

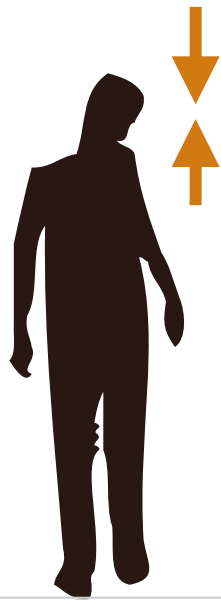
LUKE WROBLEWSKI AN EVENT APART 2012



MOBILE WEB DESIGN MOVES



Let's Learn a New Move...



1.

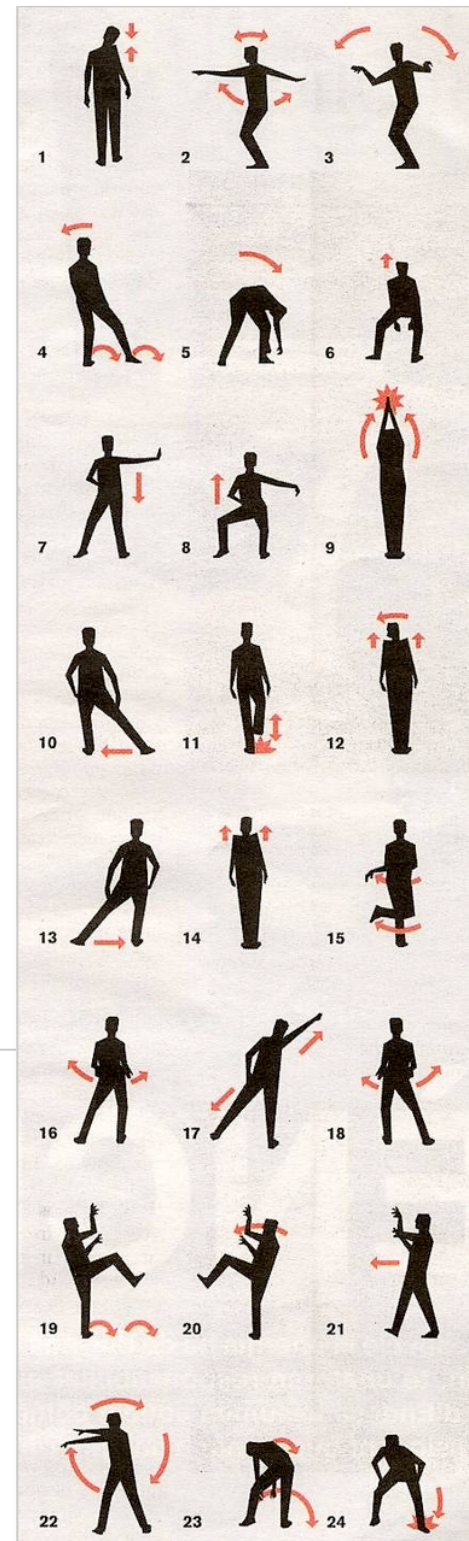


2.



3.

Small new moves
can add up to very
big things.



A man wearing a black top hat, blue sunglasses, and a dark vest is looking towards the camera. He is standing in a festival or fair setting with various colorful murals and decorations in the background. A teal speech bubble is overlaid on the image, containing the text "Why do I need new moves?".

Why do I need
new moves?

- Mobile Web Growth
- Mobile is Different


A woman wearing a yellow sequined top and a necklace is seen from the back, walking through a festival. The background shows other people and festival decorations.

Photo by badjonni

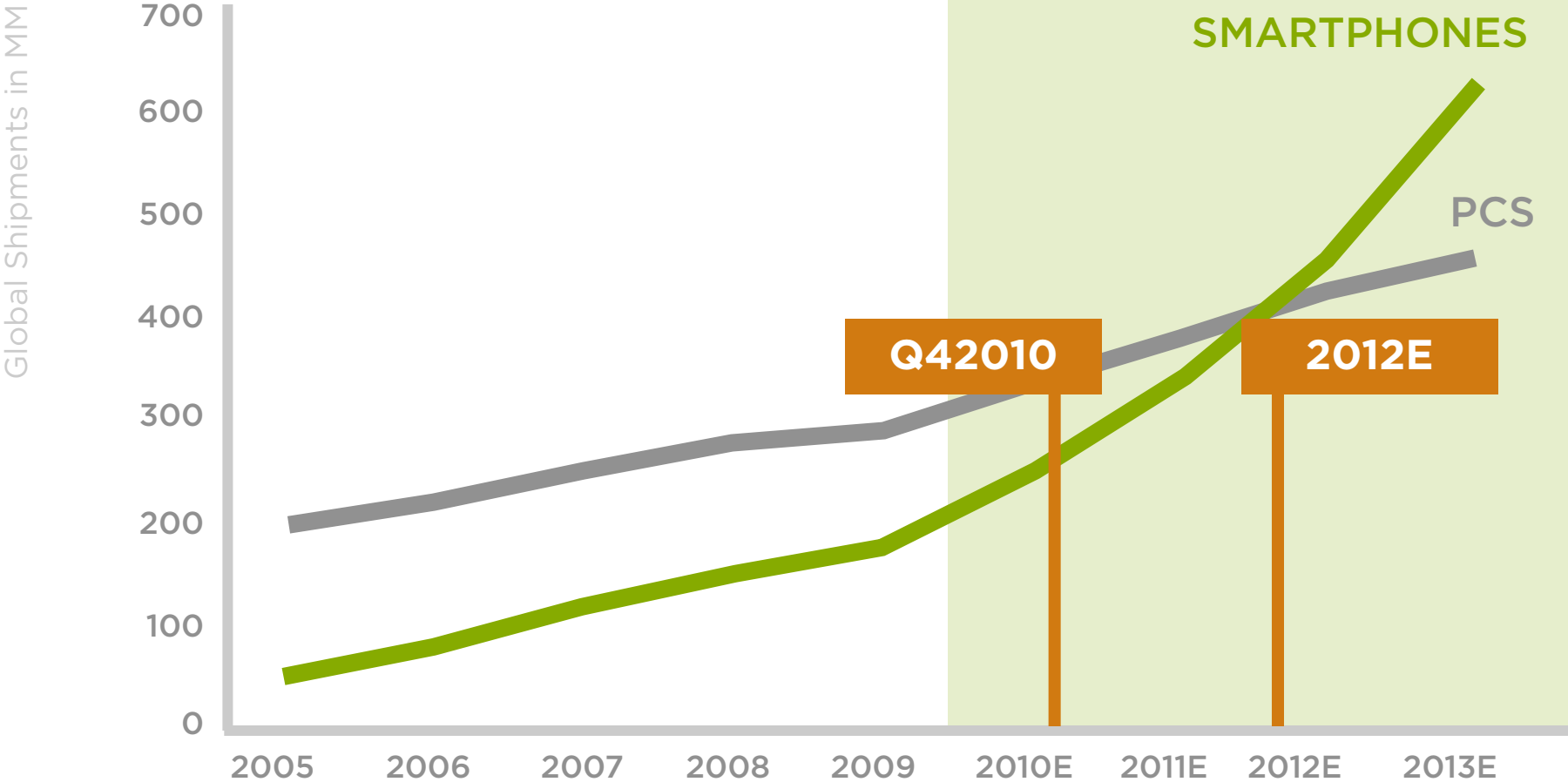
MOBILE WEB GROWTH



Photo by Matthew Field

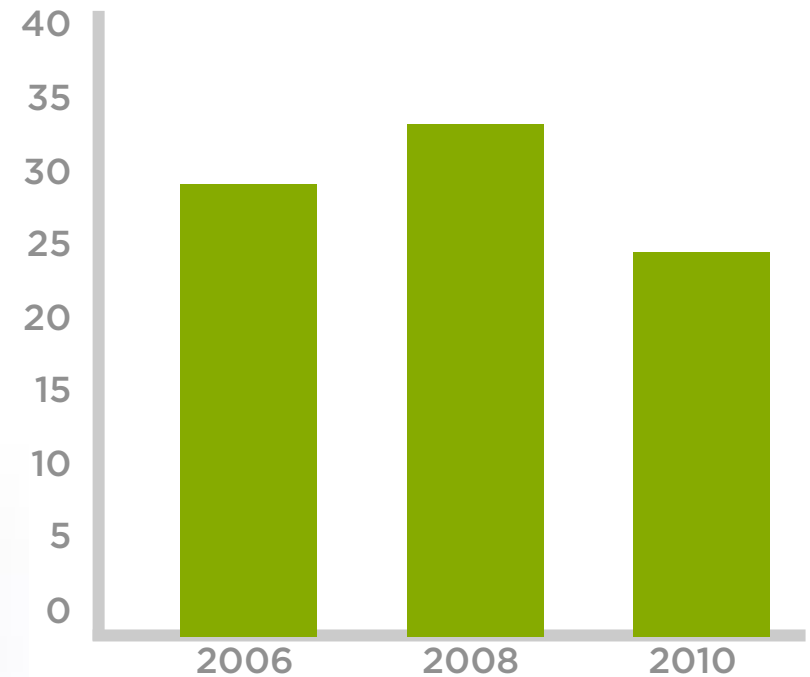
PC vs. Smartphone Shipments

Smartphones **passed** PC shipments in Q42010



Shift in Usage

-20% Home usage of PC since 2008



Why? Smartphones & tablets

Shift in Usage



-7% Visitors to Web-based email sites declined



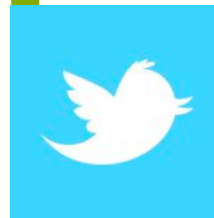
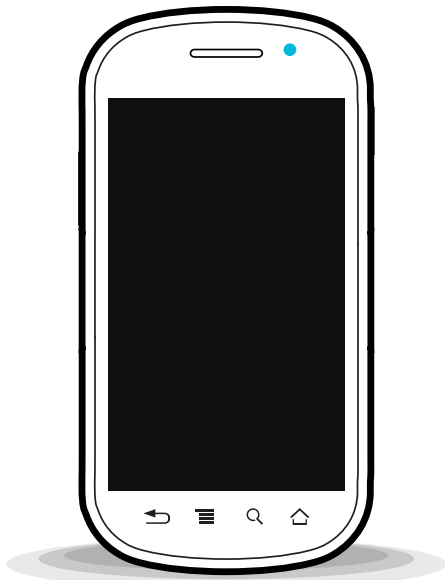
+36% Visitors accessing email on mobile devices increased

SMARTPHONES

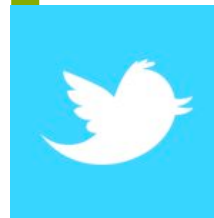
Don't most people just use native mobile applications to access the Internet?



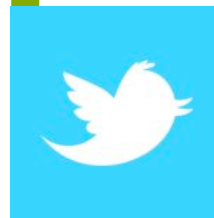
TWITTER



55% of users on mobile

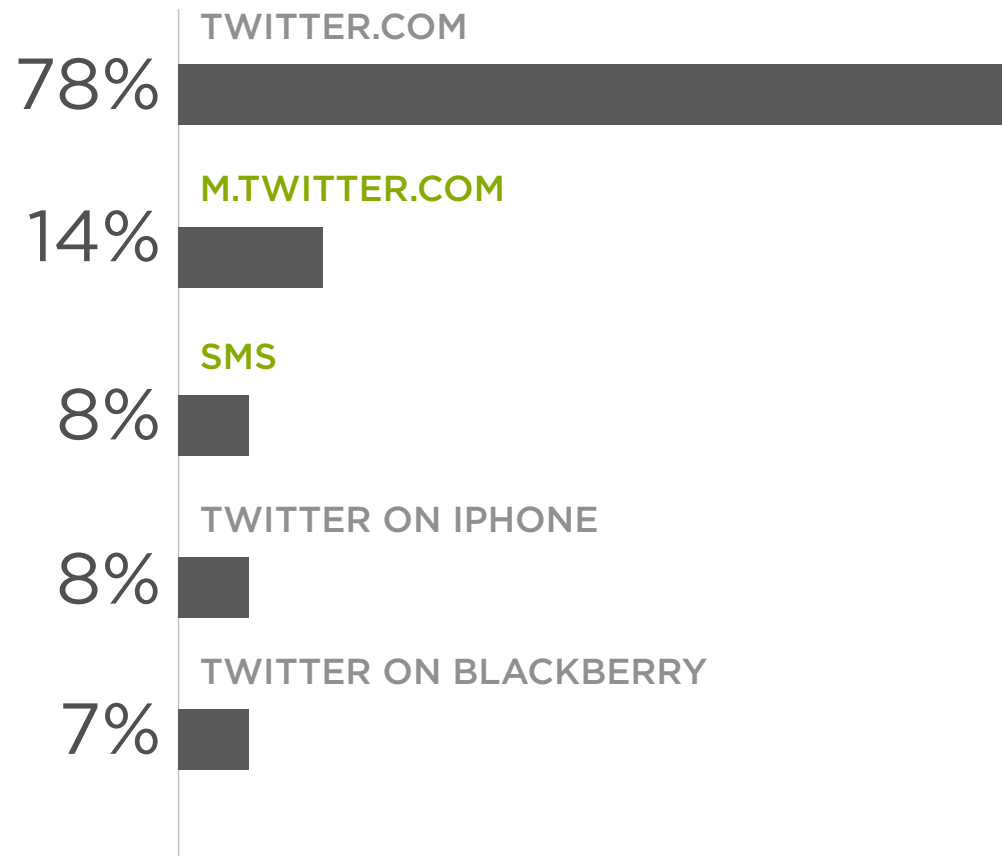
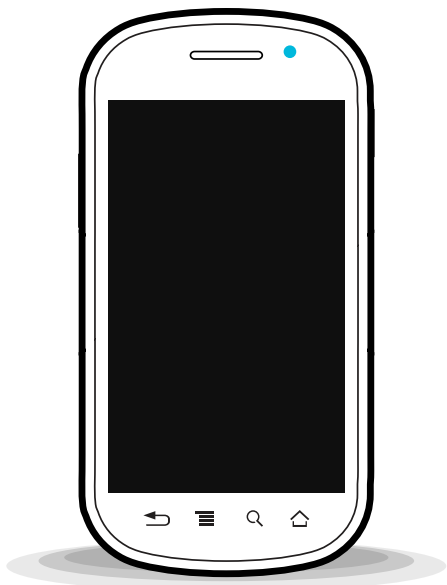


