


Mobile Devices: Beyond Angry Birds

Don't Worry Be Appy

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The speaker has no conflicts to disclose.

Goals

- Compare and contrast characteristics of Apple and Android mobile applications
- Identify traditional hard copy and electronic references with mobile application versions
- List useful pharmacy focused mobile apps
- Describe popular mobile applications with medical specialty concentrations
- Describe Dropbox and Goodreader functionality

Agenda

- Apple vs Android
 - Walkthrough of App store and intro to Google Play
- General Mobile App Reference Products
 - Hard copy references gone mobile
 - Electronic references and “app only” software
- Specialty Mobile Apps
- Productivity Apps for Healthcare Professionals

A Brief Personal History

- 1984 – Commodore 64 computer
- 1991 – 1st Windows PC
- 1996 – Sent first e-mail
- 2004 – Palm Treo
- 2008 – 1st android smartphone G1
- 2010 – G2 phone and Mac Desktop
- 2011 - 2nd gen Ipad
- 2012 – 2nd Child Born*

*gadget purchases require prior authorization ☺



I-Apps vs Android

Apple

- Initial innovators
- Uses i-tunes and mobile “App Store”
- Apple controls app design
 - Apps w/ more polished feel
- I-phones and I-pads
 - Limited hardware selection
 - No devices w/ tactile keypad
 - Some Apps may have different interface for iphone and ipad*

Google (Android)

- Successful copycats
- Uses Google “Play Store”
 - Orig. Android Marketplace
- Android is “open source”
 - Anyone can submit an app
- Many phones and tablets
 - Something for everyone
 - Apps primarily designed for smartphone vs tablet users

Apple App Store Walkthrough

- Featured Apps
 - New
 - Whats hot
 - Genius
- Categories
 - 22 total
 - Health and Fitness and Medical
- Top 25
 - Sorts by paid vs free
 - Ranks by popularity
- Search and Updates



Google Play

- Google Play
 - Interface to purchase multiple media products
 - Music, movies, books, apps, etc.
- App store within Google Play
 - Interface varies depending on service provider and operating system
 - Featured
 - Staff picks, games, editor's choice
 - Top Selling
 - Categories





General Pharmacy/Medical Reference Apps

- Mobile versions of hard copy references
 - Facts and Comparisons - PDR
 - AHFS - Pharmacist's Letter*
 - Many more
- Mobile versions of electronic references
 - Micromedex* - Lexi-Comp
 - Up-To-Date* - Epocrates
 - Medscape

Pharmacy Specialty Apps

- Generics (apple)
 - Searchable database of generics
- iPharmacy
 - Useful pill Identifier included
- IV Compatibilty
 - Trissel's database
- lwarfarin (apple)
 - Incorporates warfarin pharmacogenomics based on VKOR and CYP2C19

Specialty Focused Apps

- Cardiovascular
 - ACC ACLS guides
 - Digoxin dose calculator
- Infectious Diseases
 - Johns Hopkins Guide iphone or lpad
 - Sanford guide
 - Vancomycin calculator
- Critical Care
 - ICU Trials
- Pulmonary
 - Anesthesiologist app
 - Asthma tracker
- Preventive Care
 - AHRQ

Specialty Focused Apps

- Hepatology
 - MELD score calculator
- Endocrine
 - Endocrinology and Endo Emergency
- Renal
 - BS3 Nephrology pack
- Oncology
 - InPractice Oncology
 - Chemo Calc
- Peds
 - Pedi Quick Calc
- Calculator Suites
 - Mediquation
 - Calculate by QxMD

Other Useful Productivity Apps

- Dropbox
 - Stores your data in “The Cloud”
 - Share files across devices
 - Share selected folders with collaborators, students, residents, family, etc.
- Reader applications (eg., Goodreader)
 - Manages your pdfs, ppts, docs, etc.
 - Allows annotation, sharing, syncing w/ “cloud”

Questions & Audience Input

Questions & Audience Input

Post Test Question 1

1. Which of following “hard copy” references has a mobile “App” version?
 - a. AHFS Drug Information
 - b. The Physician’s Desk Reference (PDR)
 - c. The Pharmacist’s Letter
 - d. All of the above

Post Test Question 2

2. Which of the following is true regarding mobile applications for smartphones?
- a. Mobile "Apps" for android devices can be obtained through "Google Play".
 - b. Android "Apps" are open-source, while Apple retains design controls over "Apps" for the Iphone and Ipad.
 - c. "Apps" for the Iphone must be downloaded to a computer before being transferred to the device
 - d. Both A and B
-

