

# Mobile Device Unique

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Multiple Devices, batteries, accessories, signals, GUIs, data formats ... etc.



## DEVICES

### **Evolution of the Device**





#### **Pecking Order**











## **Hybrid Devices**

# STRI



#### **Device Specs**



iPhone 3gs

Weight 4.5 oz Display: 320 x 480 pxl CPU: 600MHz ARM Battery: 5 hour talk on 3G RAM: 32GB Connect: 2G & 3G (7.2 Mbps) WiFi 802.11b/g Bluetooth 802.15.1 & 4 Camera: 3.15 MP Speakerphone



Weight 6 oz Display: 480 x 854 pxl CPU: 550MHz ARM Battery: 6 hour talk on 3G RAM: 16GB Connect: 2G & 3G WiFi 802.11b/g Bluetooth 802.15.1 & 4 Camera: 5 MP Speakerphone •

#### Blackberry 9700

Weight 4.3 oz Display: 480 x 320 pxl CPU: 800MHz Marvell Battery: 6 hour talk on 3G RAM: 256MB / 2GB sim Connect: 2G & 3G WiFi 802.11b/g Bluetooth 802.15.1 & 4 Camera: 3.2 MP Speakerphone

## **Hardware Consolidation**



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#### **Mobile Unique**

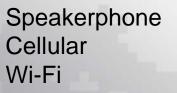
# STRI

#### **Hardware**

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

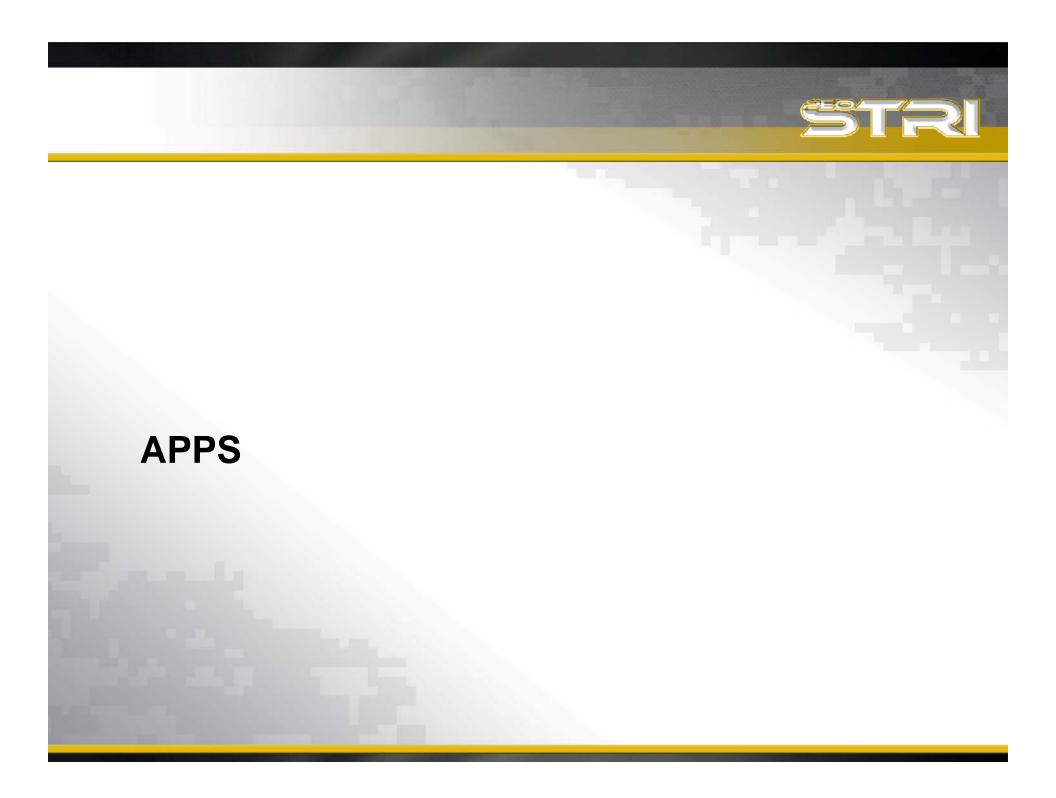
#### **Software**

Human-Machine Interface Sensor-based Apps



Long Battery





#### **iPhone Parrot AR.drone**





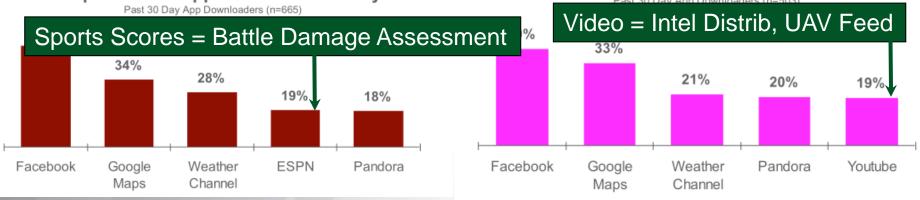
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Fly using iPhone accelerometerEngine thrust using touch screenCamera feed to iPhone screen

#### Most Popular Apps Militarized Versions Communication = Collaboration, Planning Google Maps Music = Culture, Social Norms Facebook, apps across smartphone Most Popular Used Apps on the Android OS Search = Intelligence Collection Location = Intel Prep of Battlefield Most Popular Used A Past 0 Dav App Dowr Weather = Geography, Planning 38% 58% 48% 47% 26% 26% 46% 27% Weather Google Facebook Pandora Google Maps Channel Search Facebook iPod/iTunes Google Weather Pandora Channel Maps

#### Most Popular Used Apps on the BlackBerry OS Past 30 Day App Downloaders (n=665)

#### Most Popular Used Apps on all Other Smartphones



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



