Audiovisual Interaction w/ oF & iOS

Week 1 / 8: Intro to iOS & openFrameworks

Tuesday Jan 31, 2012

Parag K Mital | http://pkmital.com

V&A

Snow Leopard + Xcode 3.2.6

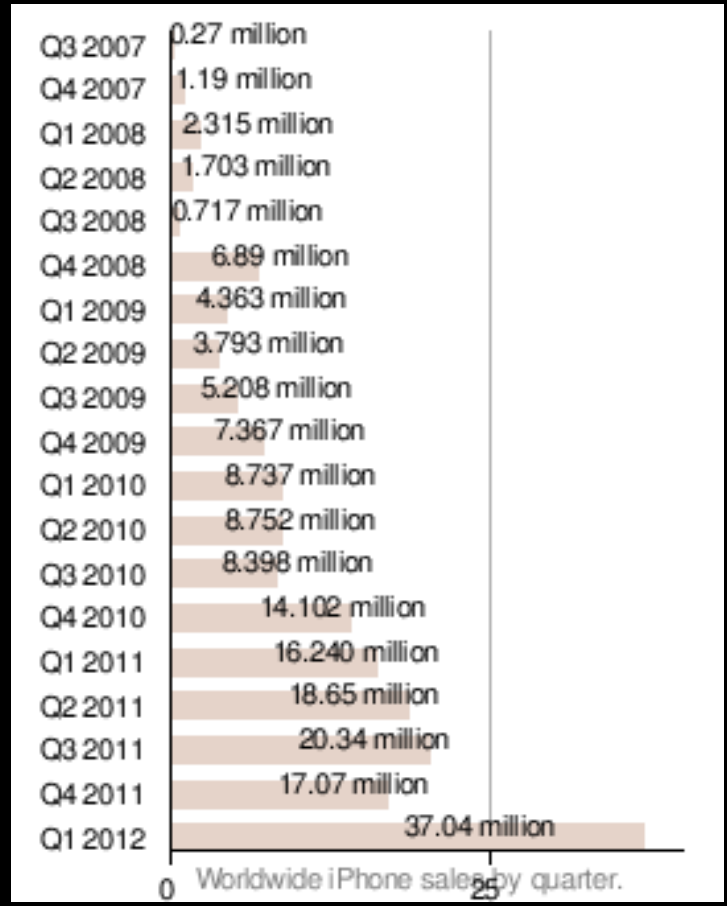
OR

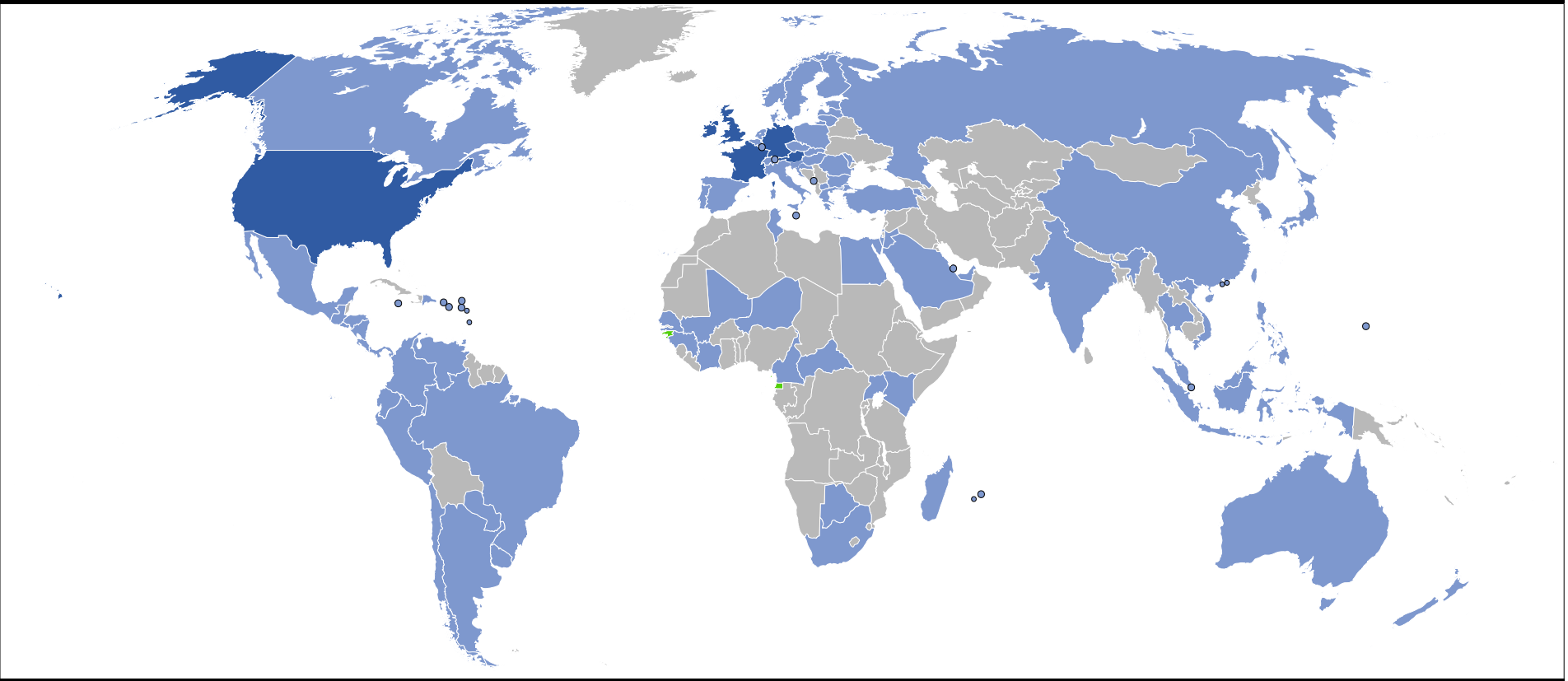
Lion + Xcode 4.2.1

iPhone

1. it is a ubiquitous device

AT&T
1:29 AM
SMS
Text
Tuesday
9
Calendar
Photos
Camera
YouTube
Stocks
Maps
Weather
Clock
Calculator
Notes
Settings
Phone
Mail
Safari
iPod