40% of tweets from mobile



16% of new users start on mobile

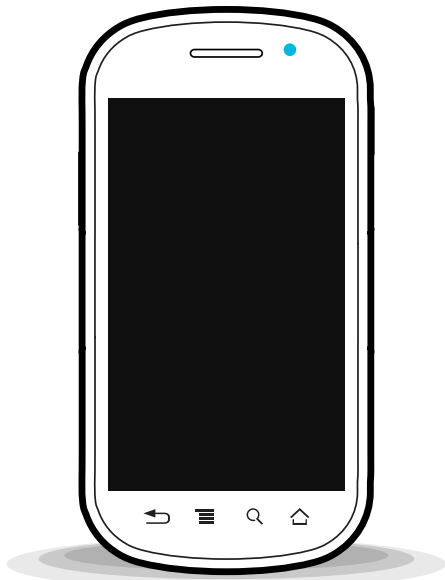
TWITTER







FACEBOOK



50% of users on mobile



50% of mobile web traffic



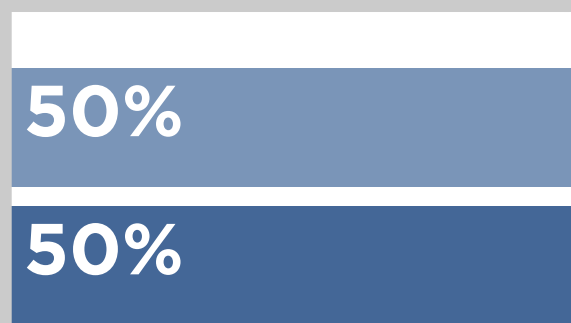
2X more desktop use if also use mobile

Facebook Usage

425 MILLION



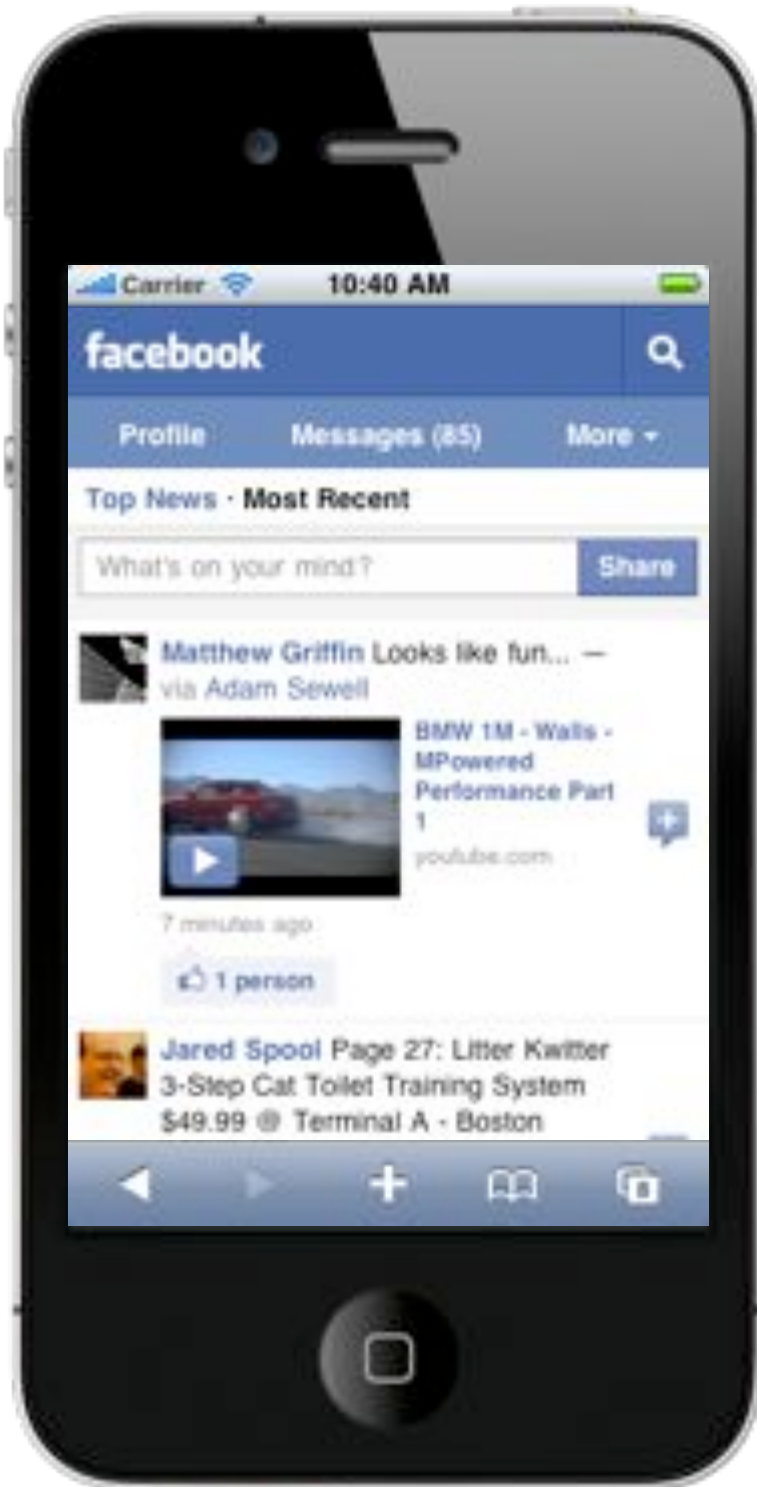
0% 50% 100%



Mobile Web

Mobile Native Apps

- iPhone
- Palm
- Sony Ericsson
- INQ
- Blackberry
- Nokia
- Android
- Windows Phone
- Sidekick





Mobile Web Usage



- Mobile phones will overtake PCs as the most common Web access devices worldwide by 2013
- 600% growth in traffic to mobile websites in 2010
- Avg smartphone user visits up to 24 Web sites visits per day
- Top 50 websites constitute only 40% of all mobile visits
- Opera Mini traffic up 200% yr/yr



Even if you have native apps...

Gowalla



Apple iPhone



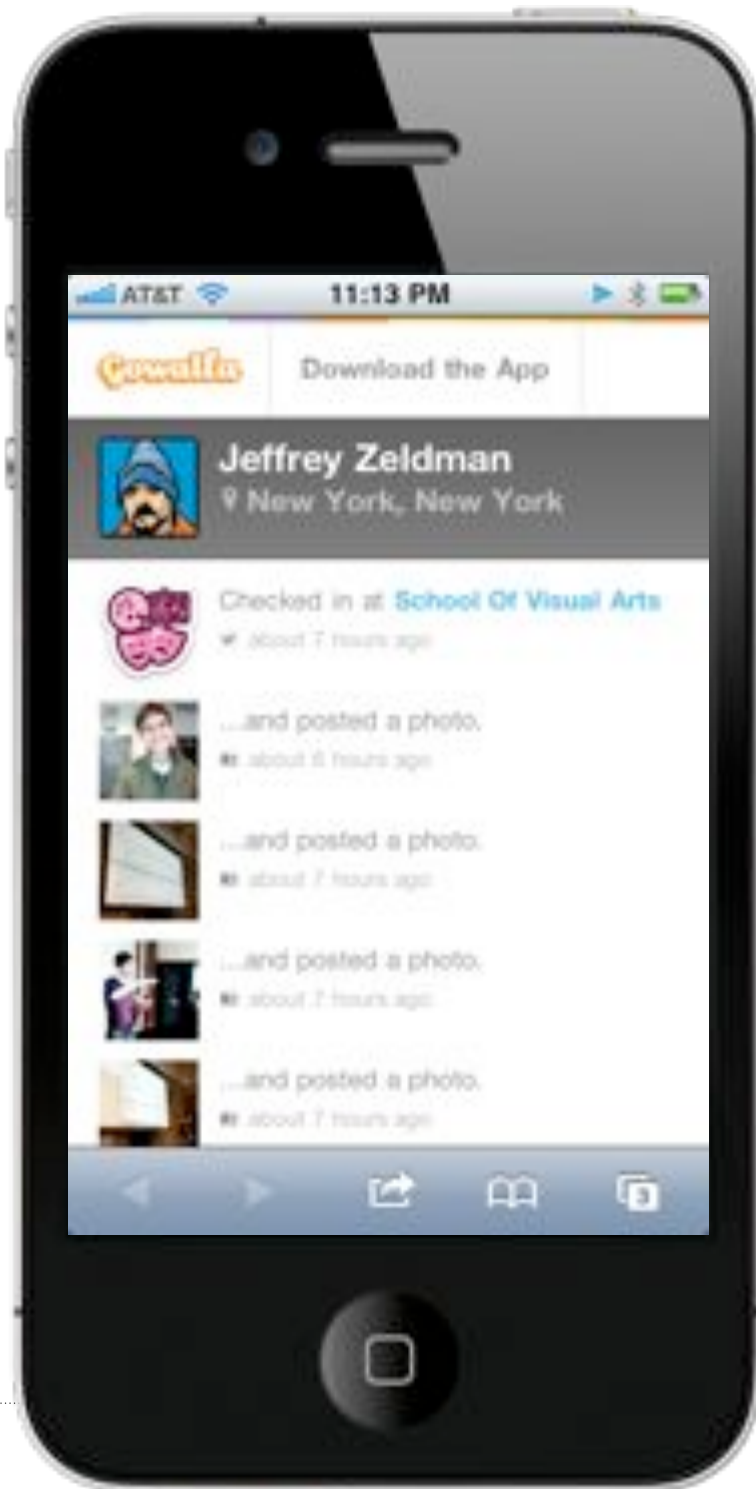
ANDROID




BlackBerry



iPad





- 
- Instant updates, fixes, & testing
 - Not playing in anyone else's backyard
 - Great way to get started with mobile

- Shift from PCs to mobile devices
- Including the Web
- Even if you have an app...
- Chances are you're not on every platform
- Even if you are URLs still need pages



MOBILE IS DIFFERENT

Photo By Michael Beserra



Coffee Mug



Big Screen



Power Supply



Consistent Network



Keyboard



Mouse



Chair



Desk



INTENSELY PERSONAL



Small Screen



Battery



Fingers



Sensors

A close-up photograph of a person in a dark blue suit jacket holding a silver smartphone. The person's face is partially visible in profile, looking down at the device. The background is a blurred city street with cars and buildings. The overall tone is professional and modern.

EVERYWHERE & ANYWHERE

84% at home

80% during misc. times

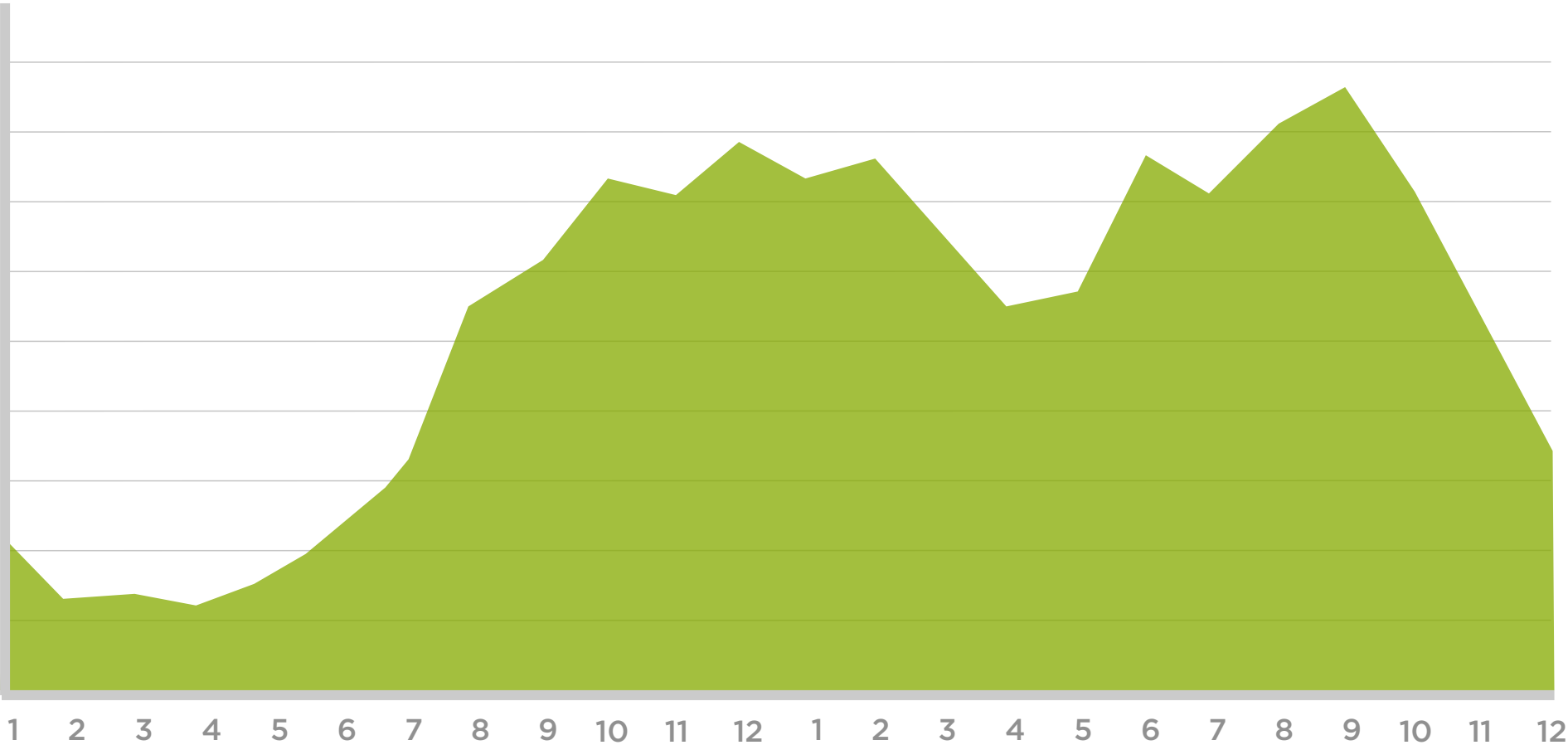
74% waiting in lines

64% at work

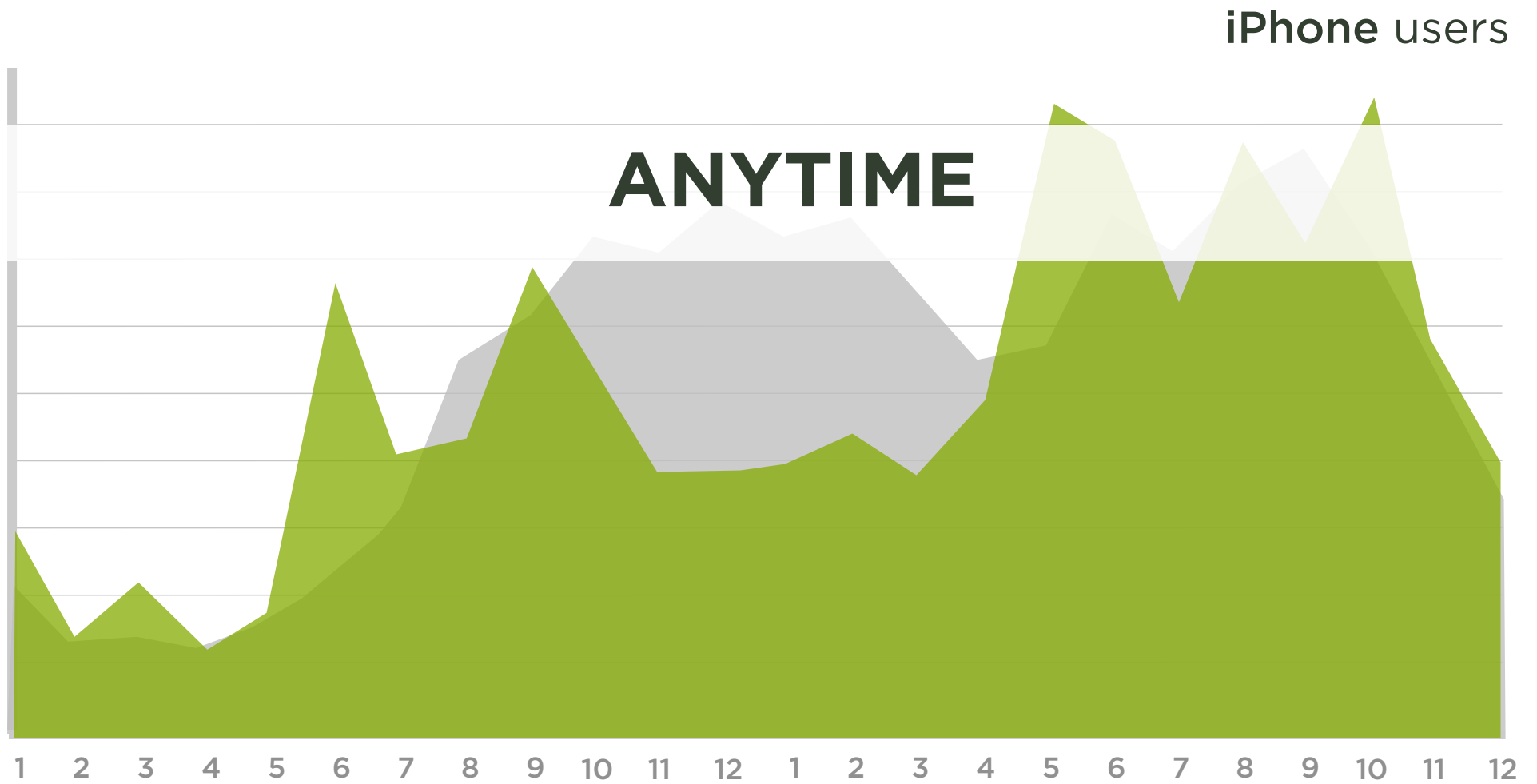
Photo by Steve Rhodes

When are we mobile?

