

# mobility transformed

Mac Tech Boot Camp - Mobility Session

Chuck Goldman - Founder and CSO of Apperian

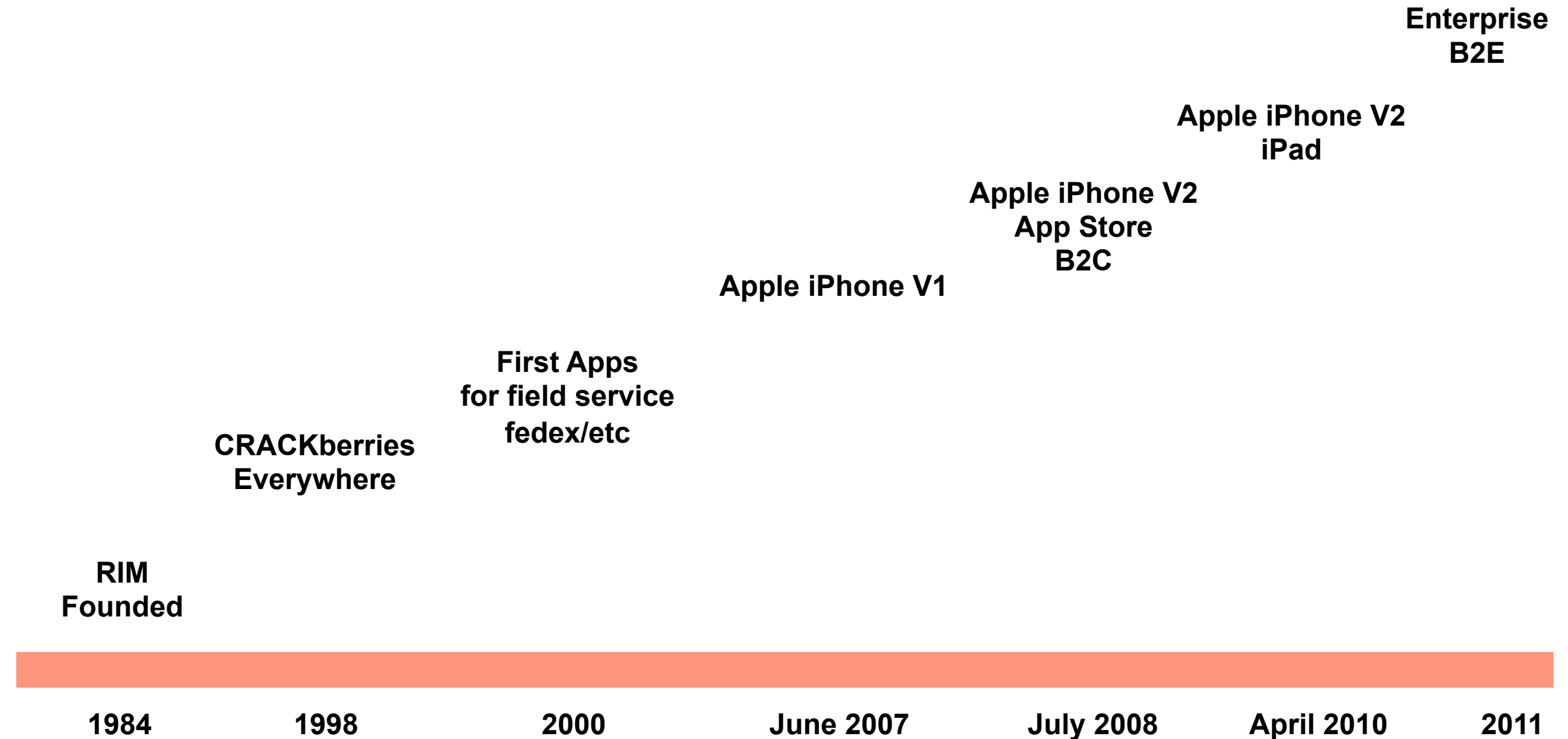