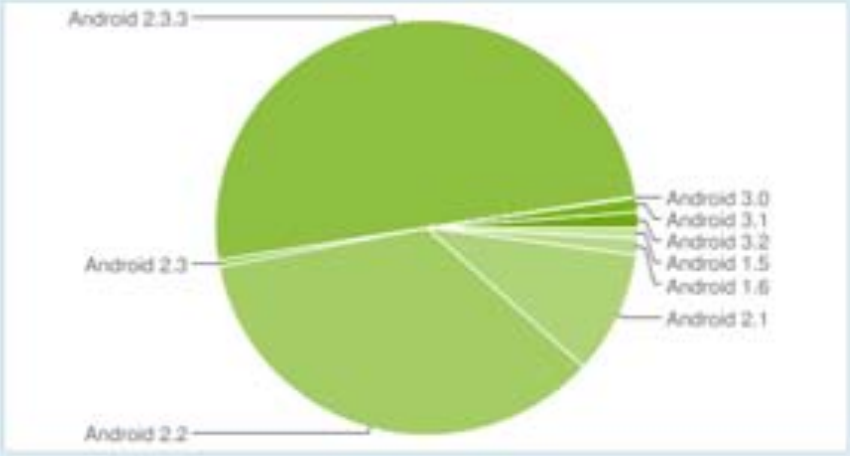

Q3 2007
0.27 million
Q4 2007
1.19 million
Q1 2008
2.315 million
Q2 2008
1.703 million
Q3 2008
0.717 million
Q4 2008
6.89 million
Q1 2009
4.363 million
Q2 2009
3.793 million
Q3 2009
5.208 million
Q4 2009
7.367 million
Q1 2010
8.737 million
Q2 2010
8.752 million
Q3 2010
8.398 million
Q4 2010
14.102 million
Q1 2011
16.240 million
Q2 2011
18.65 million
Q3 2011
20.34 million
Q4 2011
17.07 million
Q1 2012
37.04 million
0
25
Worldwide iPhone sales by quarter.



2. the OS and hardware are unified

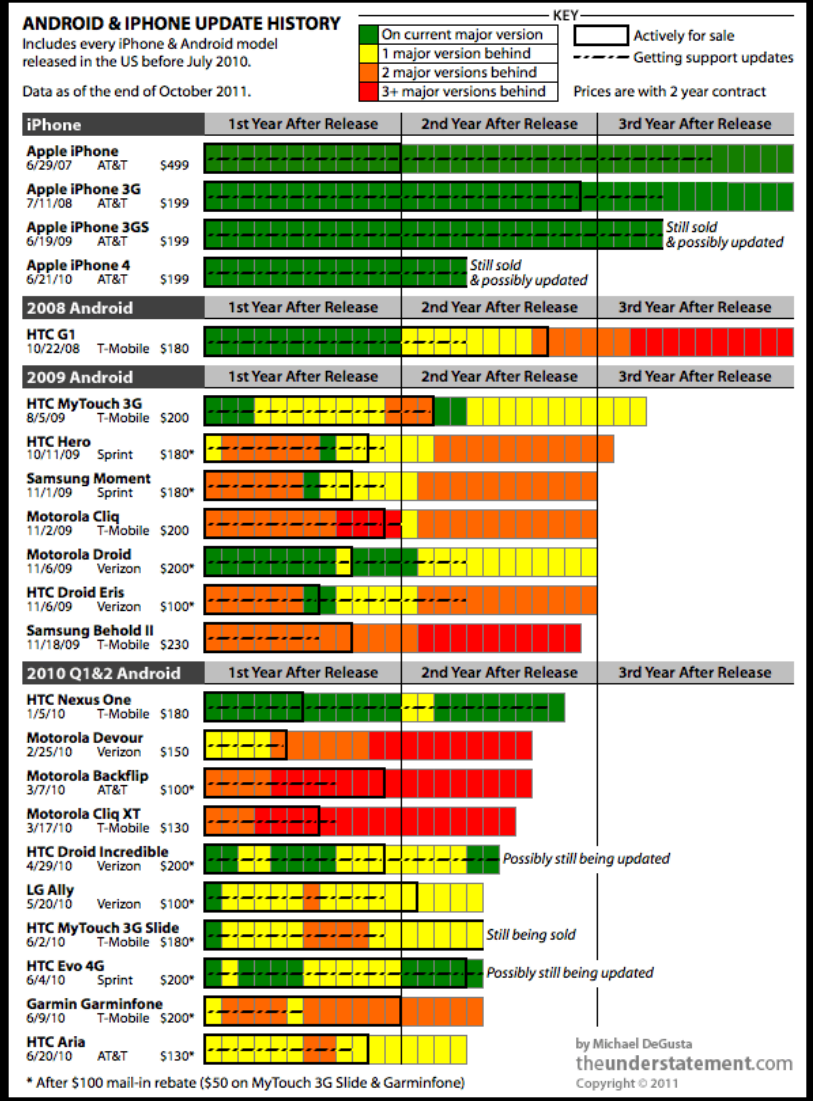
Current Distribution

The following pie chart and table is based on the number of Android devices that have accessed Android Market within a 14-day period ending on the data collection date noted below.