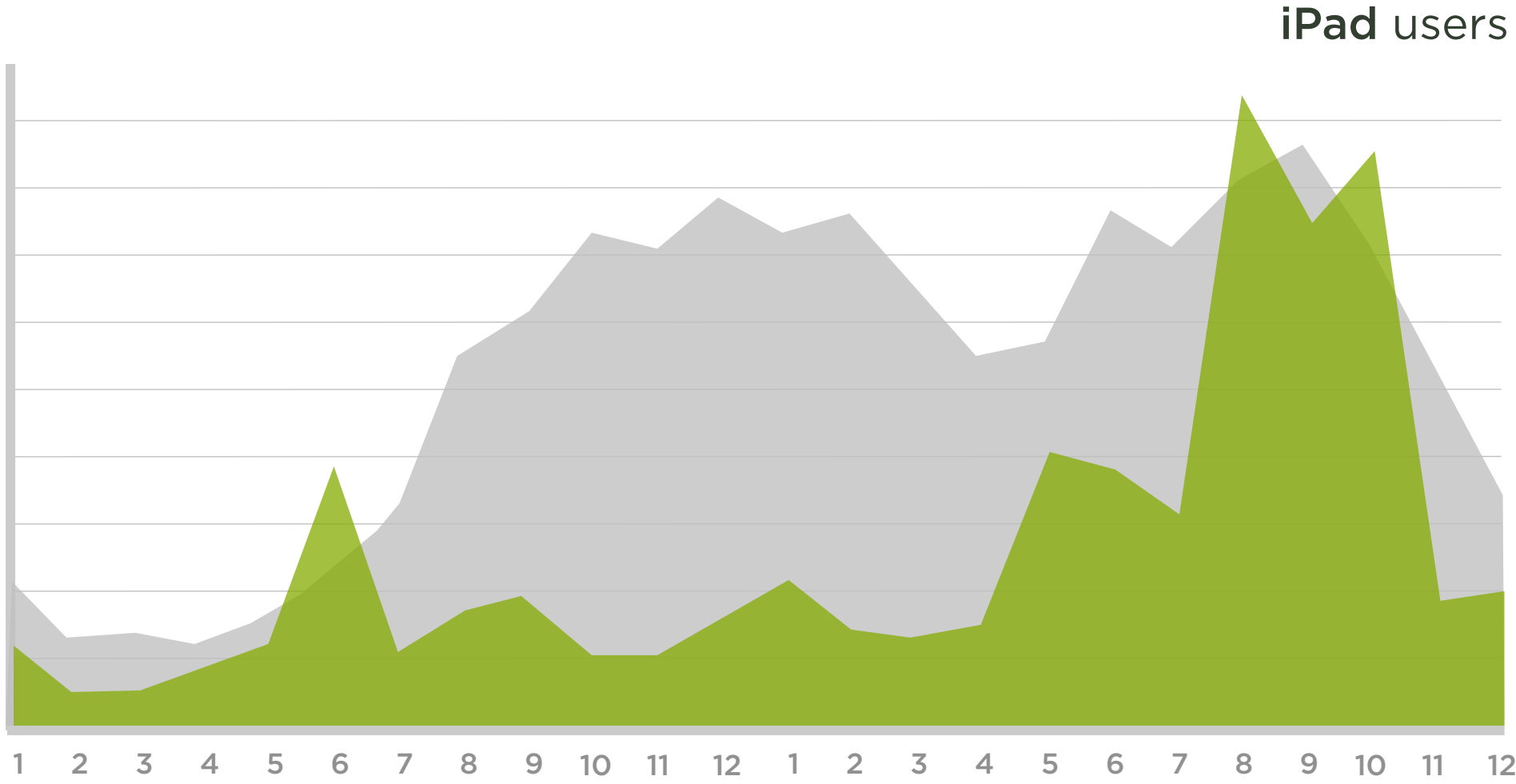
Computer users



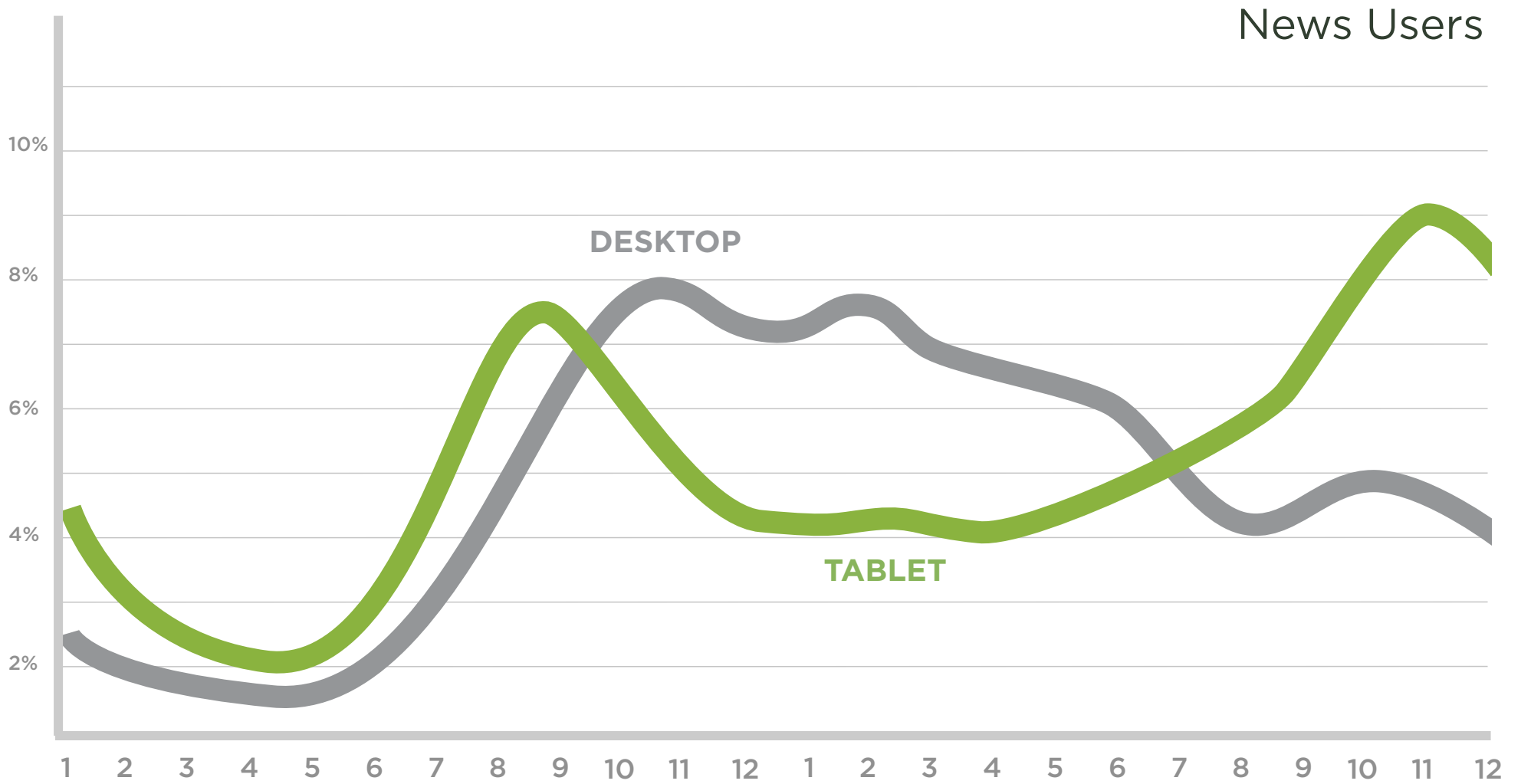
When are we mobile?



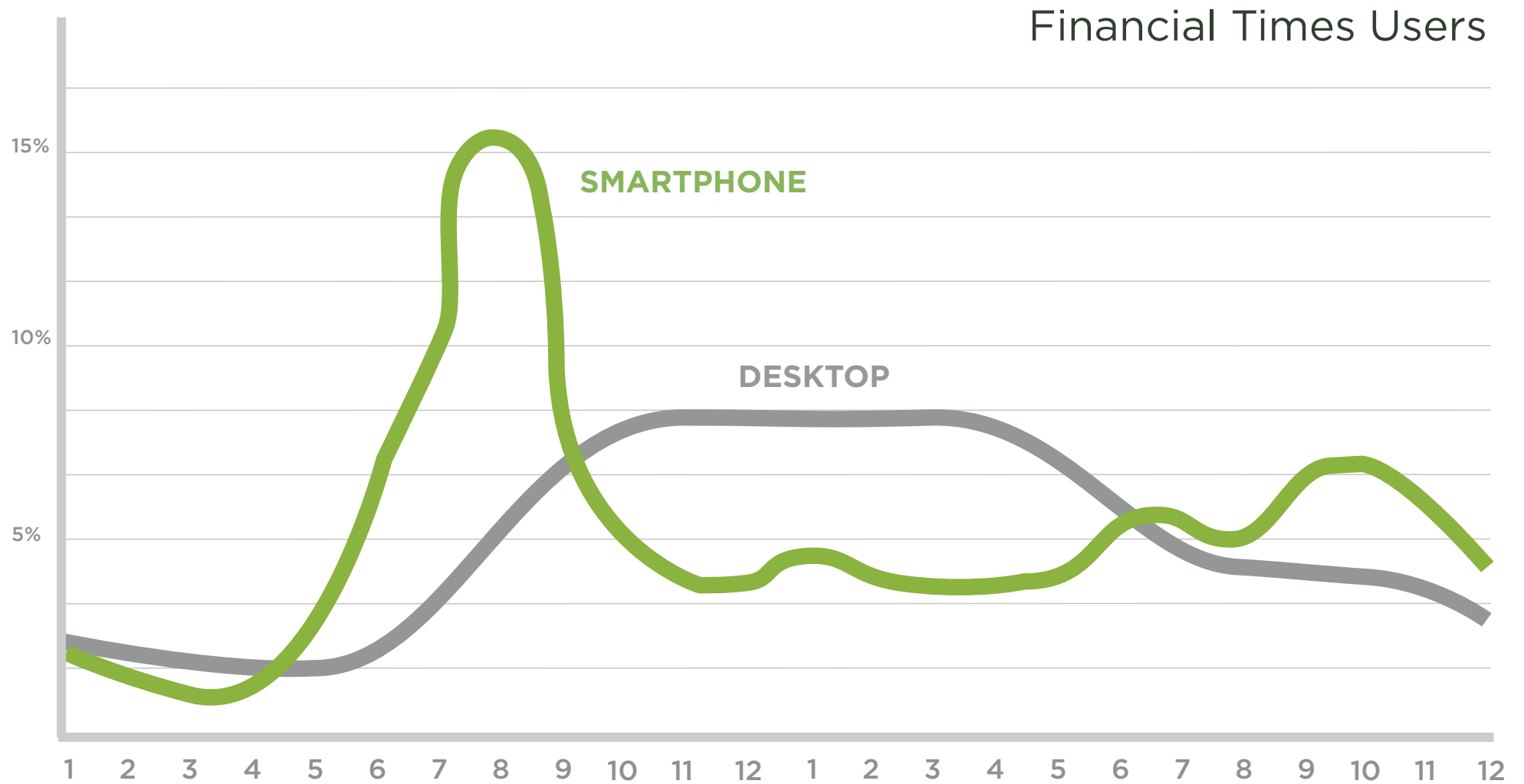
When are we mobile?



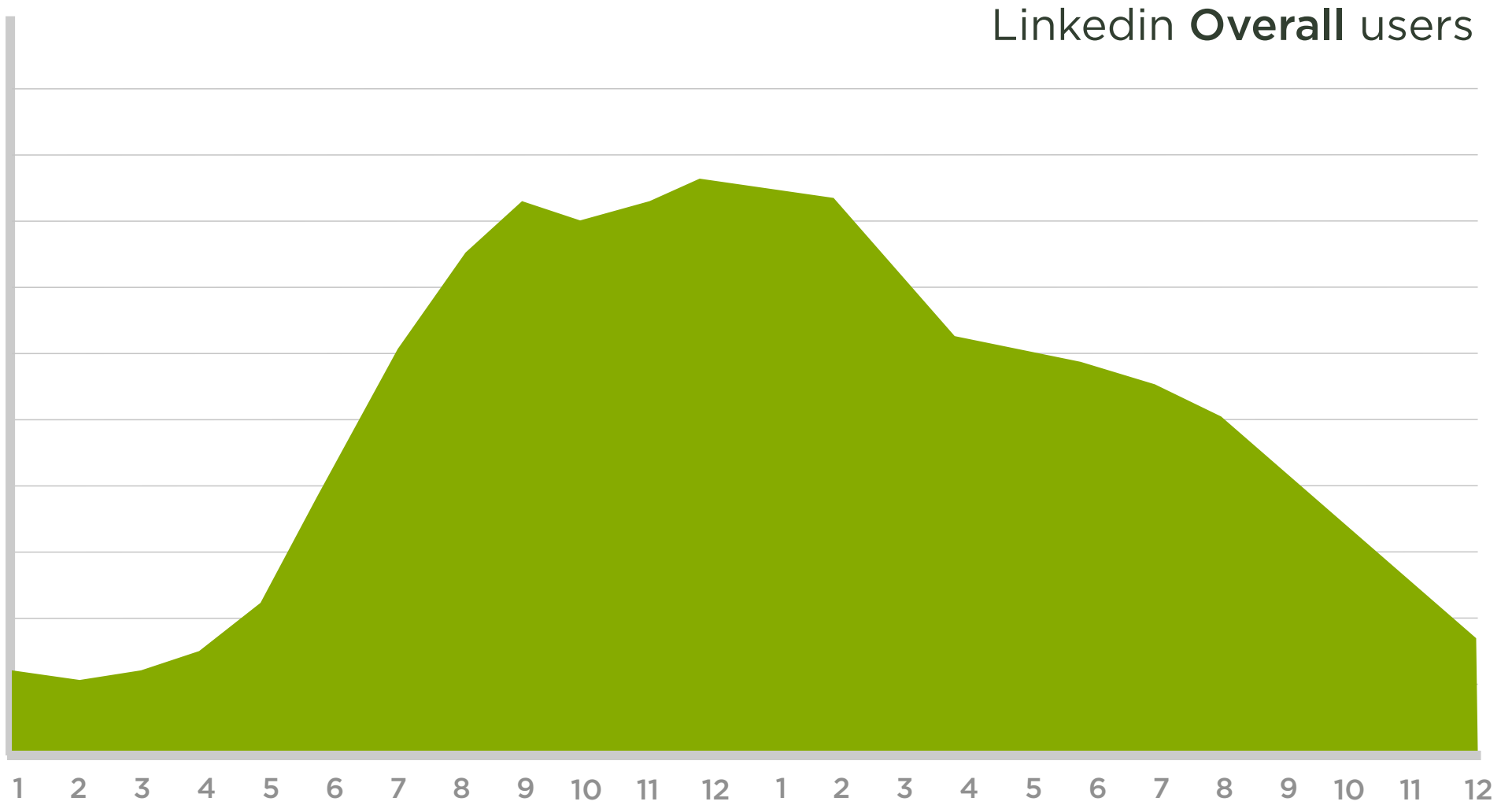
When are we mobile?



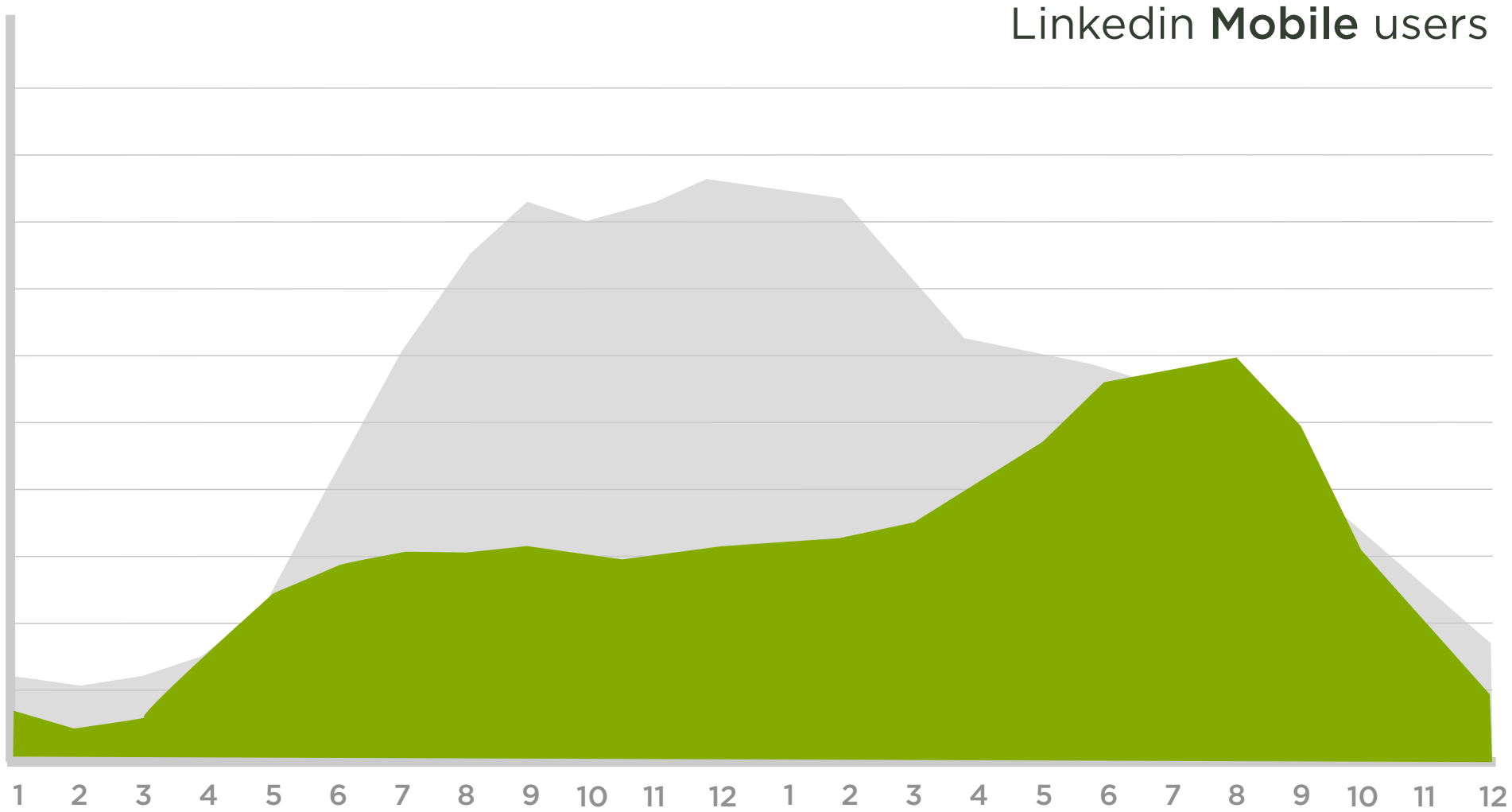
When are we mobile?