Post Test Question 3

3. Which of the following mobile "Apps" allows users to save files in "the cloud" so that they can be accessed from connected computers, smartphones, and other devices?
- a. Dropbox
 - b. SaveAcross
 - c. Mobile PDR
 - d. GoodReader



Mobile Devices: Beyond Angry Birds

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Disclosures

- My spouse and I are shareholders in:
 - Apple Inc.
 - Google Inc.
- Conflicts were resolved through peer review

Learning Objectives

- Identify the mobile device hardware and software options currently available
- Describe applications and uses of mobile devices in the clinical setting
- List the software options available on each software platform

Additional Learning Objectives

- Describe the current trends in iOS vs. Android penetration in the U.S.
- Compare and contrast the available app options in different productivity categories
- Identify key accessories for use with mobile devices

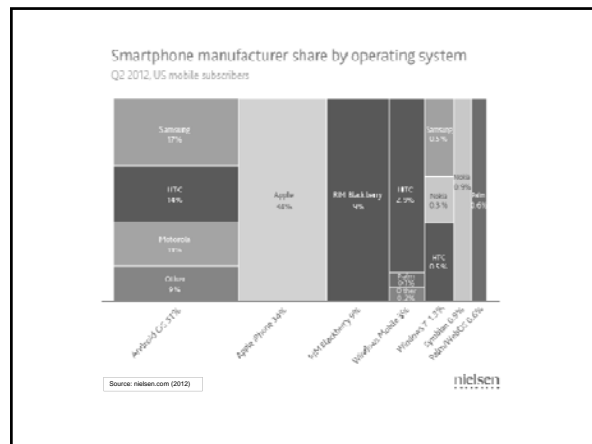
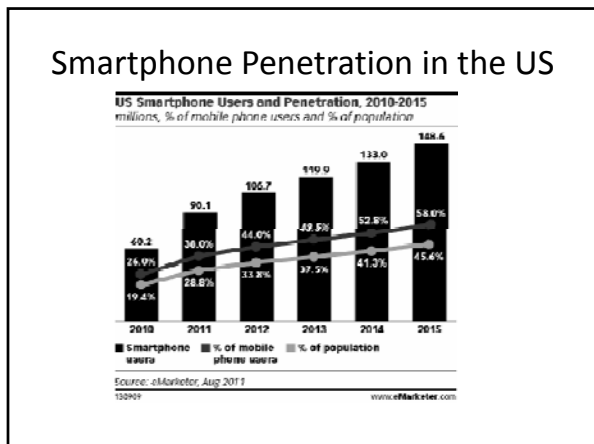
HARDWARE



Phones/Handheld Devices

- Phones
 - iPhone/iPod Touch
 - Android
 - Blackberry
 - Windows

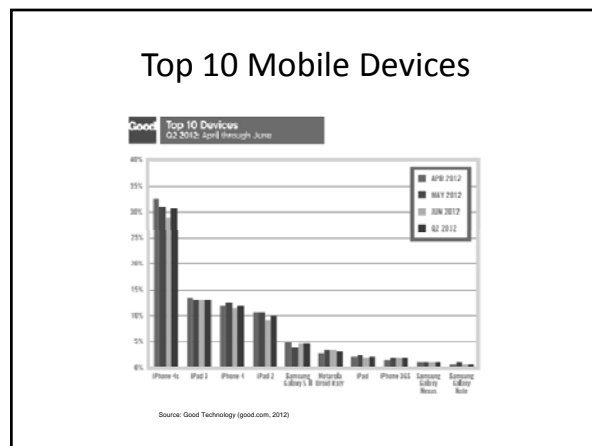
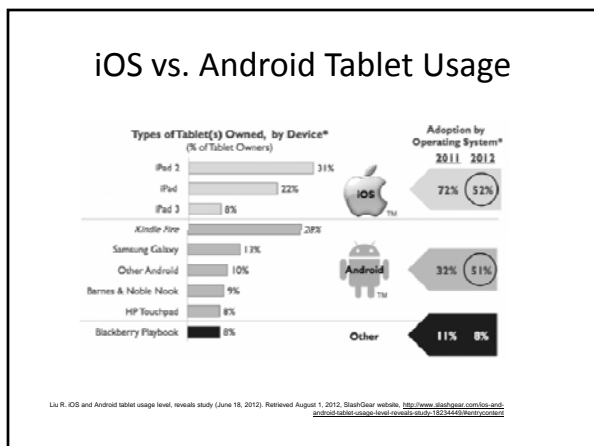
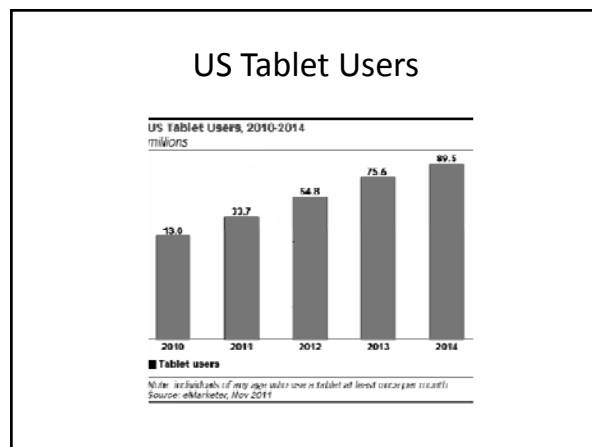