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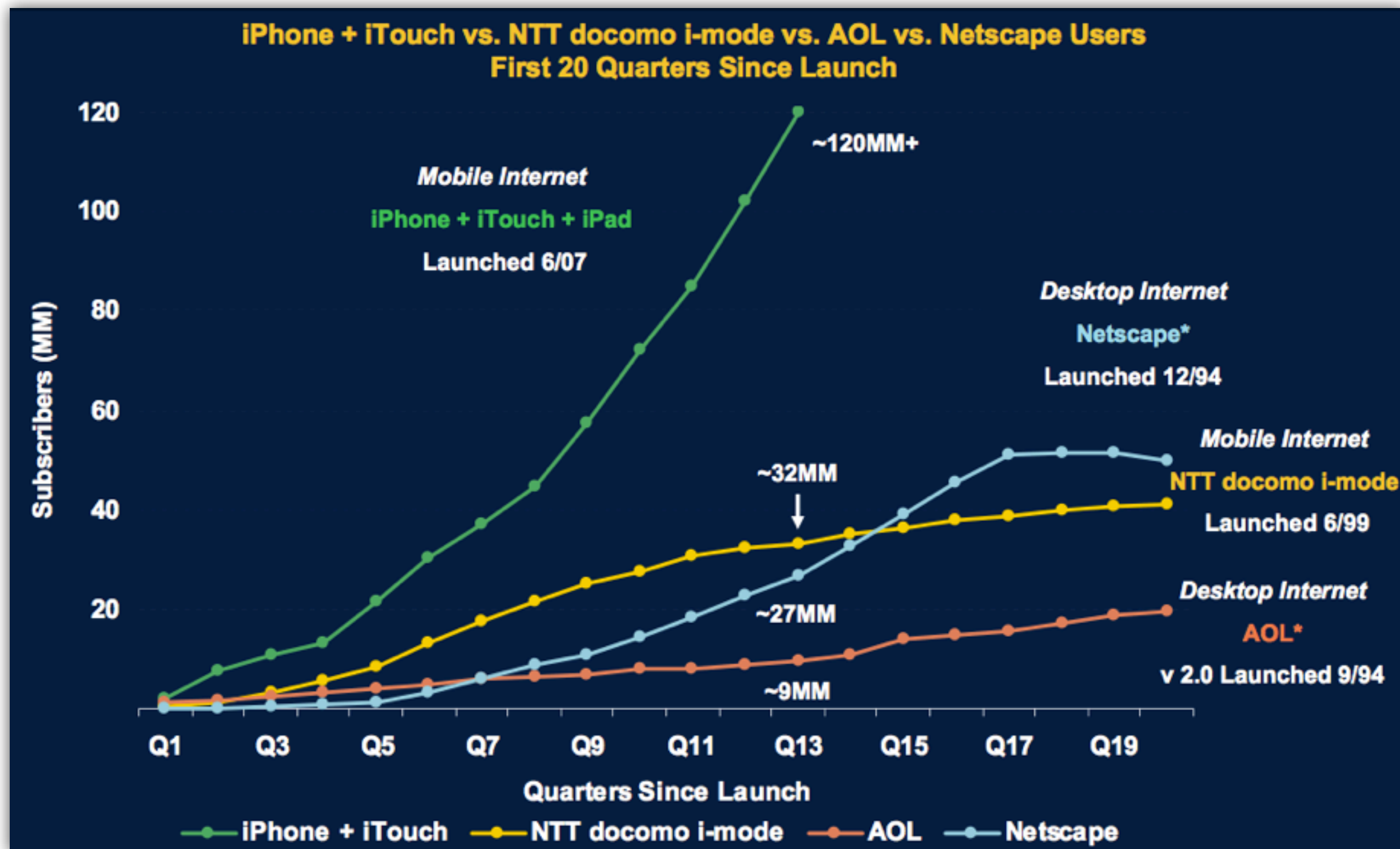
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# A brief history of enterprise mobility