Platform	Codename	API Level	Distribution
Android 1.5	Cupcake	3	0.8%
Android 1.6	Donut	4	1.3%
Android 2.1	Eclair	7	9.6%
Android 2.2	Froyo	8	35.3%
Android 2.3 - Android 2.3.2	Gingerbread	9	0.5%
Android 2.3.3 - Android 2.3.7		10	50.1%
Android 3.0	Honeycomb	11	0.1%
Android 3.1		12	1.1%
Android 3.2		13	1.2%

Data collected during a 14-day period ending on December 1, 2011


ANDROID & IPHONE UPDATE HISTORY
Includes every iPhone & Android model released in the US before July 2010.
Data as of the end of October 2011.
KEY
On current major version
1 major version behind
2 major versions behind
3+ major versions behind
Actively for sale
Getting support updates
Prices are with 2 year contract
iPhone
1st Year After Release
2nd Year After Release
3rd Year After Release
Apple iPhone 6/29/07 AT&T $499
Apple iPhone 3G 7/11/08 AT&T $199
Apple iPhone 3GS 6/19/09 AT&T $199
Still sold & possibly updated
Apple iPhone 4 6/21/10 AT&T $199
Still sold & possibly updated
2008 Android
1st Year After Release
2nd Year After Release
3rd Year After Release
HTC G1 10/22/08 T-Mobile $180
2009 Android
1st Year After Release
2nd Year After Release
3rd Year After Release
HTC MyTouch 3G 8/5/09 T-Mobile $200
HTC Hero 10/11/09 Sprint $180*
Samsung Moment 11/1/09 Sprint $180*
Motorola Cliq 11/2/09 T-Mobile $200
Motorola Droid 11/6/09 Verizon $200*
HTC Droid Eris 11/6/09 Verizon $100*
Samsung Behold II 11/18/09 T-Mobile $230
2010 Q1&2 Android
1st Year After Release
2nd Year After Release
3rd Year After Release
HTC Nexus One 1/5/10 T-Mobile $180
Motorola Devour 2/25/10 Verizon $150
Motorola Backflip 3/7/10 AT&T $100*
Motorola Cliq XT 3/17/10 T-Mobile $130
HTC Droid Incredible 4/29/10 Verizon $200*
Possibly still being updated
LG Ally 5/20/10 Verizon $100*
HTC MyTouch 3G Slide 6/2/10 T-Mobile $180*
Still being sold
HTC Evo 4G 6/4/10 Sprint $200*
Possibly still being updated
Garmin Garminfone 6/9/10 T-Mobile $200*
HTC Aria 6/20/10 AT&T $130*
* After $100 mail-in rebate ($50 on MyTouch 3G Slide & Garminfone)
by Michael DeGusta
theunderstatement.com
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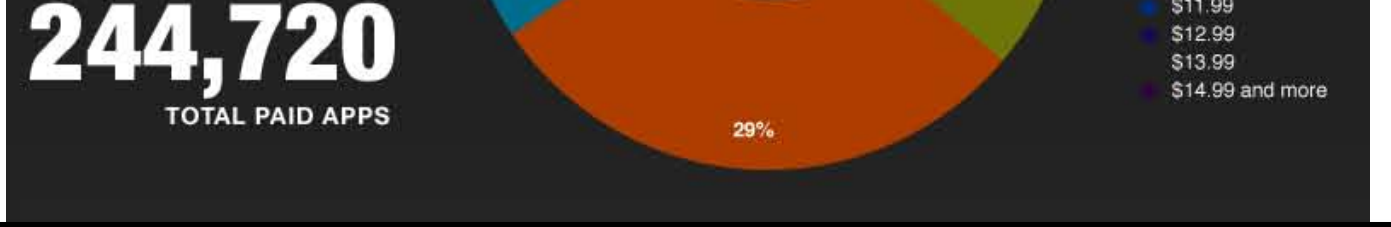
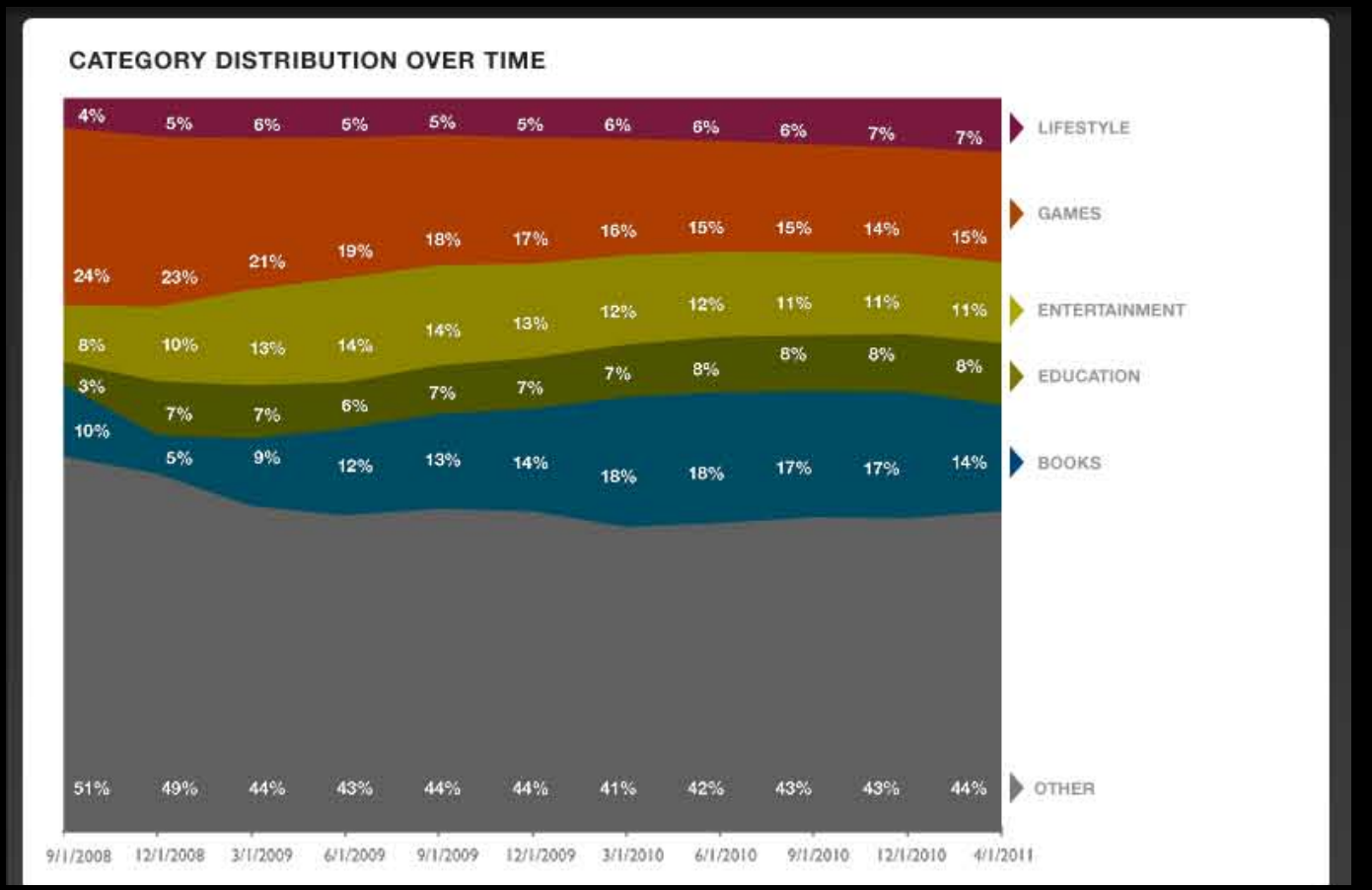
3. it’s a tiny mobile computer