Language Translation and Familiarity



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

#### **Government Apps**





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**

Army Knowledge Online - roger.smith14 (CAC Session) - Microsoft Internet Exp	lorer provided by U.S. ARMY PEC	ISTRI	
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₩ GEN Peter W. Chiarelli, Vice C	hief of Staff of th	e US Army endorses the Apps for the Army challenge	
elcome to Apps for the Army			
National Guard and Army	b and mobile application Civilians. \$30,000 in emp ave what it takes to build	US YOU.     development challenge for active duty Army,     loyee cash awards, as well as public recognition     an app that delivers real value to the Army     Watch Michael Krieger's     Interview (wmv)     Collaboration & Information Sites     Interview 1     AtA Developers Group on milbook	
Step 1: Read the Announcement Memo	» Annoucement Memo	A4A Developers Group on millbook A4A Project Site on SoftwareForge.mil	
6 Feb 2010 18:13 GMT Step 2: Read the Letter of Instruction (Detailed Rules & Regs)	»Letter of Instruction	🌮 A4A Wiki Page in milWiki	
	»Letter of Instruction	A4A Wiki Page in Intellipedia	
7 Feb 2010 20:32 GMT Step 3: Download and fill out the Registration Form.	» Registration Form	Competition Calendar	
1 Feb 2010 19:34 GMT		Upcoming Events	
Step 4: Download and fill out the Commanding Officer/Supervisor Form.	» CO/Supervisor Form	Full Month View	
7 Feb 2010 20:36 GMT Step 5: Submit the Registration Form and Commanding Officer/Supervisor Form to CIO/G6ArmyApps@conus.army.mil	»E-mail Forms	Event: Judging Period Times 6/1/2010 24:00 GMT Location: Global Summary:	2
Current «Previous   Next » Archived		All entries submitted by the competition deadline of 5/15/2010 will be evaluated by the judging committee during this period.	
9		Trusted sites	100%

Government-only

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

#### Who sets standards?

# STRI





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





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** 

**Tactical PHASE II** 