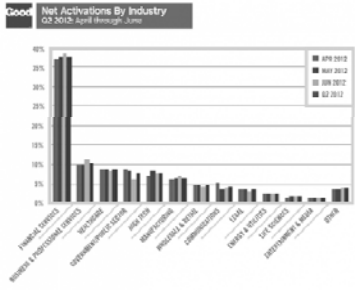
Tablets

- Tablets
 - iPad
 - Android
 - Amazon Kindle Fire
 - Google Nexus
 - Samsung Galaxy Tab

Image sources: apple.com, amazon.com, notebookforums.com, technuity.co.uk



Net Activations by Industry

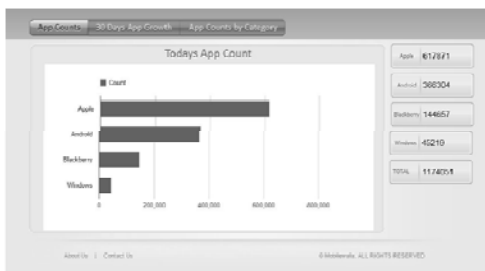


Source: Good Technology (good.com, 2012)



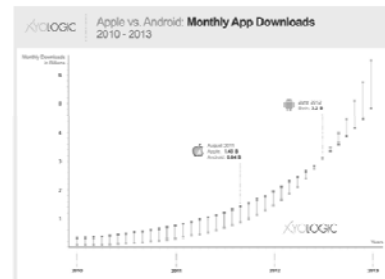
Image source: internetlife.com

Number of Available Apps



As of August 10, 2012
Source: Mobilewalla.com

Monthly App Downloads



Source: Xylogics.com, 2012

Fun Stuff

- Games
- Wine
- Music
- Travel
- Food
- Photography
- GPS



Image source: cubofmac.com



Social Networking

Features	Integrated apps for access to Social Networking sites		
Platforms	iOS, Android		
Cost	Free		
Popular Examples	<ul style="list-style-type: none"> •Facebook •Twitter •Google + 	<ul style="list-style-type: none"> •LinkedIn •TweetDeck •HootSuite 	

Social Media Dashboard




Image sources: hootsuite.com, tweetdeck.com

Notes			
Features	Text conversion from handwriting; synched audio recording; remote note storage; easy sharing		
Platforms/Integration	iOS, Android	 	
Cost	Free (basic version) up to \$9.99 (plus additional costs for add-ons)		
Popular Examples	<ul style="list-style-type: none"> •Evernote •UPAD 	<ul style="list-style-type: none"> •WritePad •Notes Plus 	

Notes






Image sources: evernote.com, pocketsoft.com, phaware.com

Notes


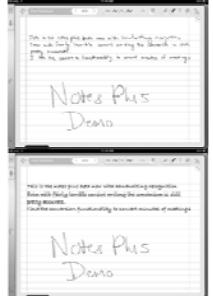





Image source: notesplusapp.com

Dictation			
Features	Excellent voice recognition; can dictate text messages, e-mails, tweets, and status updates		
Platforms/Integration	iOS, Android	 	
Cost	Free		
Popular Examples	<ul style="list-style-type: none"> •Dragon Dictation •Swype •Dictation (iPad 3) 		

swype






Image source: swype.com

News Readers/Aggregators			
Features	Summary of news and stories; can "learn" your preferences		
Platforms/Integration	iOS, Android  		
Cost	Generally free		
Popular Examples	<ul style="list-style-type: none"> •Flipboard •Zite •Currents 	<ul style="list-style-type: none"> •Pocket (Read It Later) •Instapaper 	