- 3.5’’ capacitive multi-touch touchscreen, 360×480 px at 6.3 px/mm, 160 ppi, HVGA
- Proximity sensor and ambient light sensor
- 3 axis accellerometer (SDK)
- Assisted GPS (SDK)
- 2/3.2 Mpx digital camera
- PowerVR MBX 3D Graphics Accelerator (new version of old dreamcast hardware)
- Faster, more powerful and more memory than both PSP and nintendo DS
- 3g and/or WiFi internet access
- Bluetooth communication
- And it’s a phone…….isn’t it?
- Original iPhone, iTouch and iPhone 3G – OpenGLES 1.1
- iPhone 3GS, iPhone 4 and new iTouch – OpenGLES 2

4. apps





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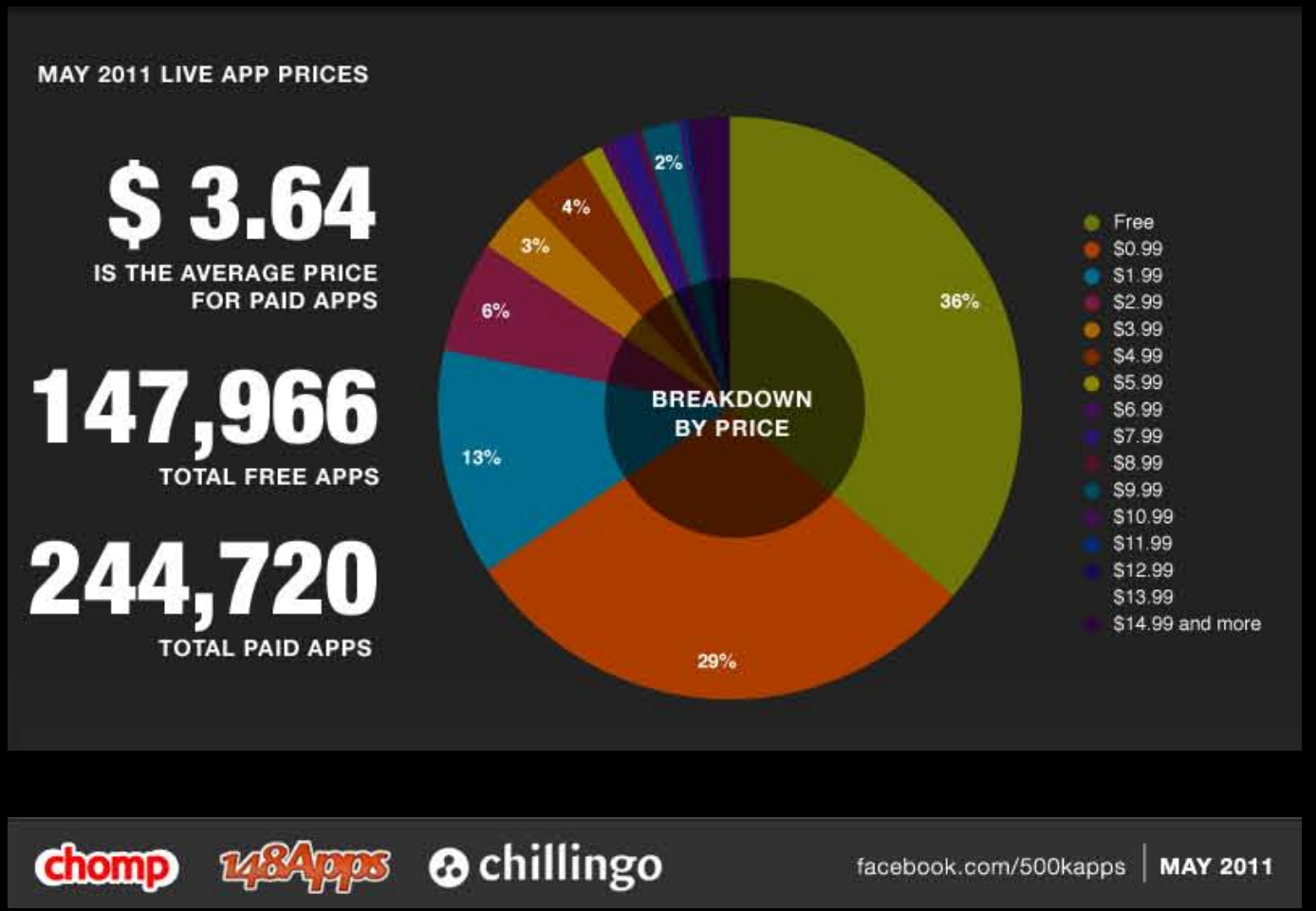
Jun 2010
Jul 2010
Aug 2010
Sep 2010
Oct 2010
Nov 2010
Dec 2010
Jan 2011
Feb 2011
Mar 2011
VALUE OF ALL LIVE APPS
4.6


