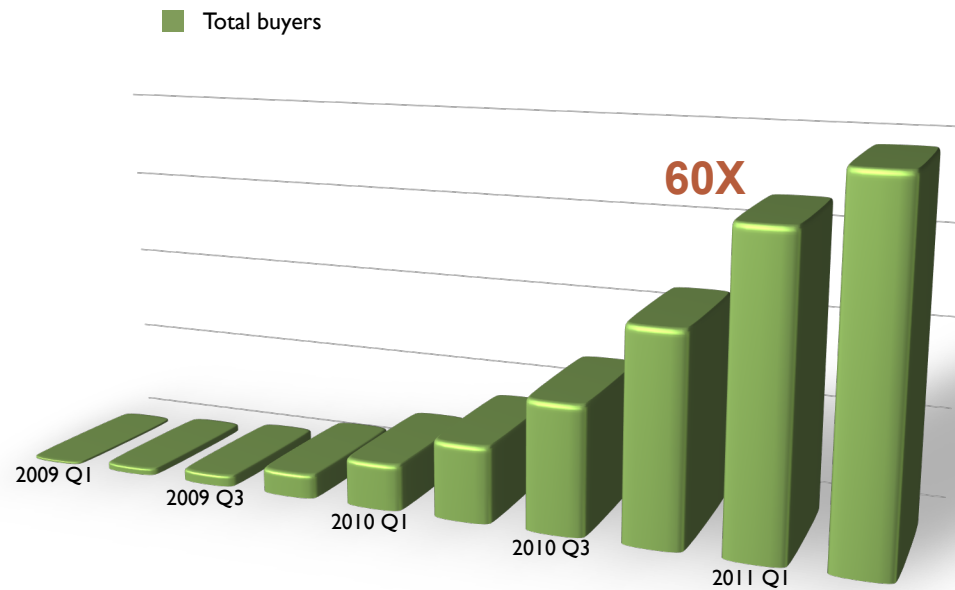


27

Google I/O

At Google I/O last year, users in 14 countries could purchase apps. Since then, we've been working hard to give you the broadest possible customer base, as Android grows to new countries. Last fall, we expanded to 18 additional buyer countries and today I'm pleased

## More Buyers



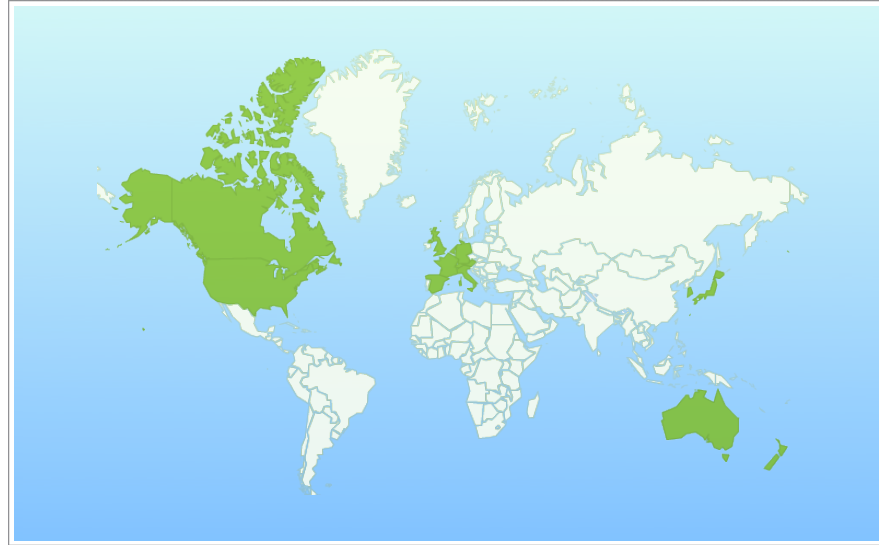
28

Google I/O

At Google I/O last year, users in 14 countries could purchase apps. Since then, we've been working hard to give you the broadest possible customer base, as Android grows to new countries. Last fall, we expanded to 18 additional buyer countries and today I'm pleased

## More Buyer Countries

Google I/O 2010: 14 buyer countries



29

Google I/O

At Google I/O last year, users in 14 countries could purchase apps. Since then, we've been working hard to give you the broadest possible customer base, as Android grows to new countries. Last fall, we expanded to 18 additional buyer countries and today I'm pleased