When are we mobile?

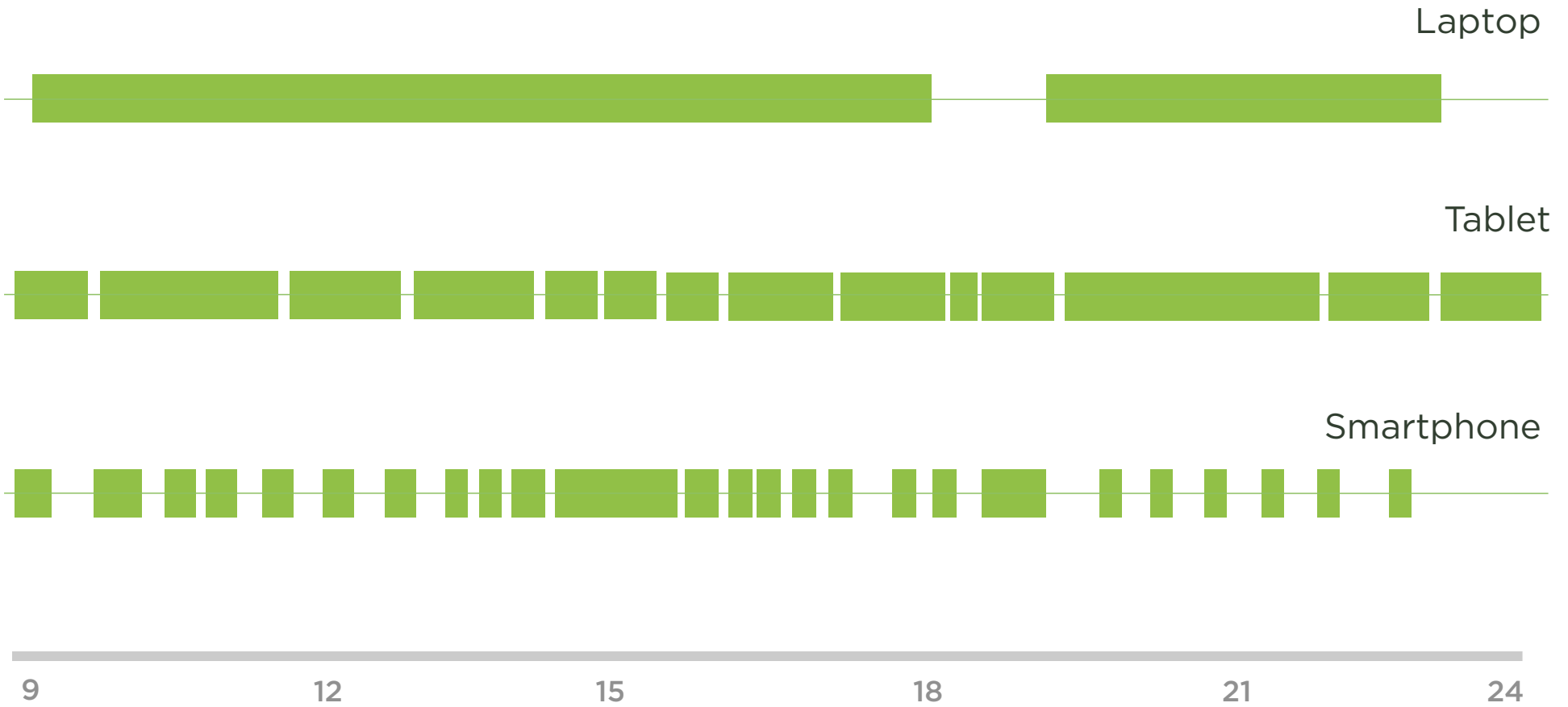


When are we mobile?



When are we mobile?

Mobile 3G Traffic Patterns



40% of searches come from 8% of users



- 40% of all Yelp searches come from their **mobile applications** which had 5.7 million unique users in Feb 2012
- That month Yelp had 66 million monthly unique users around the world

Additional Usage



- Every second a consumer calls a local business and generates driving directions from a Yelp mobile app.



- Viewing active listings 45% more often from mobile devices (audience is primarily active buyers, on location or scoping out neighborhoods)



- People that use Facebook on their mobile devices (425M active) are twice as active on Facebook than non-mobile users.



MOBILE IS DIFFERENT

- Technical capabilities & limitations
- Ergonomics of palm-sized devices & touch
- Used anywhere & everywhere
- Distinct times & behaviors

A man wearing a black bucket hat, blue sunglasses, a maroon tank top with a colorful graphic, and a large analog clock around his neck. He is in a crowded indoor setting, possibly a festival or dance event, with other people in the background. A teal speech bubble points to him with the text "OOOO I need new moves."

OOOO I need new moves.

- Mobile Web Growth
- Mobile is Different

Photo by donkeycart



MOBILE WEB DESIGN MOVES

1. Organize Yourself
2. Use your Head
3. Bottom Out



ORGANIZE YOURSELF

Photo by Guillo Solano

A hand holding a black mobile phone with a white text overlay on the screen. The background is a blurred city street at night with lights and buildings.