MAY 2011 LIVE APP PRICES
$ 3.64
IS THE AVERAGE PRICE FOR PAID APPS
147,966
TOTAL FREE APPS
244,720
TOTAL PAID APPS
BREAKDOWN BY PRICE
36%
29%
13%
6%
3%
4%
2%
Free
$0.99
$1.99
$2.99
$3.99
$4.99
$5.99
$6.99
$7.99
$8.99
$9.99
$10.99
$11.99
$12.99
$13.99
$14.99 and more
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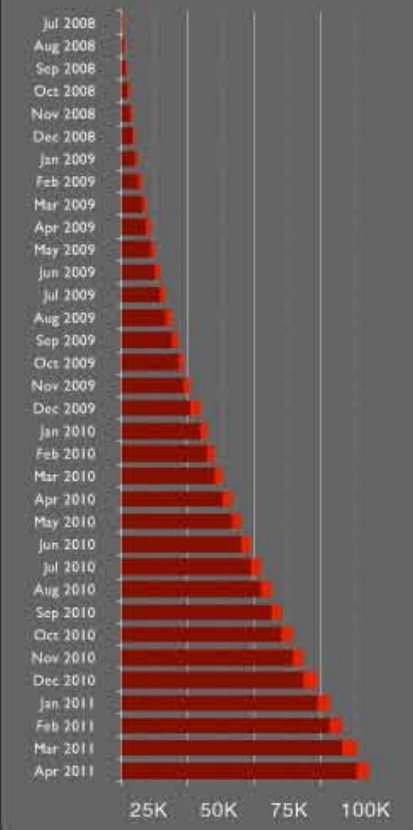
MAY 2011

