Mobile Device Unique

Roger Smith
Chief Technology Officer

Program Executive Office for Simulation, Training and Instrumentation

9 June 2010
How Many Devices?

UAV Feed

Team Net

OC Data

Army Email

Multiple Devices, batteries, accessories, signals, GUIs, data formats … etc.
DEVICES
Evolution of the Device
Pecking Order

iPhone vs. Android

Blackberry
Symbian
Windows
Palm/HP
Custom
<table>
<thead>
<tr>
<th>Device</th>
<th>Weight</th>
<th>Display</th>
<th>CPU</th>
<th>Battery</th>
<th>RAM</th>
<th>Connect</th>
<th>WiFi</th>
<th>Bluetooth</th>
<th>Camera</th>
<th>Speakerphone</th>
</tr>
</thead>
<tbody>
<tr>
<td>iPhone 3gs</td>
<td>4.5 oz</td>
<td>320 x 480 pxl</td>
<td>600MHz ARM</td>
<td>5 hour talk on 3G</td>
<td>32GB</td>
<td>2G &amp; 3G (7.2 Mbps)</td>
<td>802.11b/g</td>
<td>802.15.1 &amp; 4</td>
<td>3.15 MP</td>
<td>Speakerphone</td>
</tr>
<tr>
<td>Motorola Droid</td>
<td>6 oz</td>
<td>480 x 854 pxl</td>
<td>550MHz ARM</td>
<td>6 hour talk on 3G</td>
<td>16GB</td>
<td>2G &amp; 3G</td>
<td>802.11b/g</td>
<td>802.15.1 &amp; 4</td>
<td>5 MP</td>
<td>Speakerphone</td>
</tr>
<tr>
<td>Blackberry 9700</td>
<td>4.3 oz</td>
<td>480 x 320 pxl</td>
<td>800MHz Marvell</td>
<td>6 hour talk on 3G</td>
<td>256MB / 2GB sim</td>
<td>2G &amp; 3G</td>
<td>802.11b/g</td>
<td>802.15.1 &amp; 4</td>
<td>3.2 MP</td>
<td>Speakerphone</td>
</tr>
</tbody>
</table>
Mobile Unique

**Hardware**
- Motion Sensor/Accelerometer
- Multi-Touch Screen
- GPS
- Gyroscope
- Ambient Light Sensor
- eCompass
- Proximity Sensor
- Dual Cameras
- Microphone
- Bluetooth

- Speakerphone
- Cellular
- Wi-Fi
- Long Battery

**Software**
- Human-Machine Interface
- Sensor-based Apps
APPS
iPhone Parrot AR.drone

• Fly using iPhone accelerometer
• Engine thrust using touch screen
• Camera feed to iPhone screen
Most Popular Apps

Militarized Versions

Communication = Collaboration, Planning
Music = Culture, Social Norms
Location = Intel Prep of Battlefield
Weather = Geography, Planning

Most Popular Used Apps on the Android OS
Past 30 Day App Downoaders

Facebook = 58%
IPod/iTunes = 48%
Google Maps = 47%
Weather Channel = 46%
Pandora = 27%

Google Maps = 38%
Facebook = 26%
Weather Channel = 26%
Pandora = 26%

Most Popular Used Apps on the BlackBerry OS
Past 30 Day App Downoaders

Facebook = 34%
Google Maps = 28%
Weather Channel = 19%
ESPN = 18%
Pandora =

Facebook = 33%
Google Maps = 21%
Weather Channel = 20%
Pandora = 19%

Video = Intel Distrib, UAV Feed

http://blog.nielsen.com/nielsenwire/online_mobile/the-state-of-mobile-apps/
Training Apps

2D and 3D Maps, Line-of-Sight fans, CADRG display, Terrain Modifications

Afghan Air Advisors Course developed for USAF Negotiation Center of Excellence (NCE)

Language Translation and Familiarity
Government Apps

Apps for Democracy

Washington DC Government apps to reach citizens

Civilian government watchdog apps

Army apps on AKO
Good Discussion at:
http://govfresh.com/2010/03/developers-for-glory/
Apps 4 Army Competition

• Government-only
• 100 Teams Selected
• Judging June 1 to July 1

GEN Peter W. Chiarelli, Vice Chief of Staff of the US Army endorses the Apps for the Army challenge.
Who sets standards?

Who controls the formula for Coca Cola distributed to the Army in the Middle East?

Hint: It is not zawya

Who will decide how an app works on an Army iPhone?

Coca Cola and Apple both value their brand image more than any amount of government revenue.
Questions About Enterprise Mobile

- Can you create an Army AppStore?
- Can an App be multiplatform? (iPhone, Android, Blackberry, Windows)
- What level of oversight will the host platform enforce?
- Can an Army phone be locked out of the commercial AppStore?
- Are Army Apps hosted on Army controlled servers?
- Does the phone/OS support CAC access?
- Has the Army already purchased enterprise licenses with the provider?
- What technologies are prohibited on each platform? (e.g. Flash on iPhone)
- How does the mobile apps initiative support, diverge from, or conflict with the Army’s Blackberry-centric practice?
- ( ... add to the list ... )
Connecting Soldiers to Digital Apps

PHASE I
- College Courses
- Army Manuals & Forms
- Recruiting Tool & Incentive
- Army Apps Store
- Pay & Medical Actions
- Commercial Cellular Data Network

Tactical PHASE II
- AKO
- FBCB2
- Sensor Data
- Tactical Radio Networks
- And Mission Command Systems
- Expeditionary Cell Network
- Tactical Operations

Admin, Training, Job Aids