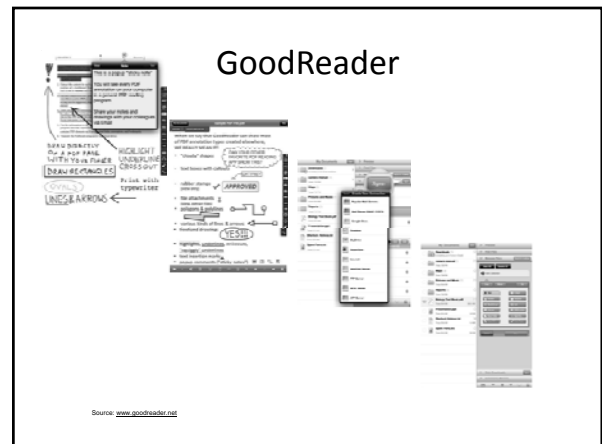
Remote/Cloud Storage			
Features	Easy access to stored files; initially free storage; version control for files; backup storage		
Platforms	iOS, Android		
Cost	Initially free, varying price tiers for paid storage		
Popular Examples	<ul style="list-style-type: none"> •Dropbox •Google Drive 	<ul style="list-style-type: none"> •SugarSync •iCloud 	<ul style="list-style-type: none"> •SkyDrive

Cloud Storage Comparison

Storage	Free tier	Paid tier		Cost per GB per month
		Storage	Cost	
SkyDrive	5 GB	100 GB	\$19.99	\$0.199
Drive	15 GB	100 GB	\$19.99	\$0.199
Dropbox	2 GB	100 GB	\$19.99	\$0.199
SugarSync	5 GB	100 GB	\$19.99	\$0.199
box	10 GB	100 GB	\$19.99	\$0.199

Source: Ars Technica (arstechnica.com, April 26, 2012)

File Reader			
Features	Converts PDFs and other file formats for easy reading; supports highlighting and annotation		
Platforms	iOS, Android		
Cost	\$4.99 (GoodReader); some free options		
Popular Examples	<ul style="list-style-type: none"> •GoodReader (iOS only) •Adobe Reader 		



Remote Control/Remote Access			
Features	Screen sharing; remote access		
Platforms	iOS, Android		
Cost	Generally free for personal use		
Popular Examples	•TeamViewer •Splashtop	•LogMeIn •Screenleap	

Voice Over Internet Protocol			
Features	Free voice and/or video calls; free instant/SMS messaging; free international calling		
Platforms	iOS, Android		
Cost	Free		
Popular Examples	•Skype •iCall	•Google Voice •TruPhone	•Viber •Line2

Voice Over Internet Protocol



Image source: iphone1ah.com

Office Apps			
Features	File editing for Office files; syncs with cloud services		
Platforms	iOS, Android		
Cost	Free to \$20		
Popular Examples	•Keynote •Numbers •Pages	•Google Docs •Quickoffice •Office ² HD	•Documents to Go

iWork




Image source: apple.com

- Accessories**
- Keyboard
 - Stylus
 - Projector cables
 - HDMI cables
 - Apple TV

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Post Test Question

1. What percentage of the US Smartphone market is made up of Android OS phones and Apple iPhones?
 - a. 55%
 - b. 65%
 - c. 75%
 - d. 85%

Post Test Question 2

2. As of August 2012, how many apps have been developed across the four major platforms (Apple, Android, Blackberry, Windows)?
 - a. Over 1,000,000
 - b. 900,000
 - c. 800,000
 - d. 700,000

Post Test Question 3

3. Which of the following is a feature that is currently available in one of the Notes apps described in the presentation?
 - a. Dictation
 - b. Text conversion from handwriting
 - c. Screen sharing
 - d. News aggregation

Post Test Question 4

4. Which of the following statements is true regarding Cloud Storage offerings?
 - a. All Cloud Storage companies offer the same amount of free storage
 - b. All Cloud Storage companies charge the same amount for paid storage
 - c. All Cloud Storage companies offer some amount of free storage
 - d. All Cloud Storage companies have a maximum file size