## More Buyer Countries

Google I/O 2011: users in 131 countries can now purchase apps



30

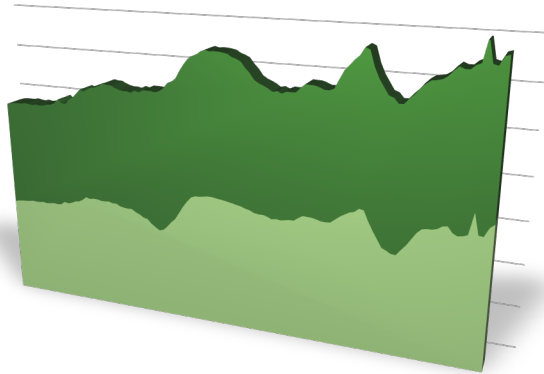
Google I/O

At Google I/O last year, users in 14 countries could purchase apps. Since then, we've been working hard to give you the broadest possible customer base, as Android grows to new countries. Last fall, we expanded to 18 additional buyer countries and today I'm pleased

## Direct Carrier Billing

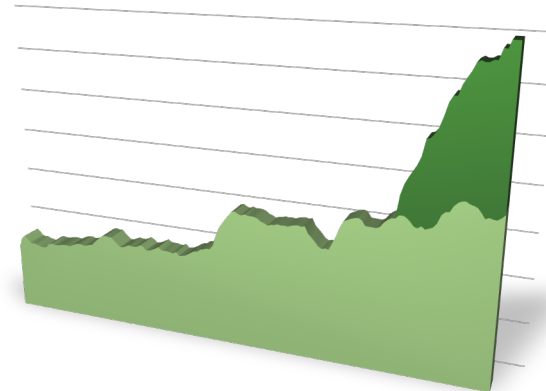
A major carrier in US

CARD DCB



A major carrier in Asia

CARD DCB

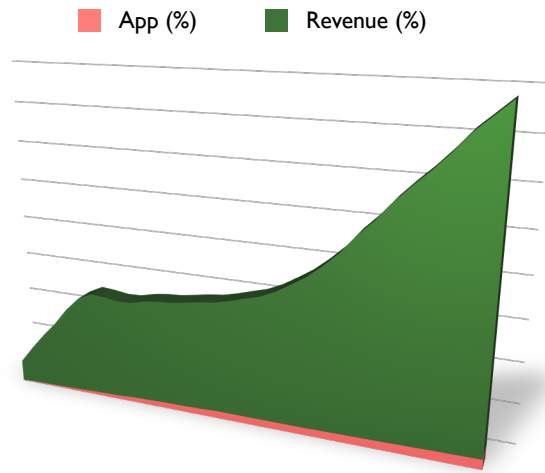


31

Google

- This is an example of daily app purchases for a major Japanese carrier

## In-App Billing



- Launched 45 days ago
- 14% of average daily revenue
- App 30X

32

Google 

- This is an example of daily app purchases for a major Japanese carrier





## Some Final Thoughts

# Drive Traffic to Your App in Android Market

## Cross promotions

- On your own website; Link to Market and/or Barcode
- From within your apps via deep-links back into Market

## Advertising

- Ad network campaigns
- Send to phone via email, text, or barcode

## Affiliates

- Let other apps prompt installation of your app

## Viral Marketing

- Make it easy to share your app
- YouTube, blogosphere, tweets, and so on

## Pricing: Free versus Paid

### Free

- Significantly more impressions and installations of free vs. paid apps
- Freemium model is very popular in Android Market
- Free plus IAB is a strong revenue generator
- Free with ads
- Affiliate models

### Paid

- Price it right, relative to your category
- Test price sensitivity and elasticity
- In-app payment

# Ways to Improve Ranking

## Pre-launch:

- Build a great app
  - Utilize platform features and navigation
  - Optimize for supported screen sizes
- Build for broad distribution
  - Target as needed
- Price relative to your category and region
- Explain required permissions
- Make it easy to rate and comment

## Post-launch:

- Market your product
  - Price promotions
  - Cross-promote
  - Advertise
  - Affiliates
- Monitor user feedback, error reports
- Respond to user comments
- Provide timely, useful updates

## Don't

- Launch prematurely
- Require excessive permissions
- Spam users
- Overprice relative to category

Thank you!