## Beyond email, calendar and contact - A platform for TRUE mobility



# Explosive Market Growth in Mobile Internet



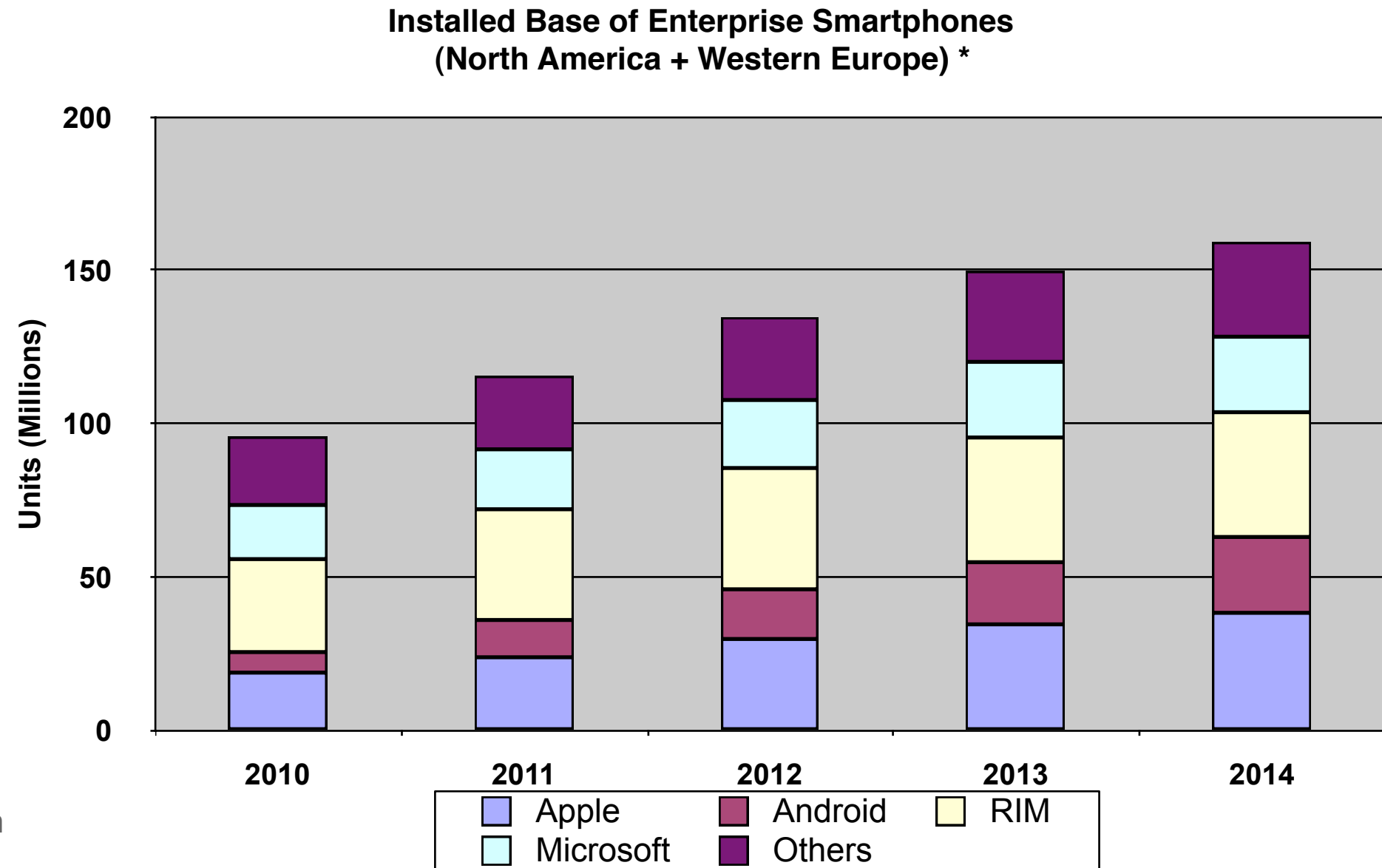
Source: Morgan Stanley, "Ten Questions Internet Execs Should Ask and Answer", Mary Meeker, Web 2.0 Conference, November 16, 2010



# Enterprise Mobile Application Market Opportunity

## Tim Cook - 100 Billion Apple Revenue comes from iPad in less then 3 years - WHAT??

- **Target Market:** Installed base of smartphones in the enterprise
  - Total Addressable Market: Enterprise smartphones running in-house applications
  - 138M units by end of 2014\*
  - \$3.5B market in 2014\*\*
  - Not including iPad upside (12.9M units in 2010\*\*\*)
- **First:** Apple Mobile Madness
  - 9,000 Licenses in 24 months (enterprise of 500+ employees)
  - Early adopters deploying 20+ apps in 1st year
- **Next:** Android & Blackberry
  - Android & Blackberry 12-18 months behind iPhone in custom app development
  - Android market entry 2011
  - Blackberry market entry 2012



Source:

\* Strategy Analytics, Enterprise Mobility Foundation

\*\* Assumes \$25 per unit per year ASP model

\*\*\* iSuppli Estimate July 2010

# Market Size & Growth

138M

Smart phones deployed in enterprises by 2015

\$3.3B

Smart phone app management, apps and cloud services in 2014

14%

CAGR in enterprise smart phone deployments over next 4 years

Size

Growth



# Market Size & Growth

“iPad invades Wall Street”