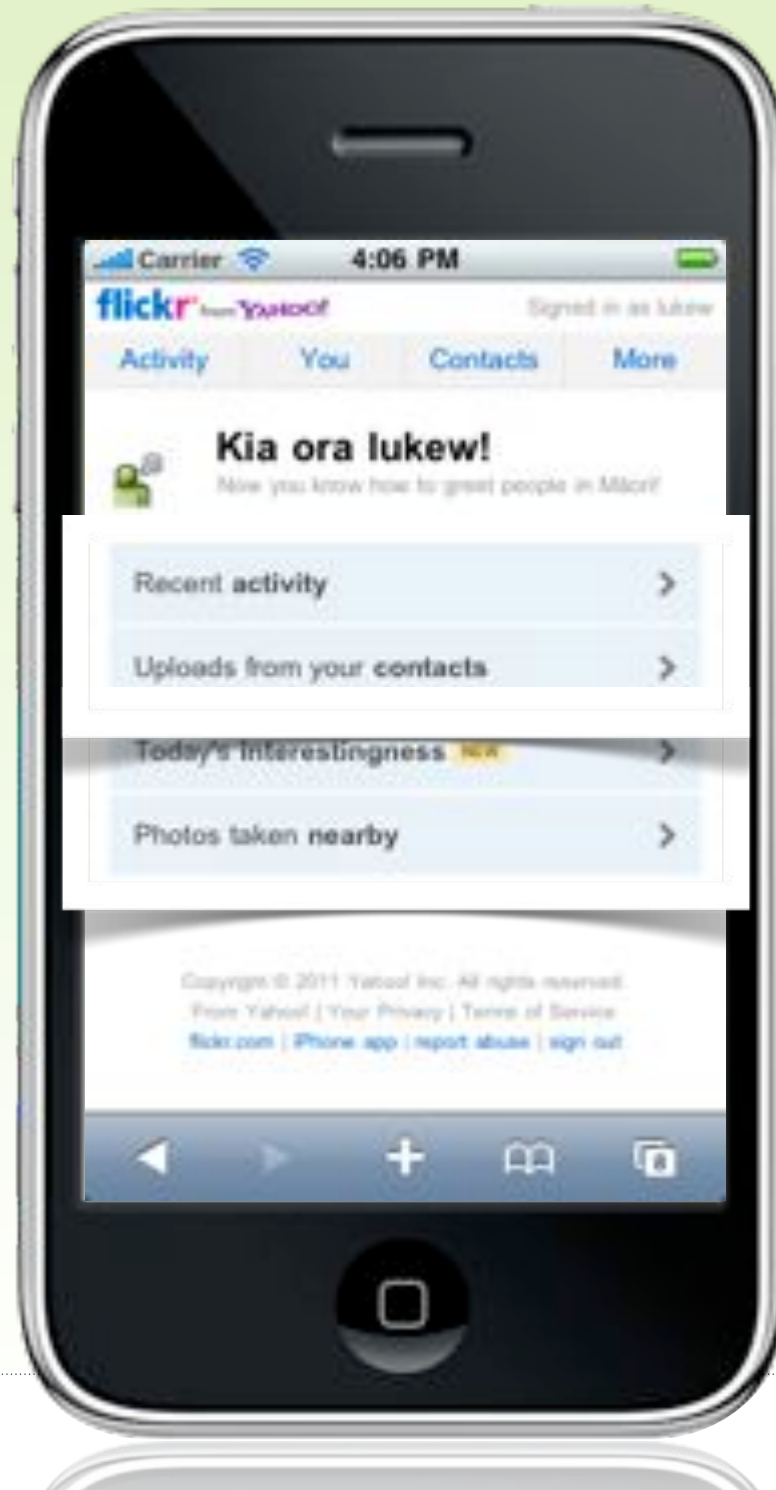
**URGENT
REPETITIVE
BORED**

GOOGLE MOBILE

Lookup/Find
Explore/Play
Check In/Status
Edit/Create

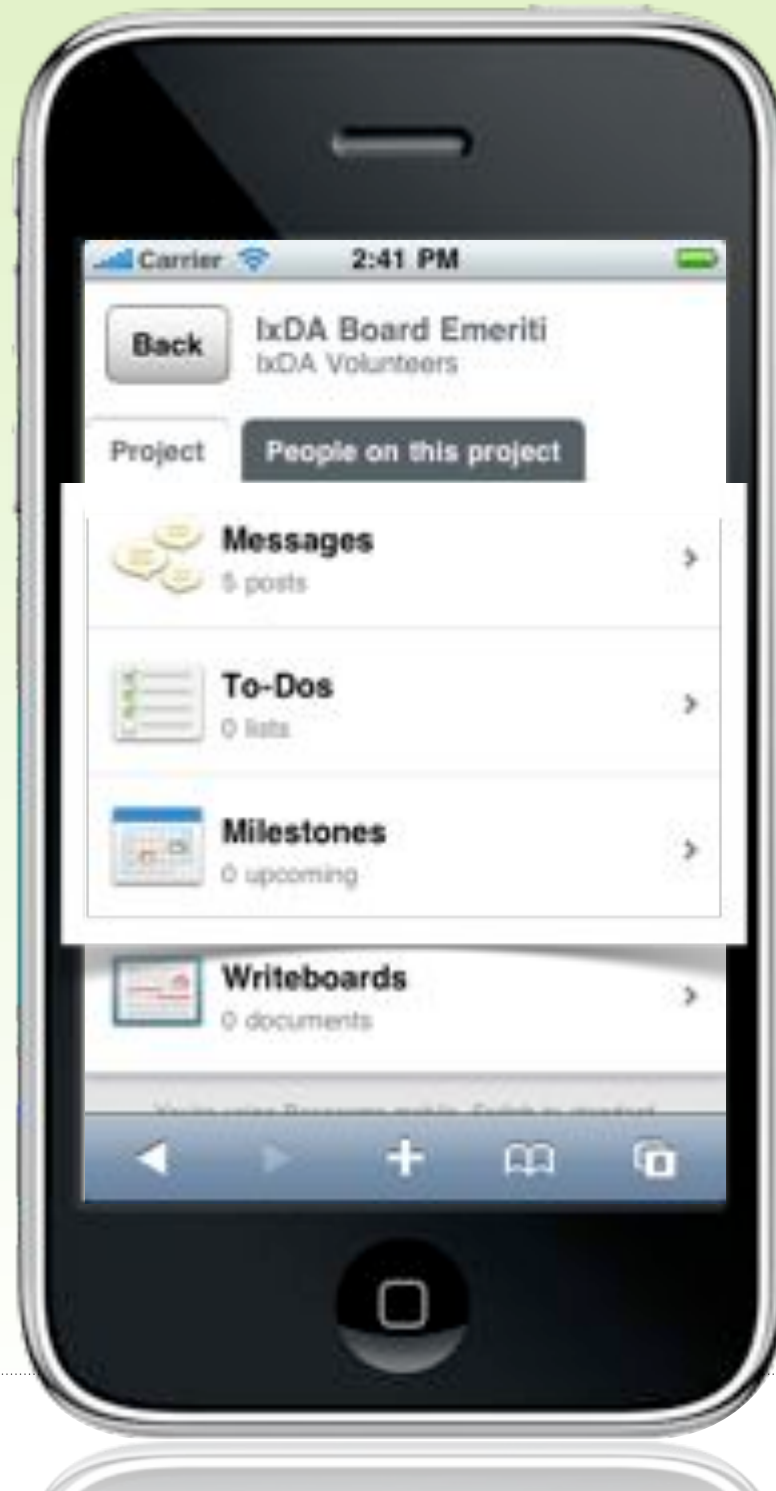


Check In/Status



Explore/Play

Check In/Status

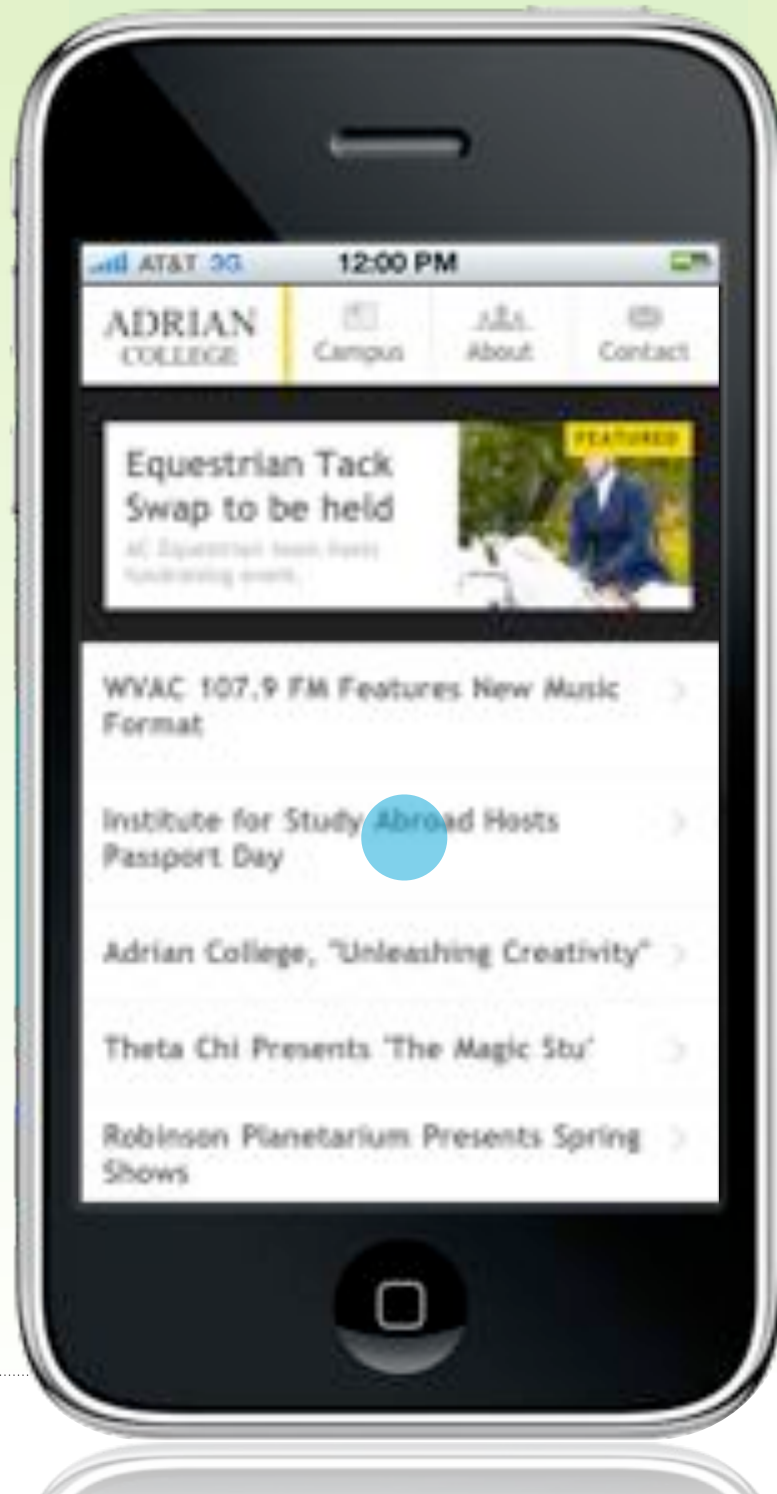


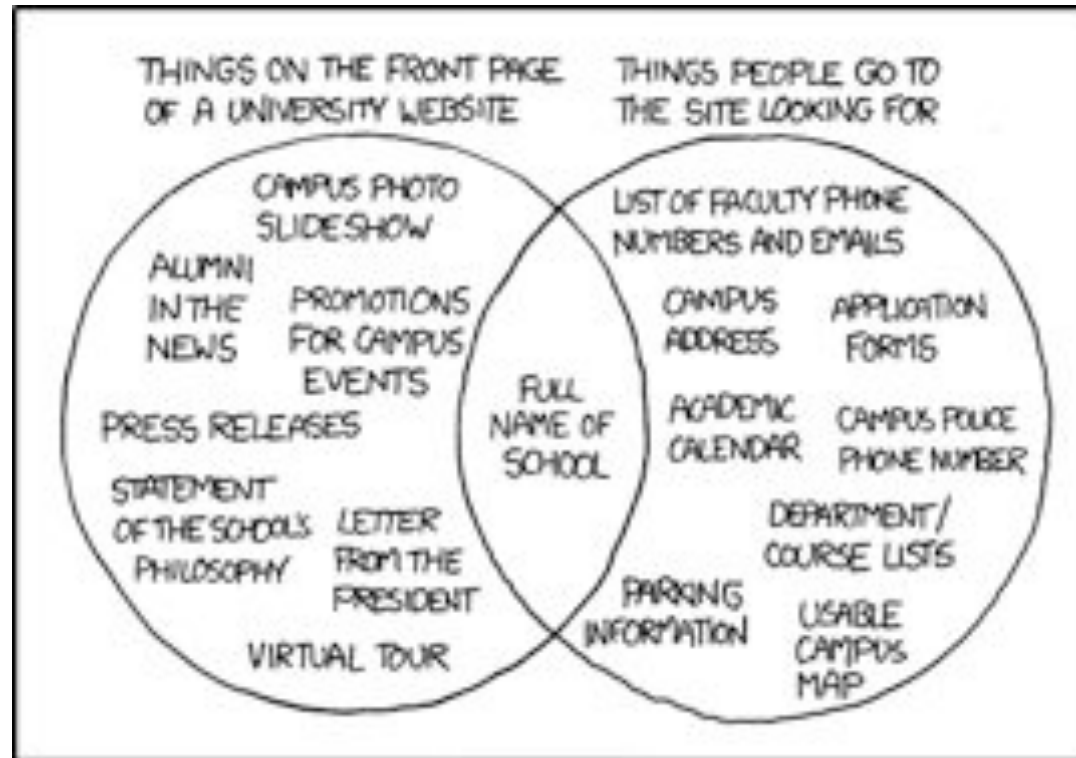
Edit/Create

Marketing



Menu



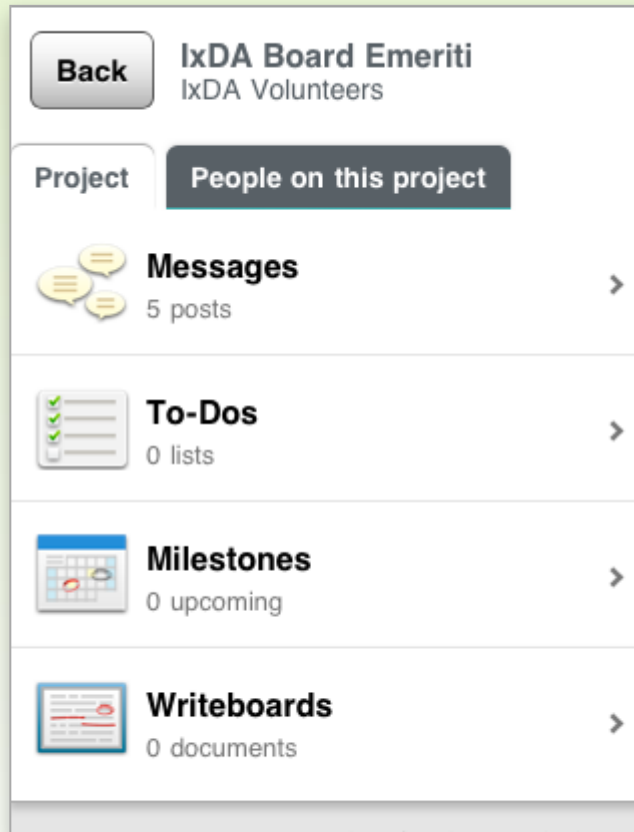
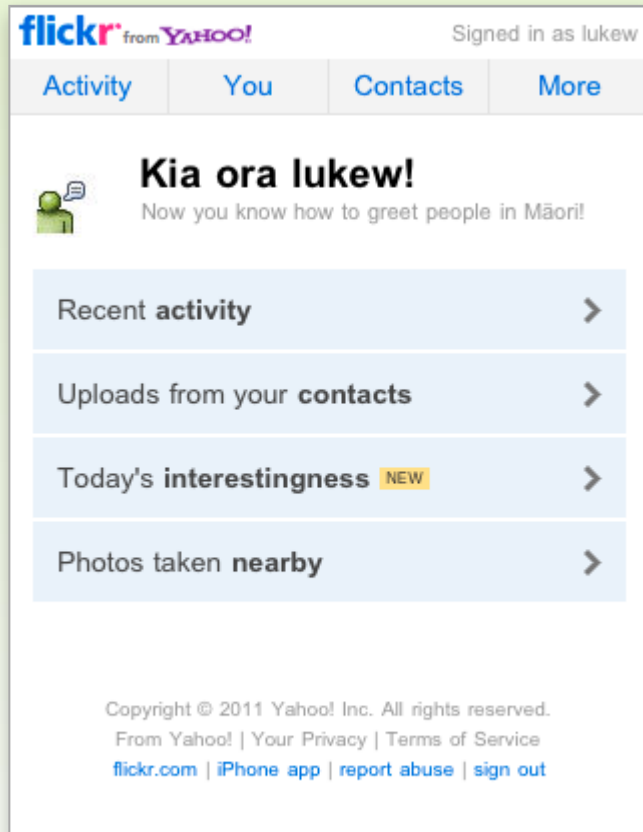


“I was looking at **the right side** of the Venn diagram I thought, ‘That looks like a lot of the current and planned content for **our mobile site.**’ I think the only thing we don’t have are the admissions application.”

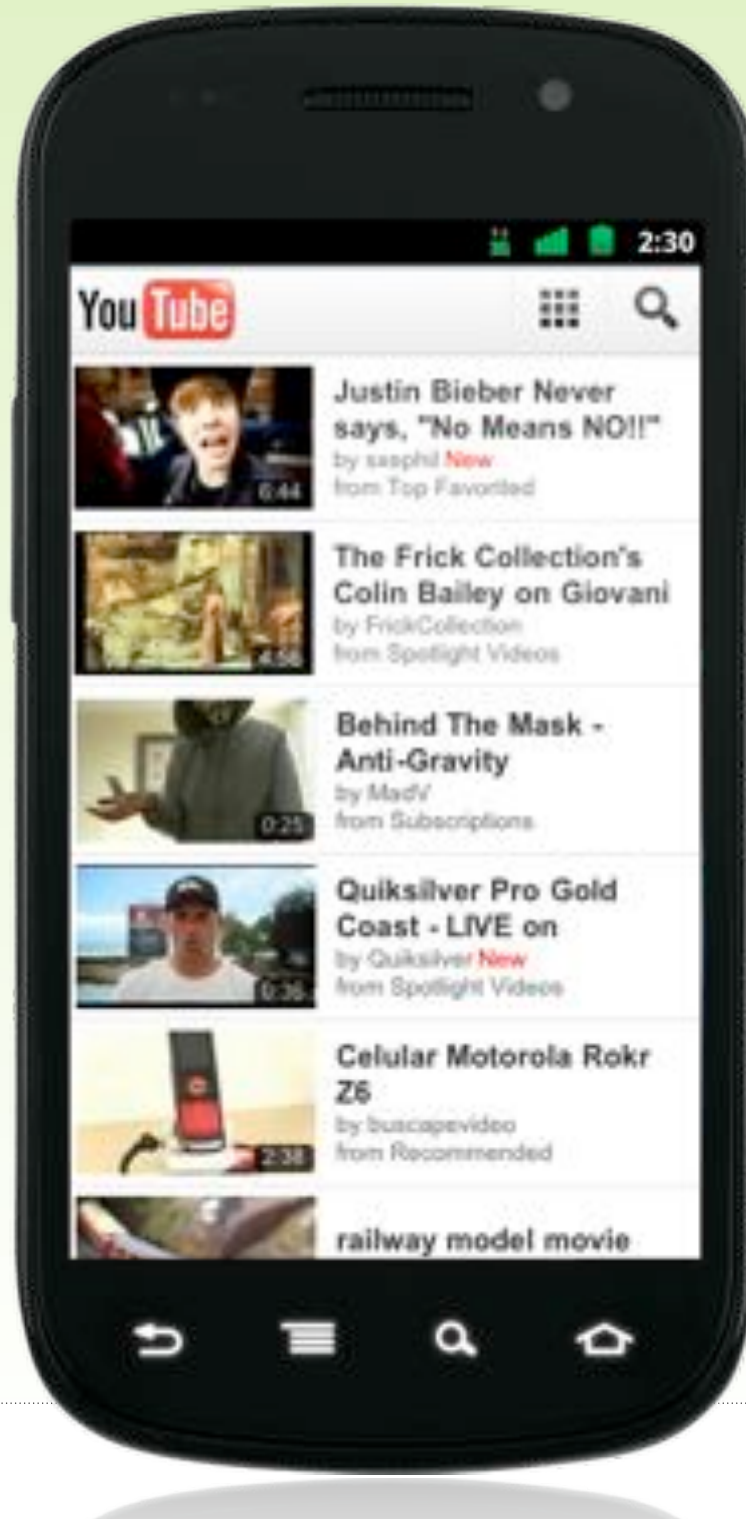
MOBILE FIRST

- 1. GROWTH = OPPORTUNITY
- 2. CONSTRAINTS = FOCUS
- 3. CAPABILITIES = INNOVATION

Navigation First, Content Second

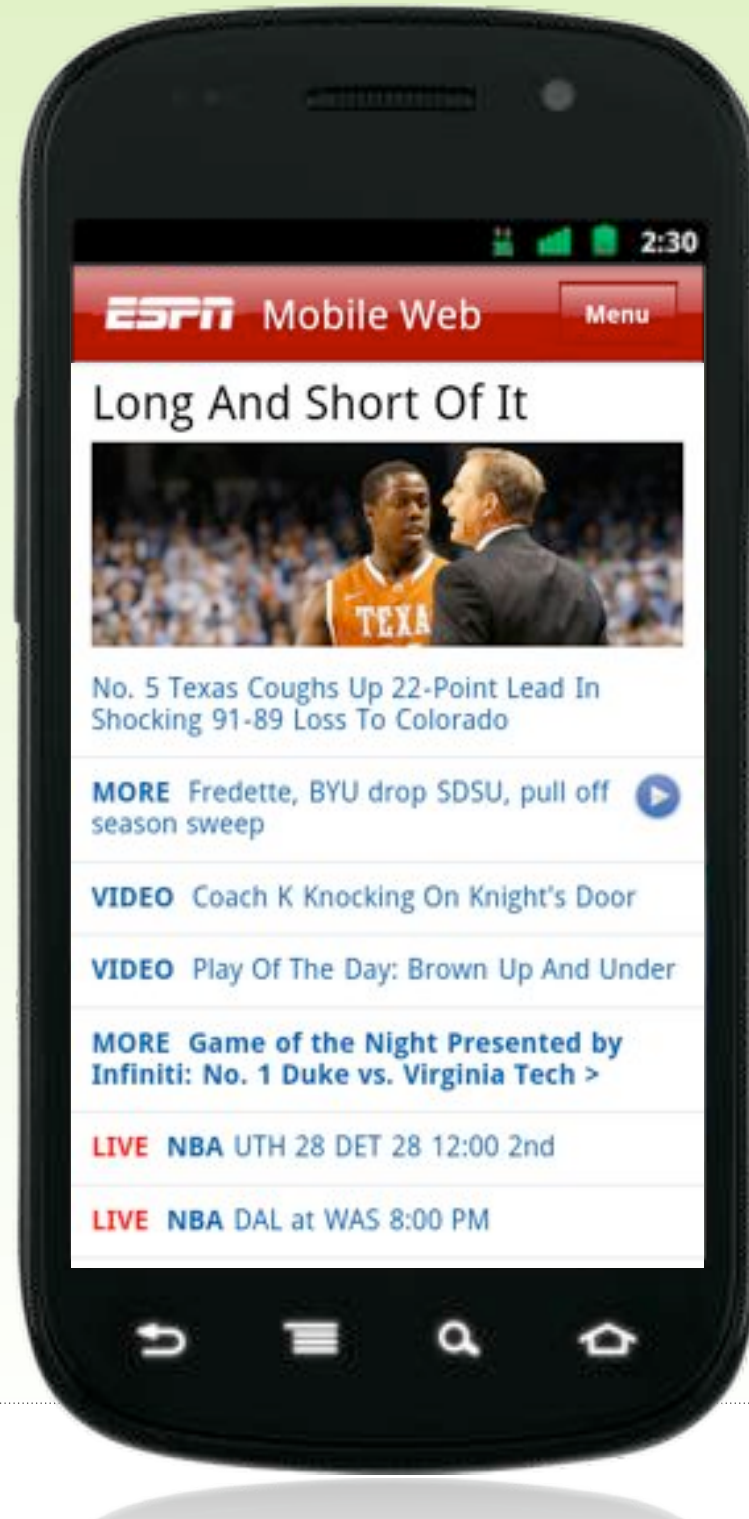


Minimal
Navigation

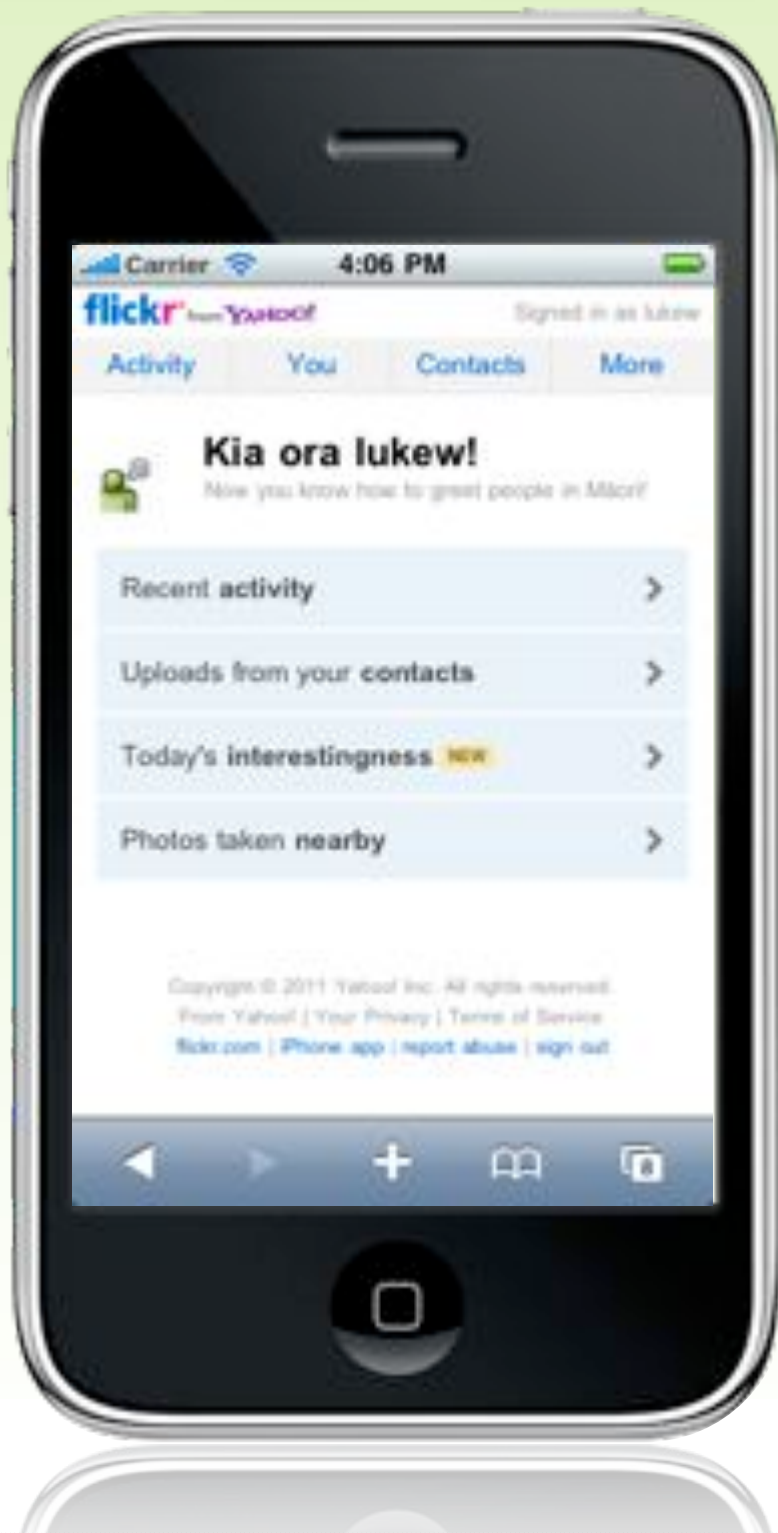


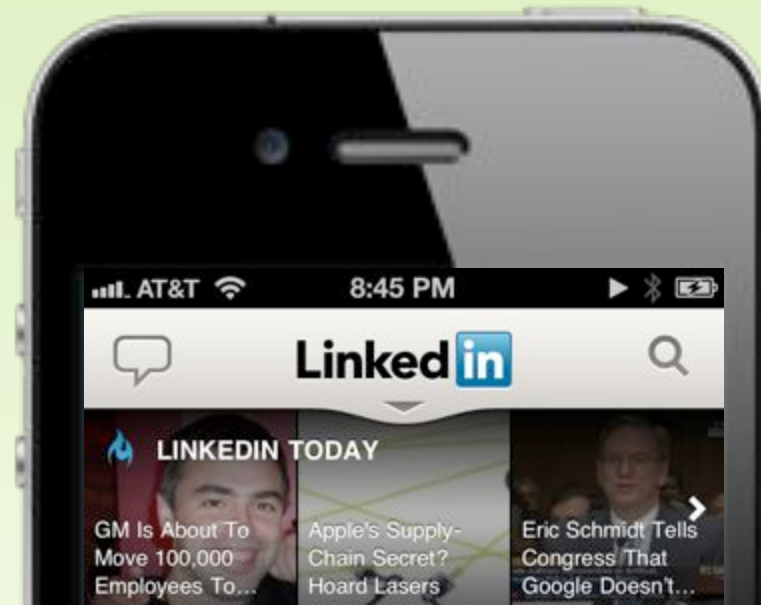
Maximum
Content

Minimal
Navigation



Maximum
Content





“In the new app, we present **relevant content up-front** and instantly notify users of new invitations and messages. In other words, we remove the friction of a dashboard and provide **immediate value on app launch.**”