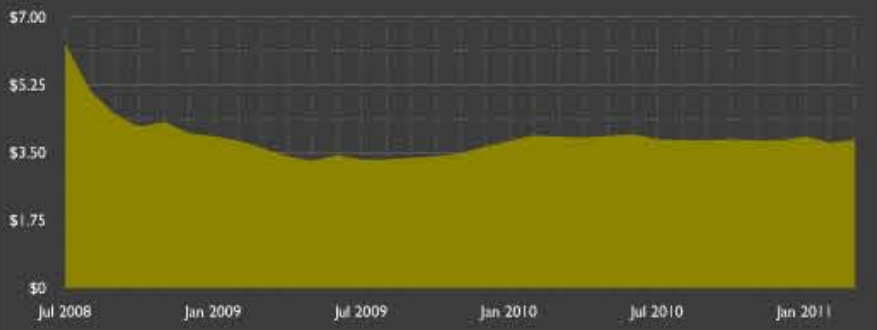
Source: Gartner

PRICE, CATEGORIES AND DEVELOPERS

NUMBER OF DEVELOPERS MONTH OVER MONTH



CHANGE IN AVERAGE APP PRICE (FOR PAID APPS) OVER TIME



$ 891,982.24

VALUE OF ALL LIVE APPS

4.6

AVERAGE NUMBER OF APPS PER DEVELOPER

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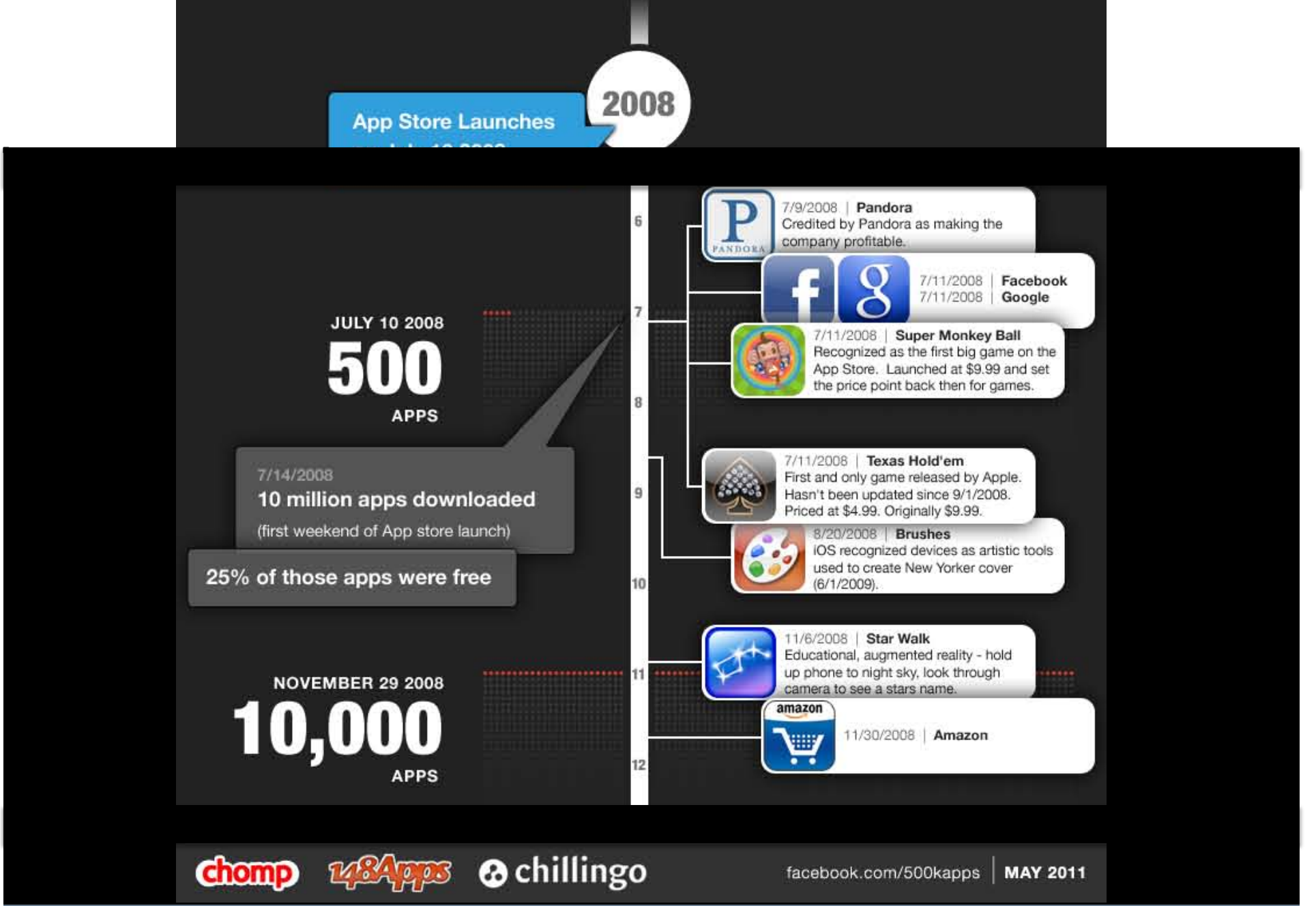
App Store Launches
2008
JULY 10 2008
500
APPS
7/14/2008
10 million apps downloaded
(first weekend of App store launch)
25% of those apps were free
NOVEMBER 29 2008
10,000
APPS
6
7
8
9
10
11
12
7/9/2008 | Pandora
Credited by Pandora as making the company profitable.
7/11/2008 | Facebook
7/11/2008 | Google
7/11/2008 | Super Monkey Ball
Recognized as the first big game on the App Store. Launched at $9.99 and set the price point back then for games.
7/11/2008 | Texas Hold'em
First and only game released by Apple. Hasn't been updated since 9/1/2008. Priced at $4.99. Originally $9.99.
8/20/2008 | Brushes
iOS recognized devices as artistic tools used to create New Yorker cover (6/1/2009).
11/6/2008 | Star Walk
Educational, augmented reality - hold up phone to night sky, look through camera to see a stars name.
11/30/2008 | Amazon
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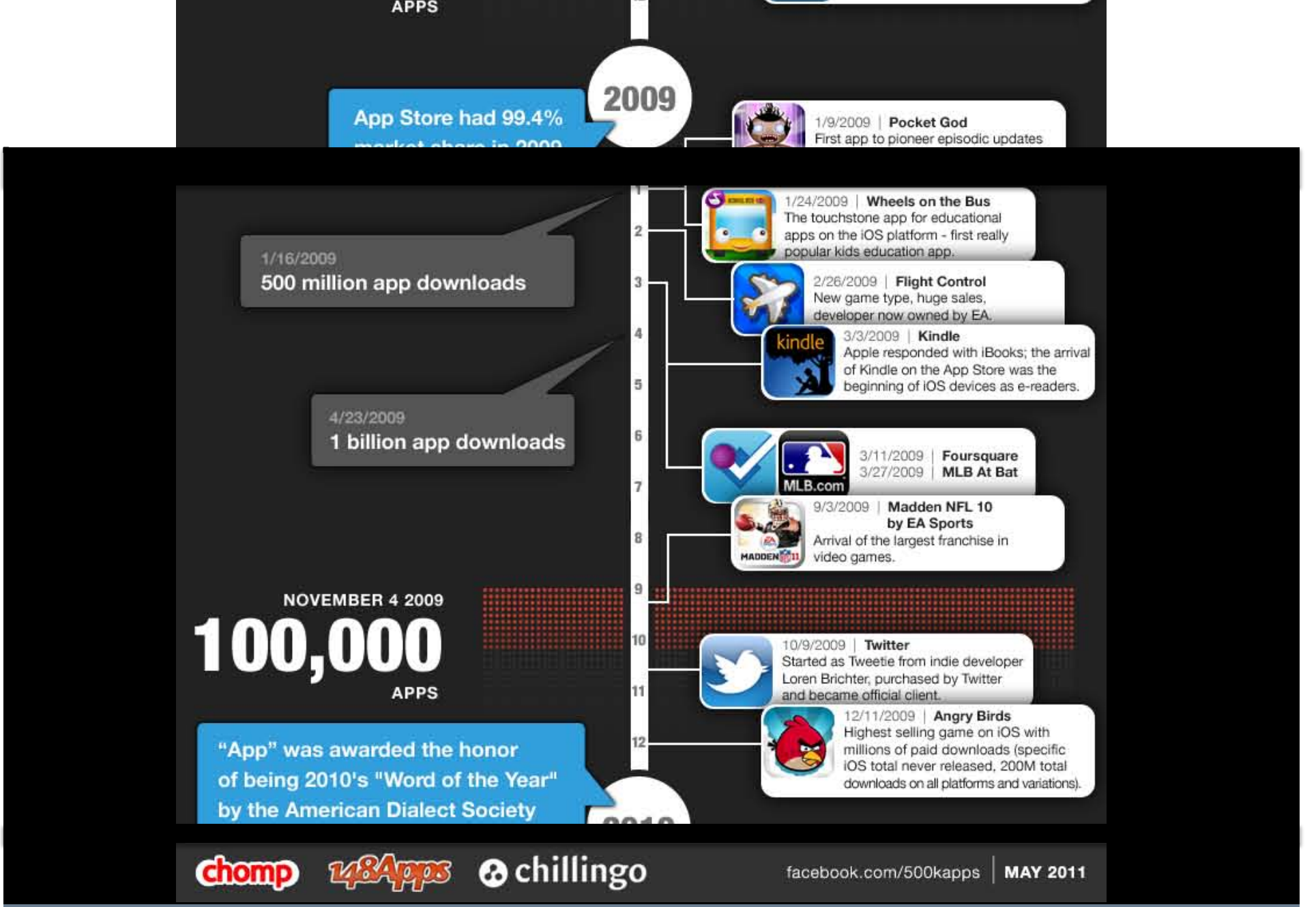
APPS
2009
App Store had 99.4%
1/9/2009 | Pocket God
First app to pioneer episodic updates
1/16/2009
500 million app downloads
1/24/2009 | Wheels on the Bus
The touchstone app for educational apps on the iOS platform - first really popular kids education app.
2/26/2009 | Flight Control
New game type, huge sales, developer now owned by EA.
kindle
3/3/2009 | Kindle
Apple responded with iBooks; the arrival of Kindle on the App Store was the beginning of iOS devices as e-readers.
4/23/2009
1 billion app downloads