**BUSINESS INSIDER** Dec 1, 2010

“iPad Leads Tablet March  
Into Businesses”

News & Information for Technology Purchasers  
**NEWSFACTOR.com** Dec 16, 2010

“Enterprise tablet growth set to  
explode, says survey”

**COMPUTERWORLD** Dec 15, 2010

“Mobile Business Apps  
Flourish at IBM, Google”

**Bloomberg  
Businessweek** Nov 1, 2010

none deployments | **Growth**

“Alternatives to Apple App Store  
For Enterprises”

**CIO** Nov 19, 2010

# Enterprise Challenges for Mobile Computing

## Users

Why can't you make business apps like this?



- Consumerization of IT
- Single personal/work device
- Increased mobility



# Enterprise Challenges for Mobile Computing

## Users

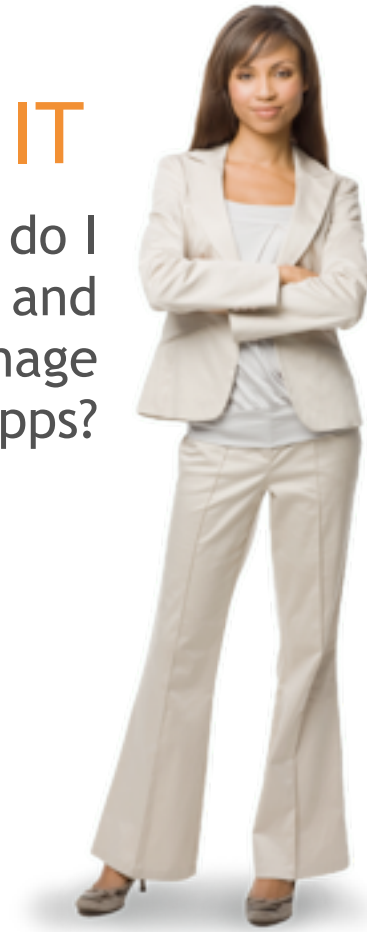
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## IT

How do I deploy and manage Apps?



- Need a solution now!
- Security is still #1
- Have to mobilize workforce
- Need consistent access, sharing and control of information



# Enterprise Challenges for Mobile Computing

## Users

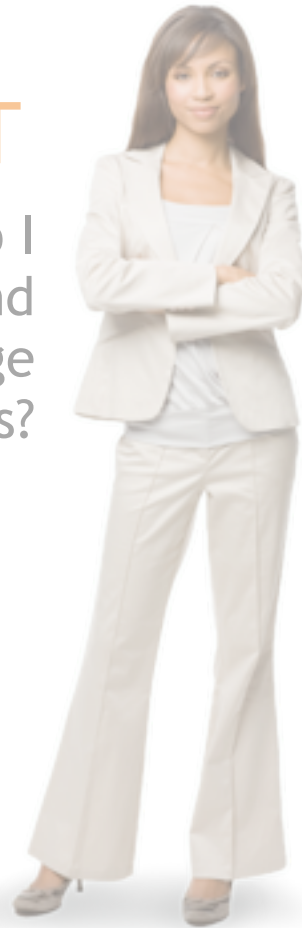
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## Dev

Where do I start?



- Need App “starter kit”
- Minimal IT Apple or Android experience
- Smartphone SDKs not built for enterprise