Check In/Status



Navigation
Second



Conditions

Trail Map

News

Events

Room Reservations

Contact Us

Timberline Full Site

SEARCH

Visit Timberline

Play on the Mountain



ROOM AVAILABILITY CHECK-IN NIGHTS ADULTS KIDS

EXPLORE

NEWS

Photos & Videos from our Timberline Community



FRESH SNOW BANKS TIMBERLINE

DEC 26, 2010



Visit Timberline

- Introduction
Heritage
Whisperer's Dinner Series
Spend The Night
Dining
Tours & Activities
Camping
Shopping
Workshops
Meetings & Get Togethers
Ski Hut
Guest Services
Transportation

Play on the Mountain

- Introduction
Lift Passes & Info
Trail Map
Skiing & Snowboarding
Mountain Safety
Gear Rental
Freestyle Terrain
Group Planning
Climber Snowcat Transport Service
Snowshoeing
Mountain Biking At Timberline
Summer Ski & Piste 2011
Magic Mile Sky Ride

Learn at Timberline

- Introduction
Winter 10-11 Programs & Pricing
Your First Time
Your Lessons
Find the right lesson
On Your Own
Frequent Questions
I Want to Teach
Timberline Summer Snow Camps

Connect with Timberline

- Introduction
Home
Events
Contact Us
Desk
Newsletter
Subkeys

Explore the Gallery

Photos And Videos

Company Info

- About
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Jobs
Privacy Policy
Press Room
Partners
Charitable Contributions

TICKETS 509.279.3156 | RESERVATIONS 800.547.1406 | GROUP SALES 509.279.3051 | SHOW PHONE 509.250.2011

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@wito

Mat "Wito" Marquis

“Mobile users want to see our menu, hours, and delivery number. Desktop users definitely want this 1mb png of someone smiling at a salad.”

27 Apr via [Twitter for Mac](#) ☆ [Favorite](#) 13 [Retweet](#) 4 [Reply](#)

Retweeted by [libra](#) and 100+ others



@grigs that we both rely on "view desktop site" links tells me that mobile-optimized content regularly falls short of users' needs
/cc @beep

10:30pm Mar 4th 2011 via Twitter for Mac in reply to grigs

#10 [x]



scottjehl

Scott Jehl

Thought of the day: we'll know the mobile web is "ready" when links to the desktop version are understood to be unnecessary.

10:43pm Mar 4th 2011 via TweetDeck

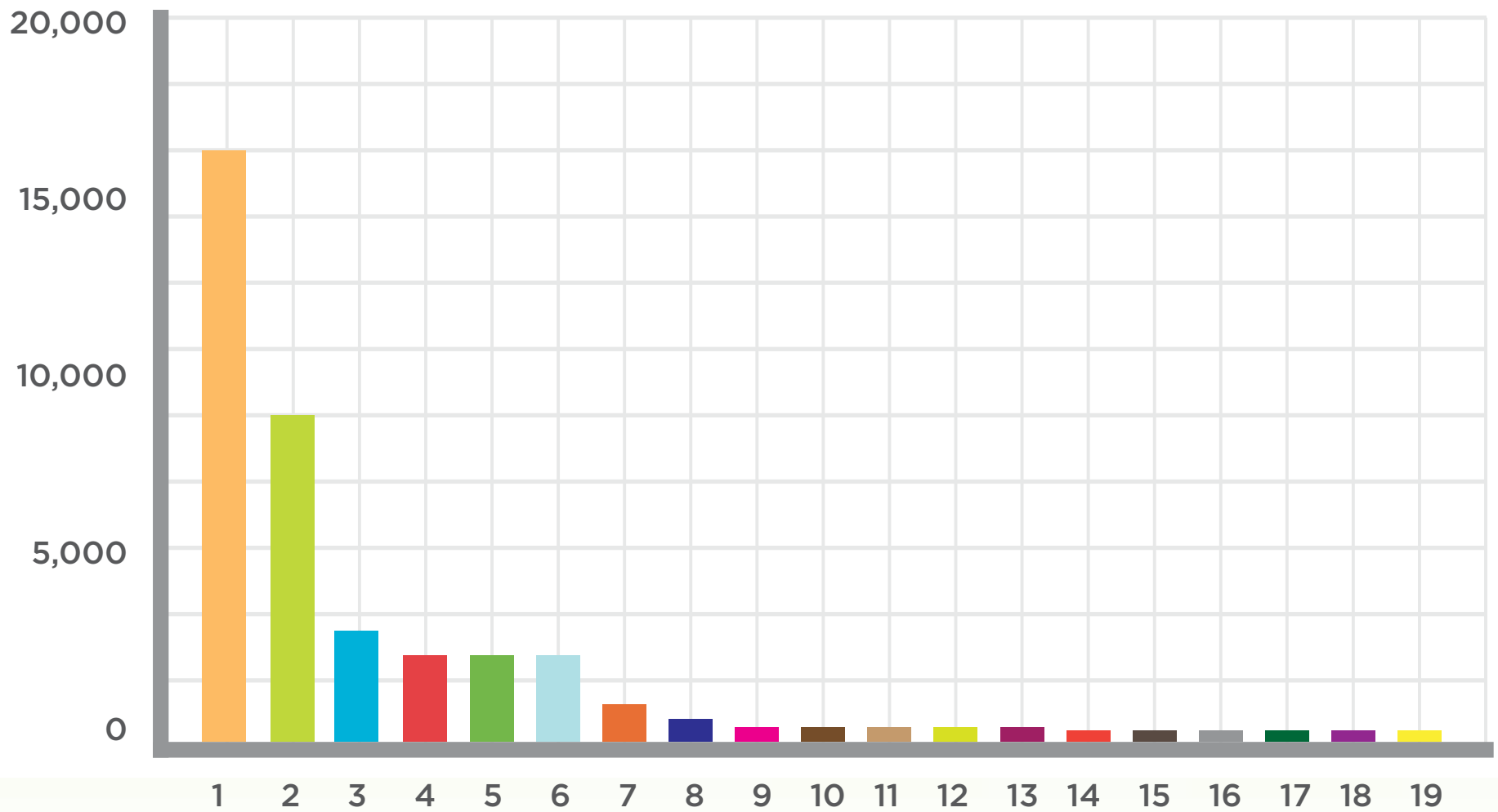
#11 [x]



grigs

Jason Grigsby

Top Pages by Visit





ORGANIZE YOURSELF

- Know what mobile is uniquely good at
- Adjust site organization accordingly
- Content first, navigation second
- Don't dumb it down for mobile