MLB.com
3/11/2009 | Foursquare
3/27/2009 | MLB At Bat
9/3/2009 | Madden NFL 10 by EA Sports
Arrival of the largest franchise in video games.
NOVEMBER 4 2009
100,000
APPS
10/9/2009 | Twitter
Started as Tweetie from indie developer Loren Brichter, purchased by Twitter and became official client.
12/11/2009 | Angry Birds
Highest selling game on iOS with millions of paid downloads (specific iOS total never released, 200M total downloads on all platforms and variations).
"App" was awarded the honor of being 2010's "Word of the Year" by the American Dialect Society
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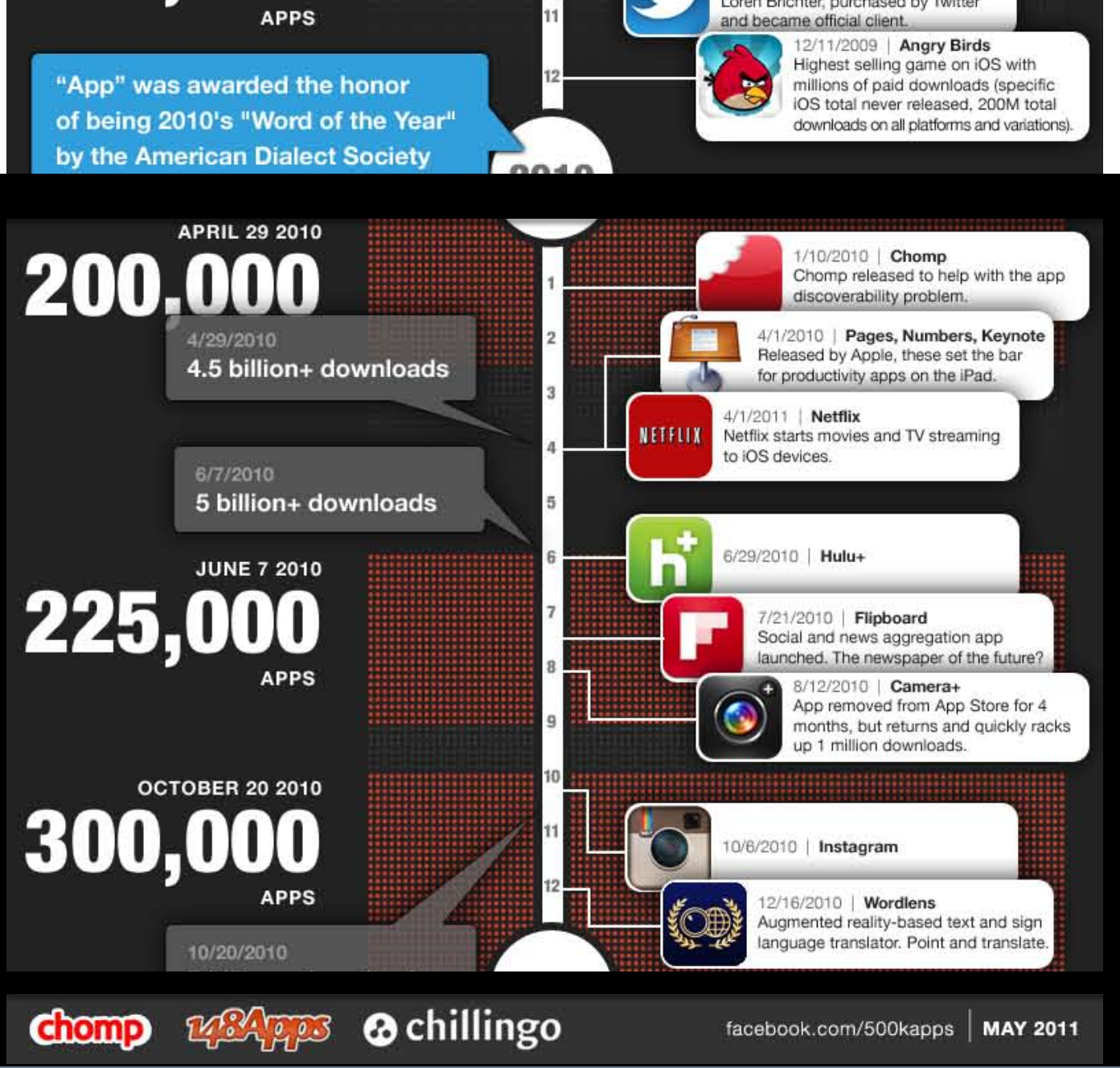
APPS
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11
12
and became official client.
12/11/2009 | Angry Birds
Highest selling game on iOS with millions of paid downloads (specific iOS total never released, 200M total downloads on all platforms and variations).
APRIL 29 2010
200,000
4/29/2010
4.5 billion+ downloads
6/7/2010
5 billion+ downloads
JUNE 7 2010
225,000
APPS
OCTOBER 20 2010
300,000
APPS
10/20/2010
1
2
3
4
5
6
7
8
9
10
11
12
1/10/2010 | Chomp
Chomp released to help with the app discoverability problem.
4/1/2010 | Pages, Numbers, Keynote
Released by Apple, these set the bar for productivity apps on the iPad.
4/1/2011 | Netflix
Netflix starts movies and TV streaming to iOS devices.
6/29/2010 | Hulu+
7/21/2010 | Flipboard
Social and news aggregation app launched. The newspaper of the future?
8/12/2010 | Camera+
App removed from App Store for 4 months, but returns and quickly racks up 1 million downloads.
10/6/2010 | Instagram
12/16/2010 | Wordlens
Augmented reality-based text and sign language translator. Point and translate.
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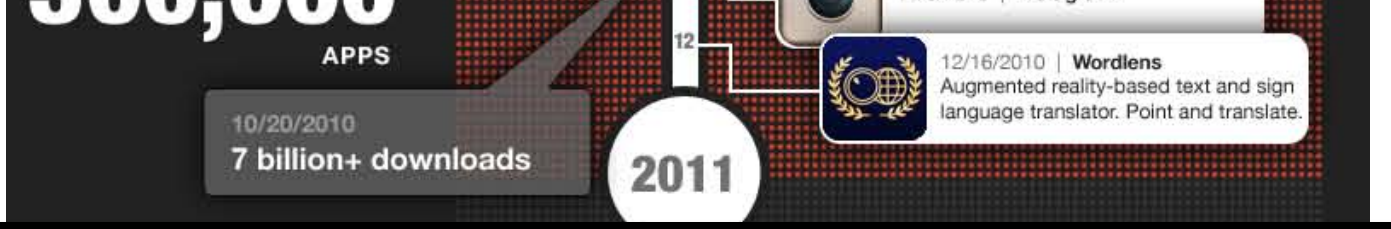