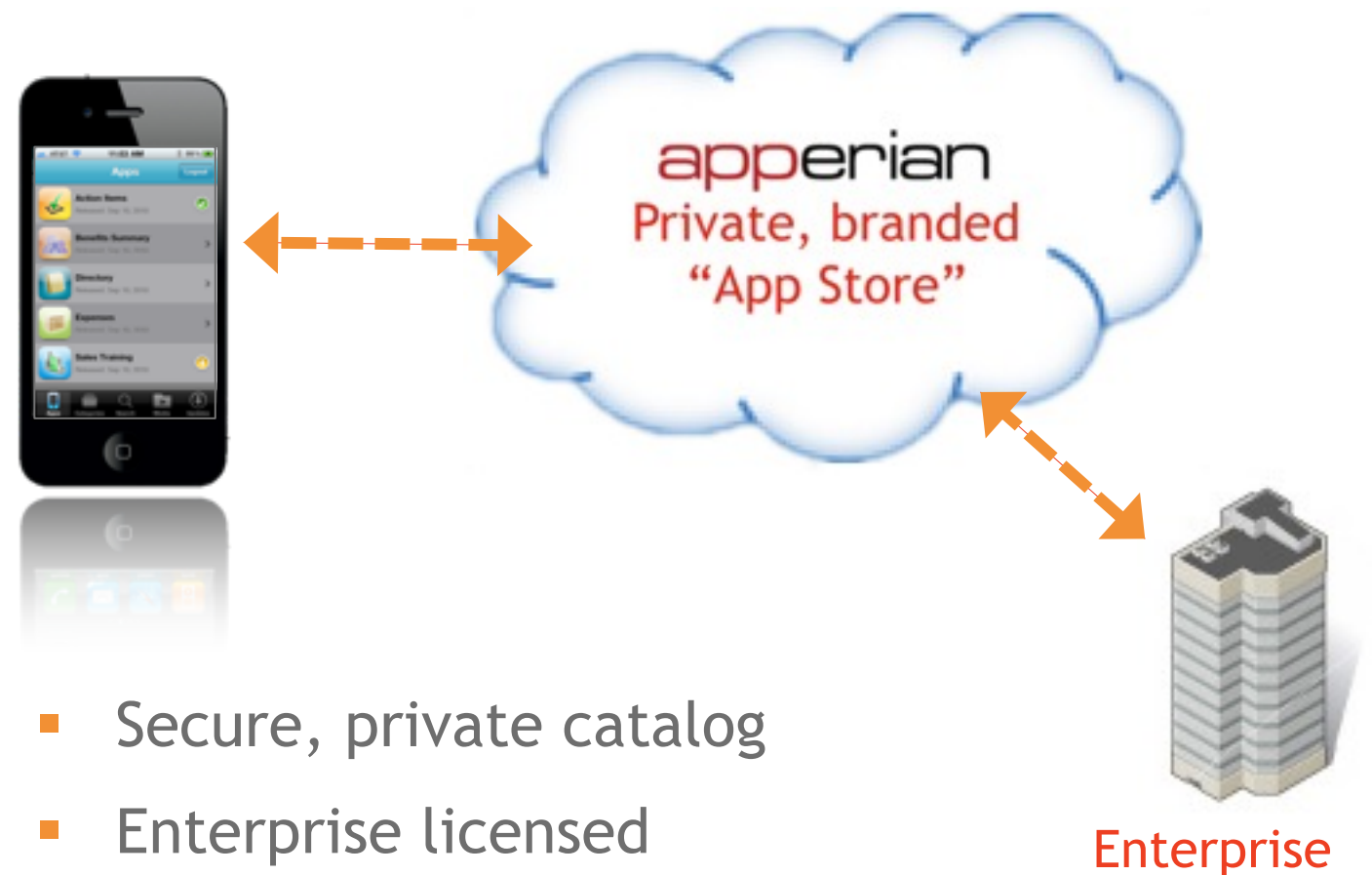
# App Management Platform (EASE)

## Consumer



- Finding within 350K Apps
- Requires iTunes account
- Device-by-device install
- Manual update process
- No App & data disablement

## Enterprise



- Secure, private catalog
- Enterprise licensed
- Multi-device, multi-app install
- Self-service or IT Push
- Identity-based provisioning
- Reporting/Analytics

# iOS in Business





# What is a Transformative App?

On-the-go Point of Service

Valuable to End User

Sustained Usage

Socially Networked

Viral

Leverages Smartphone's Core Technologies

# HTML 5 vs Native

## HTML5 vs. Native for Enterprise Apps

HTML5 Apps	Native Apps
Performance – Slower, subject to network connectivity and latency delays	Performance – Highly responsive, immersive, apps delivered with data ready-to-use
User Experience – Limited to UI capabilities available in <u>Webkit</u> browser view	User Experience – Full control of application and UI can leverage all aspects of device
Security – App runs from web site, and local data on device can be mined	Security – App can use multiple authentication methods, local data on device is encrypted
Device Capabilities – Limited to those features available in <u>Webkit</u> browser; device-specific feature access limited	Device Capabilities – Access to accelerometer, vector based graphics without plug-ins, caching, and location based services
Data Access – No access to device data (e.g., calendar, contacts, device APIs)	Data Access – Full access to calendar, contacts, email, and any device APIs that enable “smart actions” (e.g., knowing the wireless connection type)