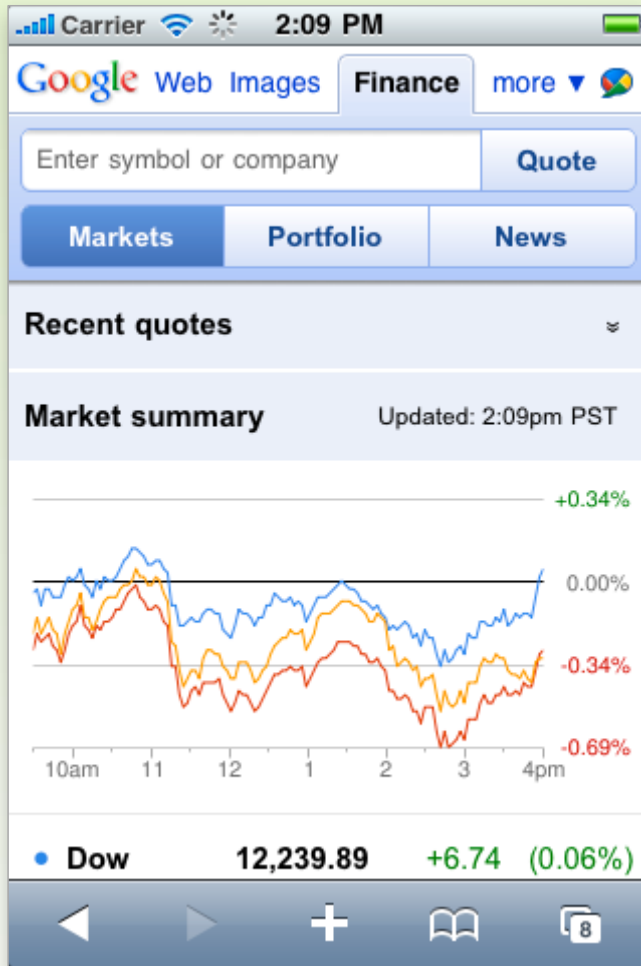
Photo by Guillo Solano



USE YOUR HEAD

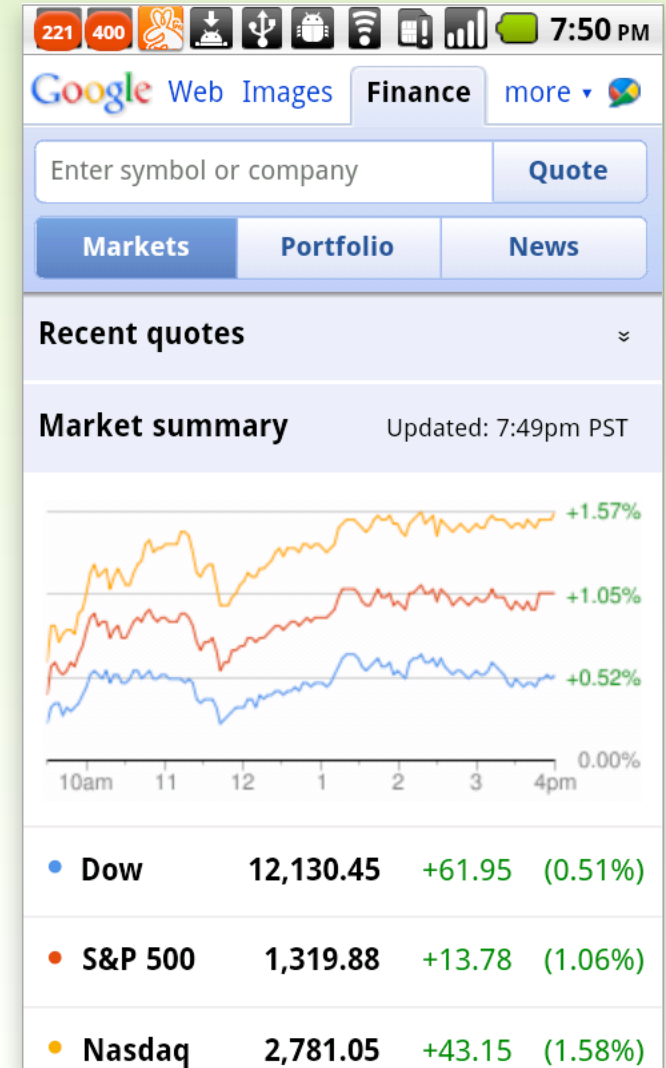
Photo by re-Verse

Navigation Elements



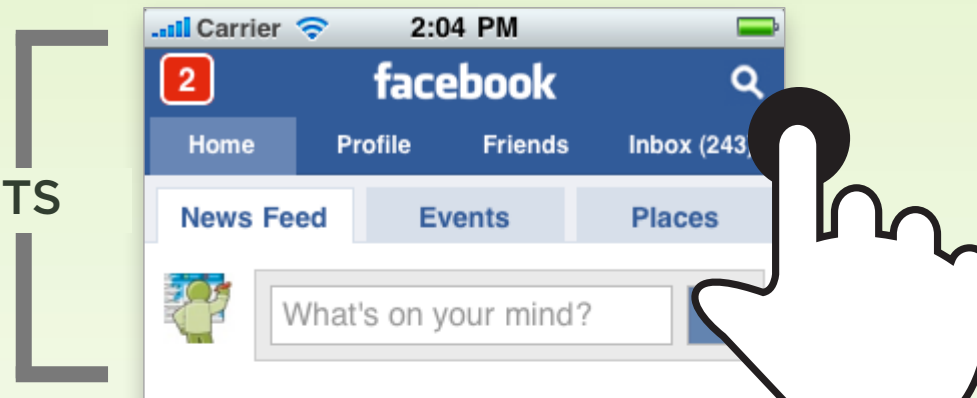
56% NAV/CHROME

44% CONTENT

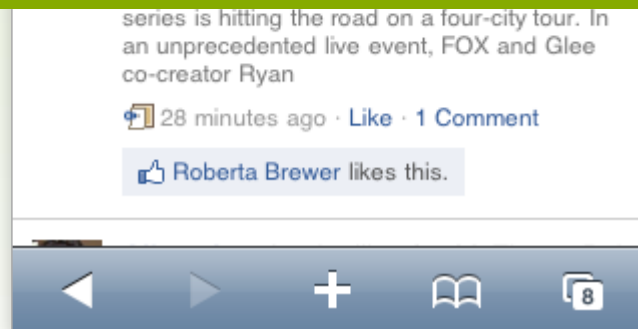


Navigation Elements

13 NAV ELEMENTS



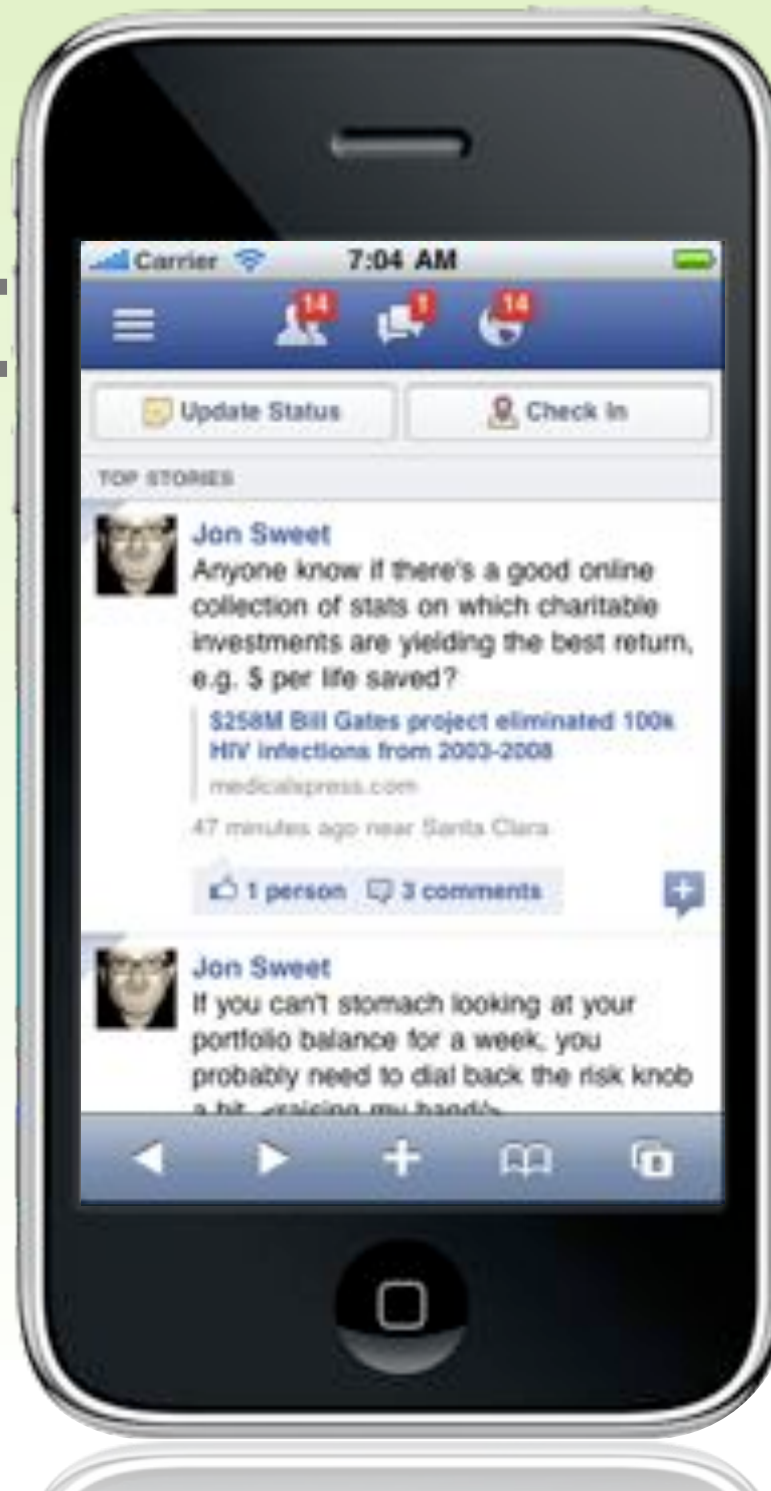
lukew.com/touch

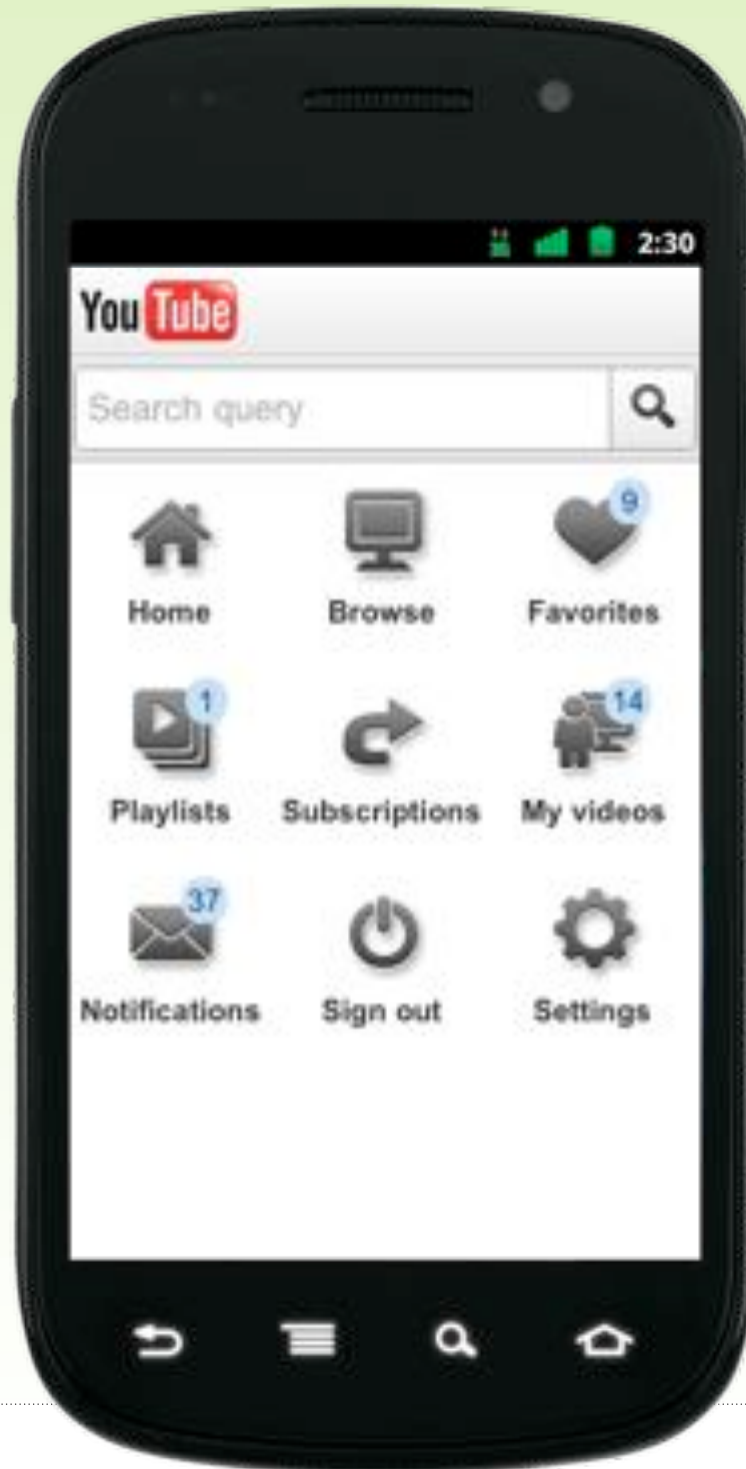


5 NAV ELEMENTS

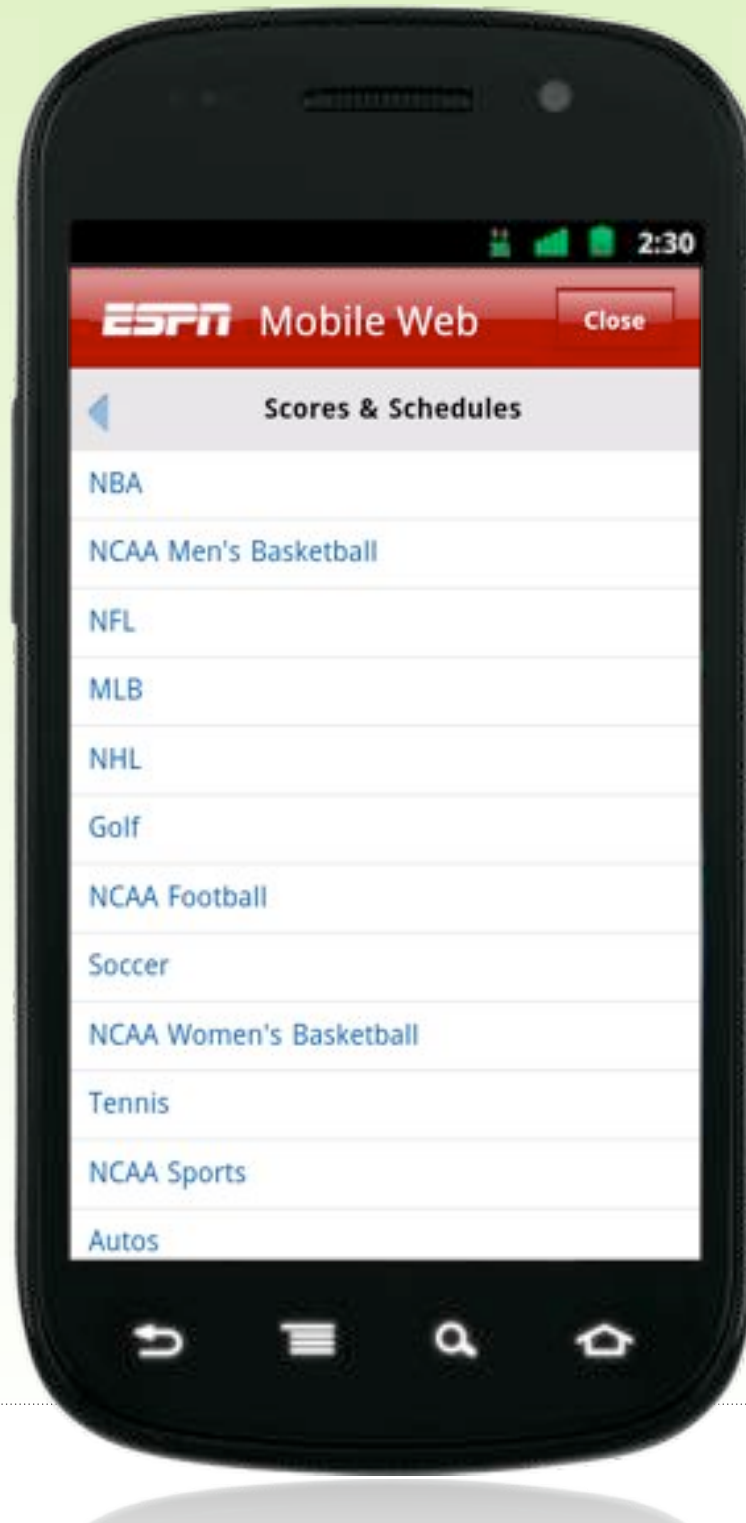


4 NAV ELEMENTS



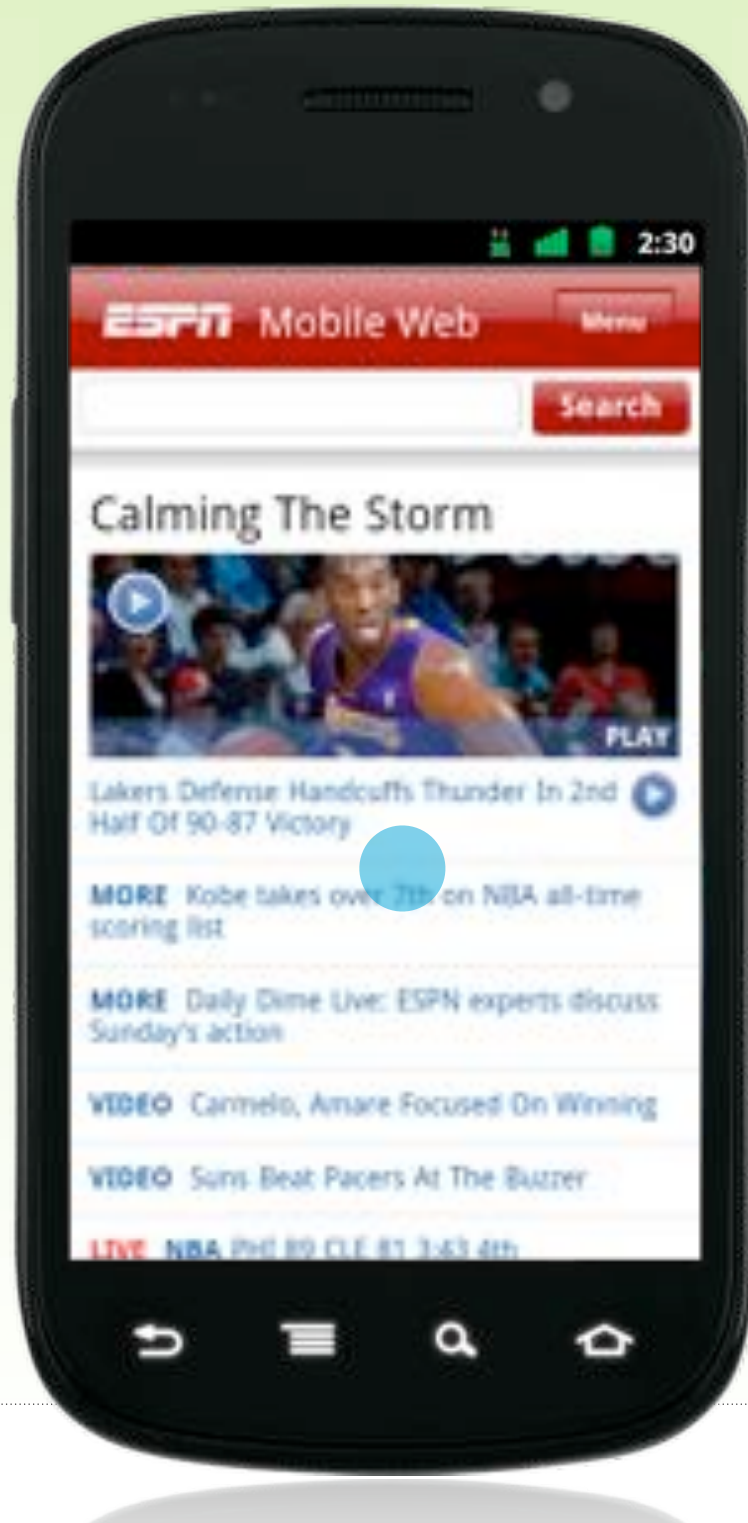


Full Navigation Page



Top Navigation Overlay

Pivot & Explore



Bottom
Navigation
Menu

MORE Daily Dime Live: ESPN experts discuss Sunday's action

VIDEO Carmelo, Amare Focused On Winning

VIDEO Suns Beat Pacers At The Buzzer

LIVE NBA PHI 89 CLE 81 3:43 4th

LIVE NBA GSW 113 MIN 118 4:18 4th

LIVE NBA NYK at MIA 8:00 PM

Did you know?
Virginia Tech beat the nation's No. 1 team for the 4th time in school history.

Scores & Schedules ▲

NBA NCAAB MLB NHL NASCAR MORE

Go to NBA Scoreboard ▶

FEB 27, 2011 UPDATED 7:16PM ET

What's Hot ▼

News & Analysis ▼

Video ▼

Sports ▼

SportsNation ▼

Podcenter ▶

Favorite Teams ▼

Fantasy ▼

More from ESPN ▼

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Justin Bieber Never says, "No Means NO!!!"
by sxephil **New**
from Top Favorited



The Frick Collection's Colin Bailey on Giovanni
by FrickCollection
from Spotlight Videos



Stoners' New Anthem
by collegehumor **New**
from Top Favorited



The Harvesters
by metmuseum
from Spotlight Videos



Behind The Mask - Anti-Gravity
by MadV
from Subscriptions



Quiksilver Pro Gold Coast - LIVE on
by Quiksilver **New**
from Spotlight Videos



Celular Motorola Rokr Z6
by buscapevideo
from Recommended



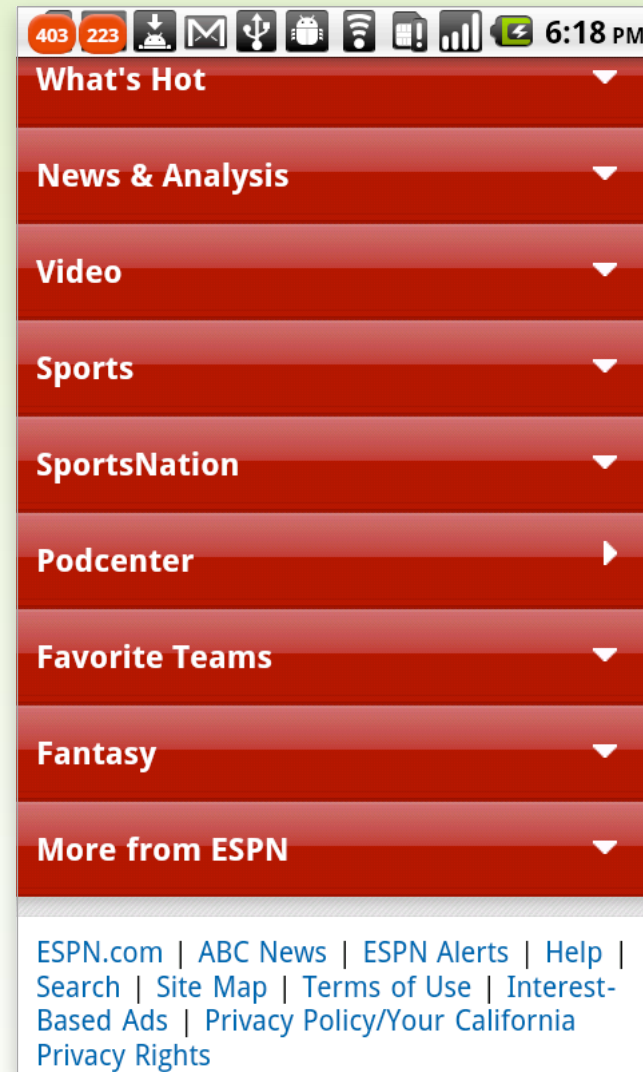
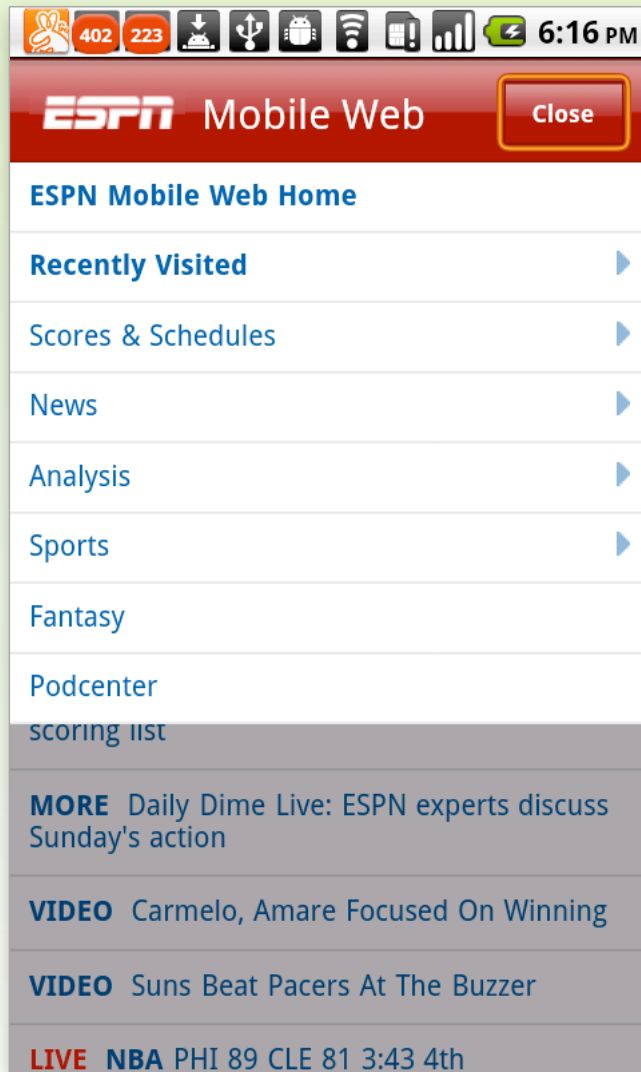
railway model movie
by scs0360
from Friend Activity