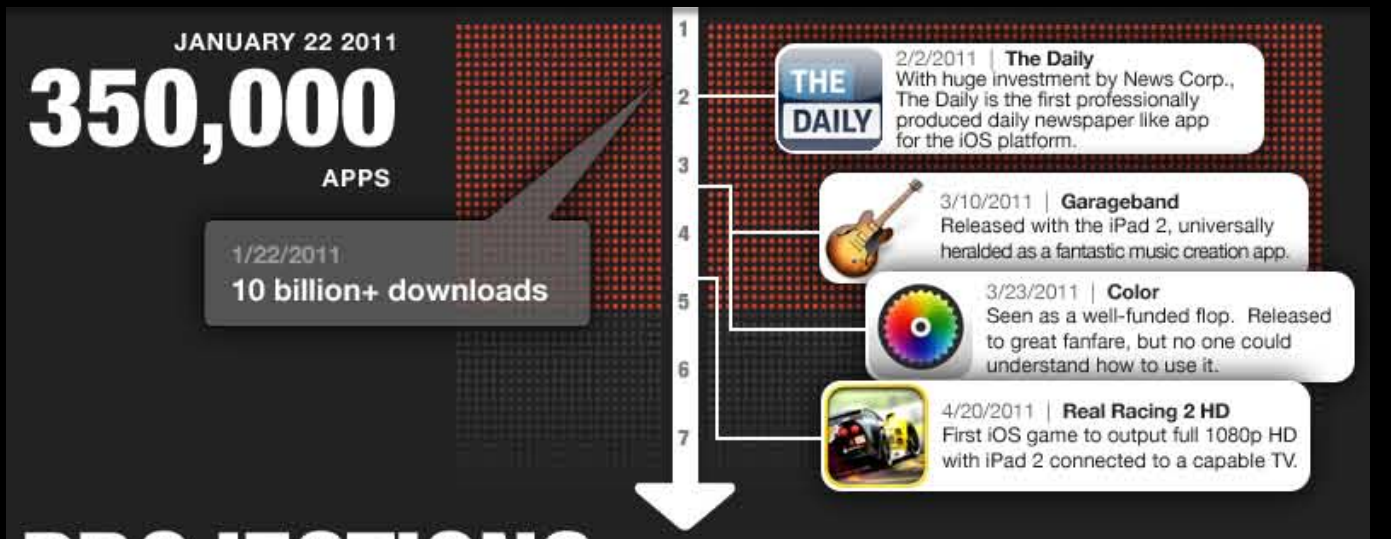

PROJECTIONS

PROJECTED: JANUARY 18 2010

4.5 billion
apps sold in 2010, $6.8 billion in revenue

21.6 billion
apps sold in 2013, $29.5 billion in revenue

PROJECTED: JANUARY 27 2011

15 billion +
apps sold in 2011 for all tablets & phones
17.7 billion app downloads
with 190% revenue increase over 2010

Source: Gartner

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Xcode

openFrameworks