## App “Fridge”

50+ Cisco Salesforce Apps

Crowd Sourced App Ideas

Multiplatform Apps

Apperian Cloud Services

Push Notifications

Social Networking



# Estée Lauder Companies

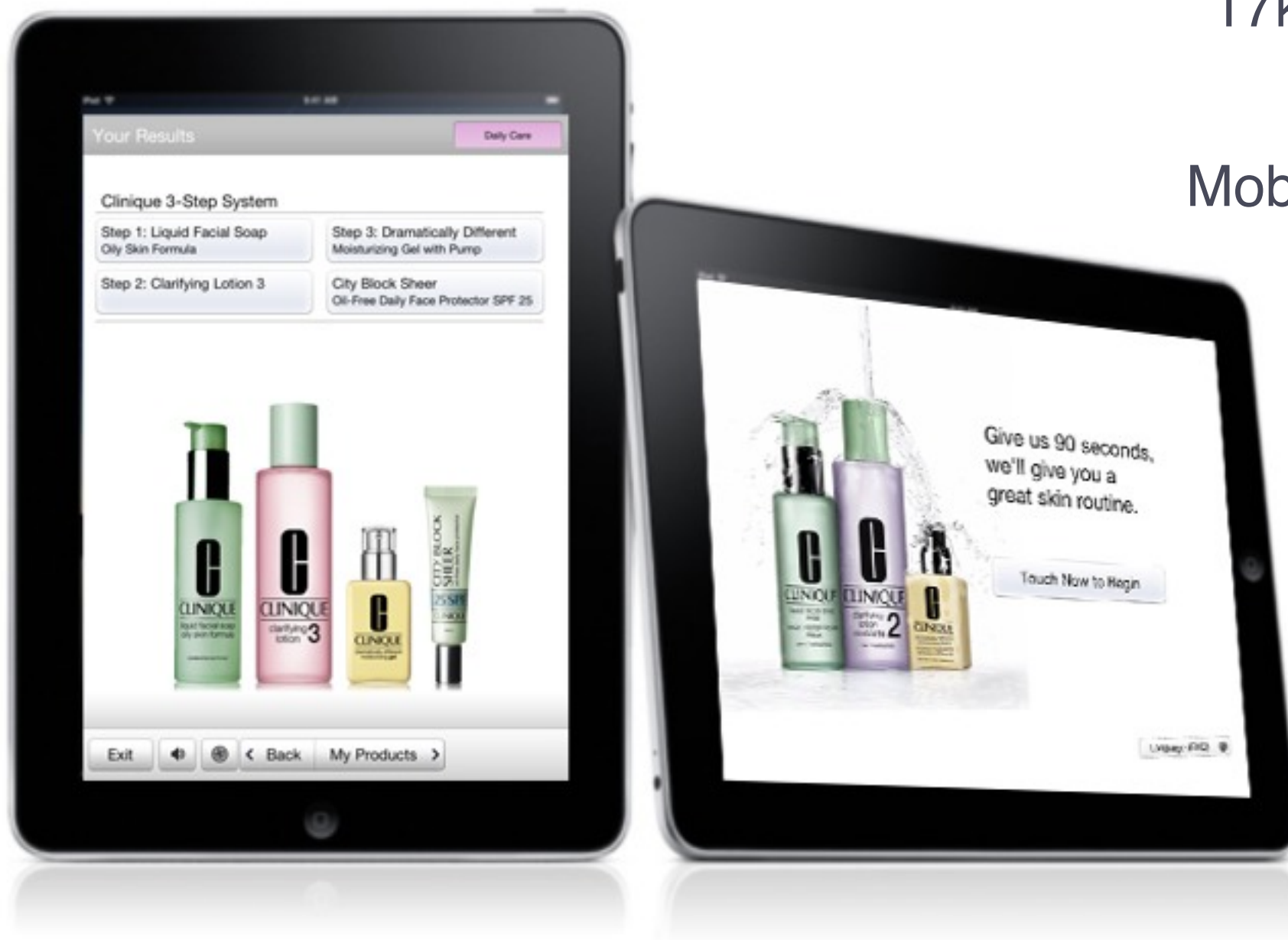
Personal Interactive Product  
Recommendation

17k iPads Kiosks on makeup  
counters worldwide

Mobile training platform for 32k  
associates off hours

Lead Gen System

Print, Email, Bluetooth



# Estée Lauder Companies





# iOS v Mac OS X Technologies

	MAC OS	IOS
ITUNES	✓	✓
FILE SHARING	✓	✓
E-MAIL	✓	✓
CONTACTS & CALENDARS	✓	✓
MOBILE DEVICE MANAGEMENT		✓
BACKUP	✓	



# iOS - IMAP and MDM thoughts

- ▶ **SHARED DEVICE!**
- ▶ **IRON FIRST OR EMPOWER?**
- ▶ **SERVER MAINTAINS “TRUTH” FOR E-MAIL STORE**
- ▶ **CLIENTS AUTOMATICALLY POLL MAIL SERVER — NO PUSH**
- ▶ **ACTIVESTINK - SUPPORTS REMOTE WIPE - MDM**



# iOS Security and Encryption

- ▶ **AD, LDAP, SAML 2.0 AUTHENTICATION**
- ▶ **SSL TO SECURE YOUR COMMUNICATIONS**
- ▶ **L2TP, PPTP, CISCO IPSEC**
- ▶ **THIRD-PARTY VPN**
- ▶ **MOCANA (FIPS 140), SHIMO, VPN TRACKER, IP SECURITAS**
- ▶ **COMMON PROBLEMS WITH APPLE AIRPORT BASE STATION (VPN PASSTHROUGH)**



# iOS as Remote Control Solution

▶ **AIRPLAY**

▶ **BLUESLR**

▶ **MOBILE MOUSE**

▶ **L5 REMOTE**

▶ **SAVANT**

▶ **X10 COMMANDER**

▶ **LUMINAIR**



# Mac OS X Server for IOS

- ▶ **DOVECOT MAIL SERVER – IMAP**
- ▶ **BUILT IN MAIL - GOOD ENOUGH? OR DO YOU WANT GOOD/SYBASE/ETC**
- ▶ **ICAL SERVER – CALDAV**
- ▶ **ADDRESS BOOK SERVER – CARDDAV**
- ▶ **MOBILE ACCESS SERVER**
- ▶ **LION - HUGE MDM IMPROVEMENTS**
- ▶ **IOS CONFIG MANAGEMENT - VPN, WIRELESS, RESTRICTIONS, PASSCODE POLICY, BACKUP ENCRYPTION**
- ▶ **OTA APP DISTRIBUTION**



# App Management Platform

## Enterprise App Services Environment (EASE)

### Create



#### Free Developer Services

- SDK enterprise extensions
- SAP, Oracle, and other connections
- Enterprise App Kit
- Seeded/Starter Apps
- Killer App Templates

### Deploy



#### IT Services

- Configuration
- App provisioning & decommissioning
- User management
- Help desk integration

### Manage



#### Management Services

- Management dashboard
- Enterprise branded “App Store”
- Reporting & analytics
- Application ratings

# Apperian EASE™ User Experience

As compelling & engaging an experience as consumer apps



**“Internal App Store”  
Company App Catalog**

**Read detailed App info**

**Receive notification of app  
updates**

**Access IT help & support**

**Just-in-time training videos &  
documentation**



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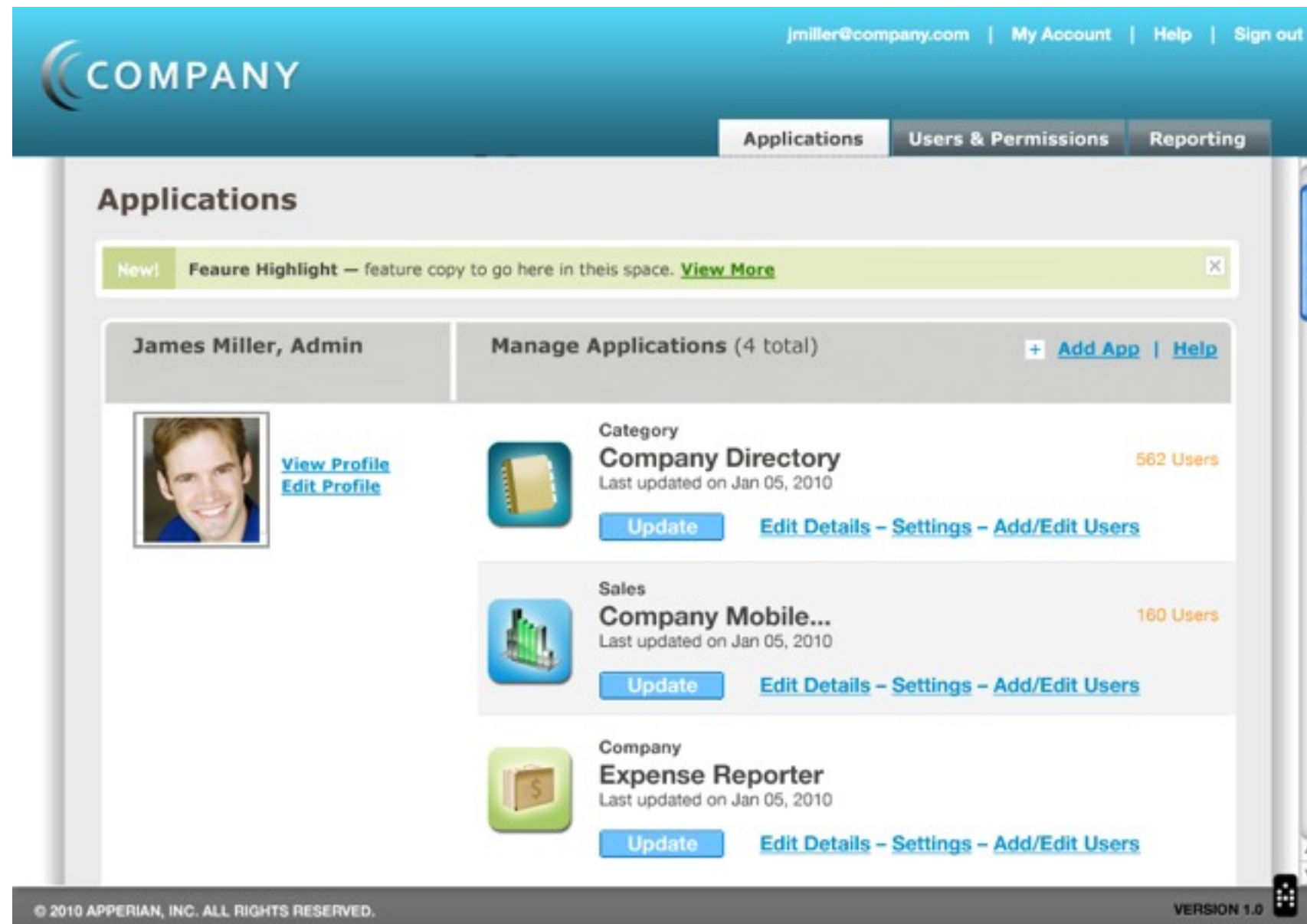
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# Apperian EASE™ IT Portal

Insider view of Apple SDK provided insight for 'right' enterprise extensions



**Easy, fast way for IT to add & update apps**

**Real-time dashboard status of all users**

**Centrally authorize users or groups to use apps**

**Automatically update app, configuration & provisioning profiles**

**Built-in conformance with Apple's Enterprise Program License Agreement**

# MobileME, Profiles and Ad-hoc testing of your Apps

- ▶ **DIRECT USB, EMAIL, WEB, OVER THE AIR DEPLOYMENT**
- ▶ **APPRAMP OR TESTFLIGHTAPP WILL ALLOW YOU TO TEST APPS THROUGH OTA DISTRIBUTION - BIG PLUS!**
- ▶ **NEW MOBILEME IS GOING TO OFFER CLOUD HOSTING OF ALL YOUR CONTENT - MUSIC, MOVIES, TOO**





# Best Practices

- ▶ **EMPOWER USERS - CONSUMERIZE IT!**
- ▶ **ASK USERS WHAT TO BUILD FOR APPS**
- ▶ **OFFER FULL CLOUD HOSTING, INTERNAL APP STORE**
- ▶ **BUILD KILLER APPS - EASY TO USE BUT POWERFUL**
- ▶ **BUILD JSON NOT XML WEBSERVICES!**
- ▶ **USE GPS DATA TO MAKE YOUR ENTERPRISE DATA SMARTER**
- ▶ **HAVE FUN - BE HAPPY - LIFE IS SHORT**

# Contact Information - Stop BY!

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Apperian Developed Apps

One More Thing.....

# WWDC RECAP

## FOR IT MANAGERS

**JUNE 21st**

**DETAILS TO BE POSTED AT [APPERIAN.COM](http://APPERIAN.COM)**