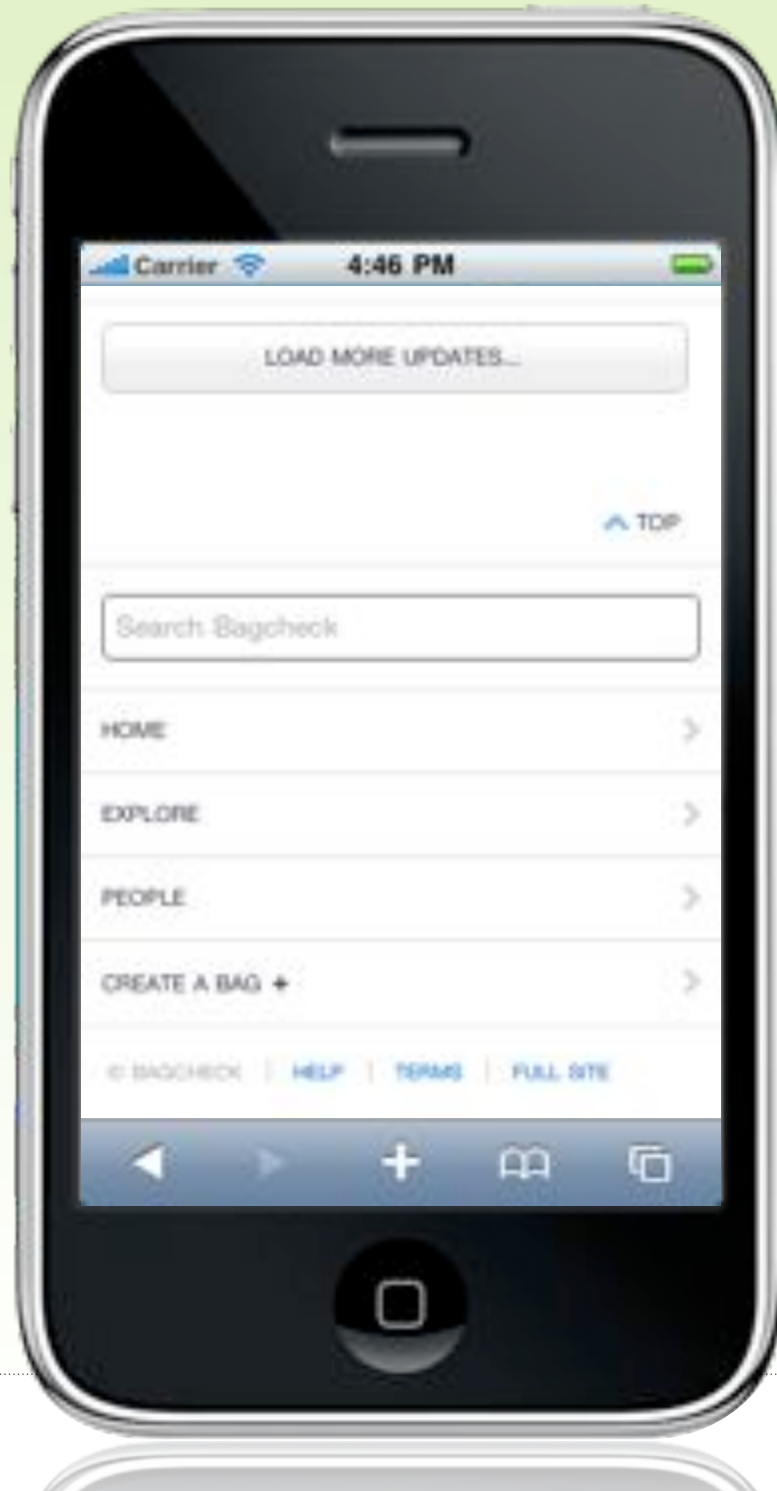


Oscar Host James

Dead End

Duplicative Menus





Top Navigation Link

Bottom Navigation Menu

Best of Both Worlds?

Minimal
Navigation

No
Duplicative
Menus



Just an
Anchor Link

Pivot &
Explore



80-90% of people are right handed



USE YOUR HEAD

- Avoid excessive navigation menus
- Top navigation links for quick access
- Page bottom for pivoting & exploring

Photo by re-Verse

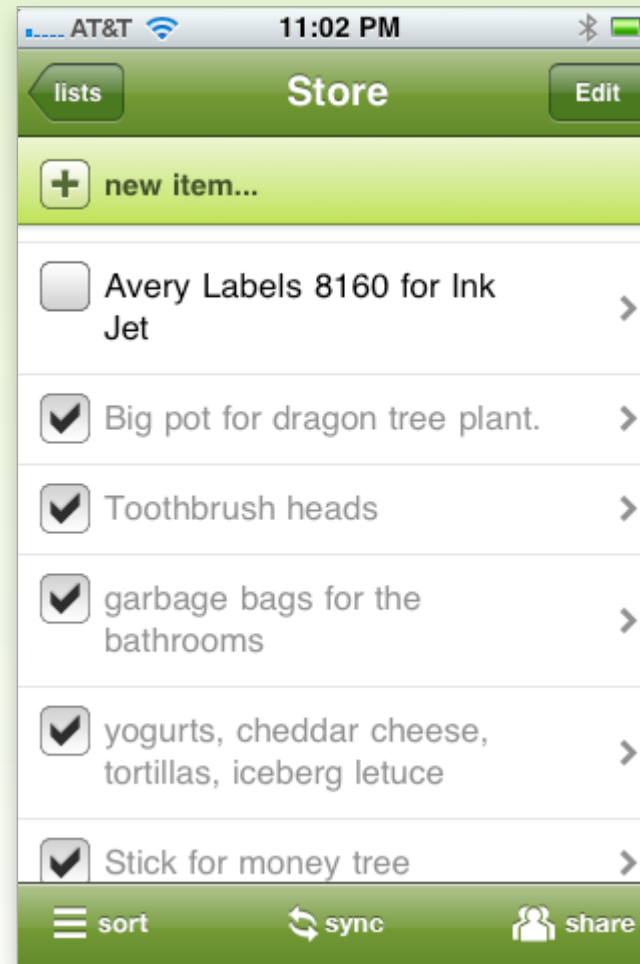
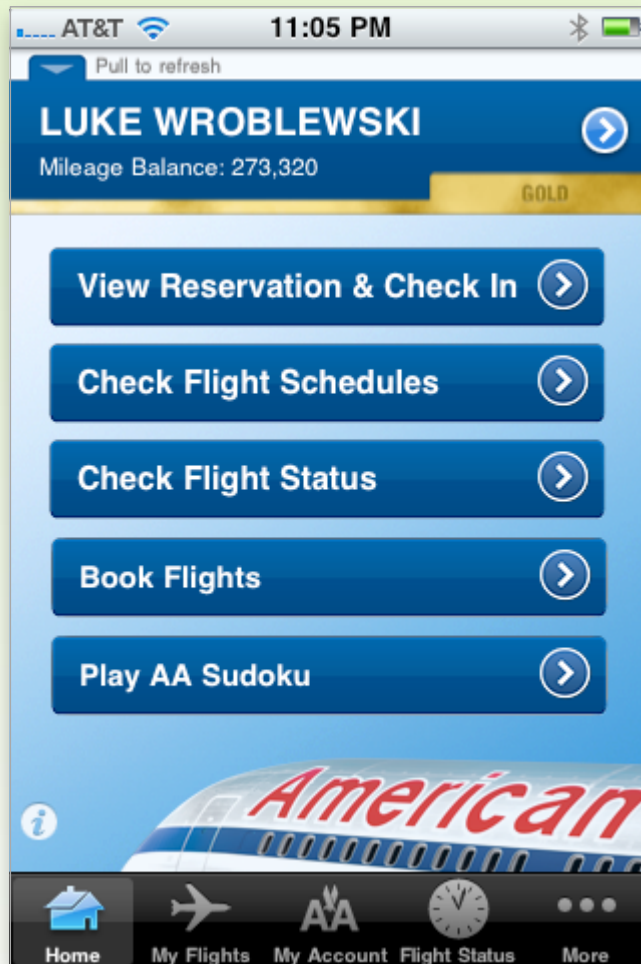


BOTTOM OUT



Photo by re-Verse

What About Fixed Position Menus?





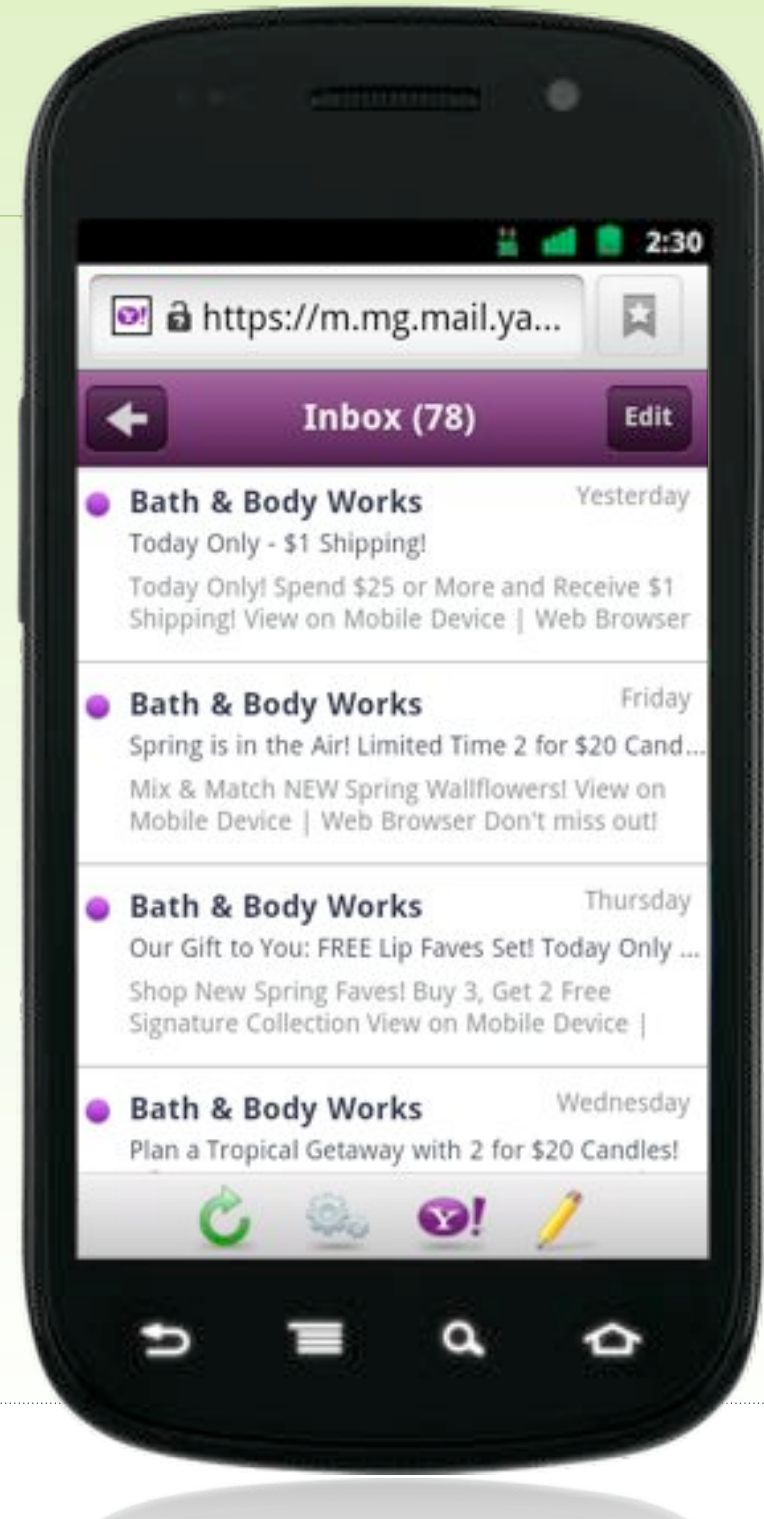
Fixed Bottom

- Requires Javascript
- Eats up Screen Space



Fixed Bottom

- Requires Javascript
- Eats up Screen Space
- Physical Control Proximity

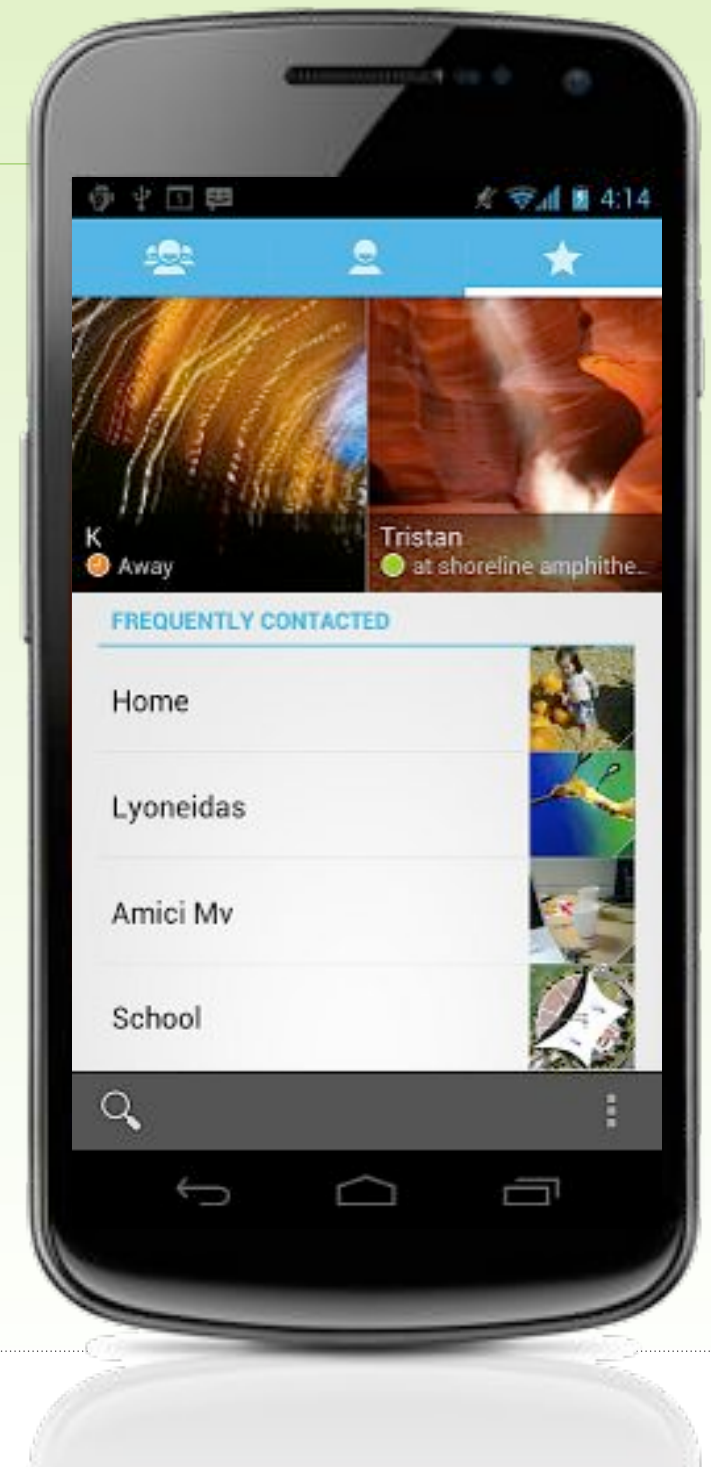


Physical Controls Below Screen



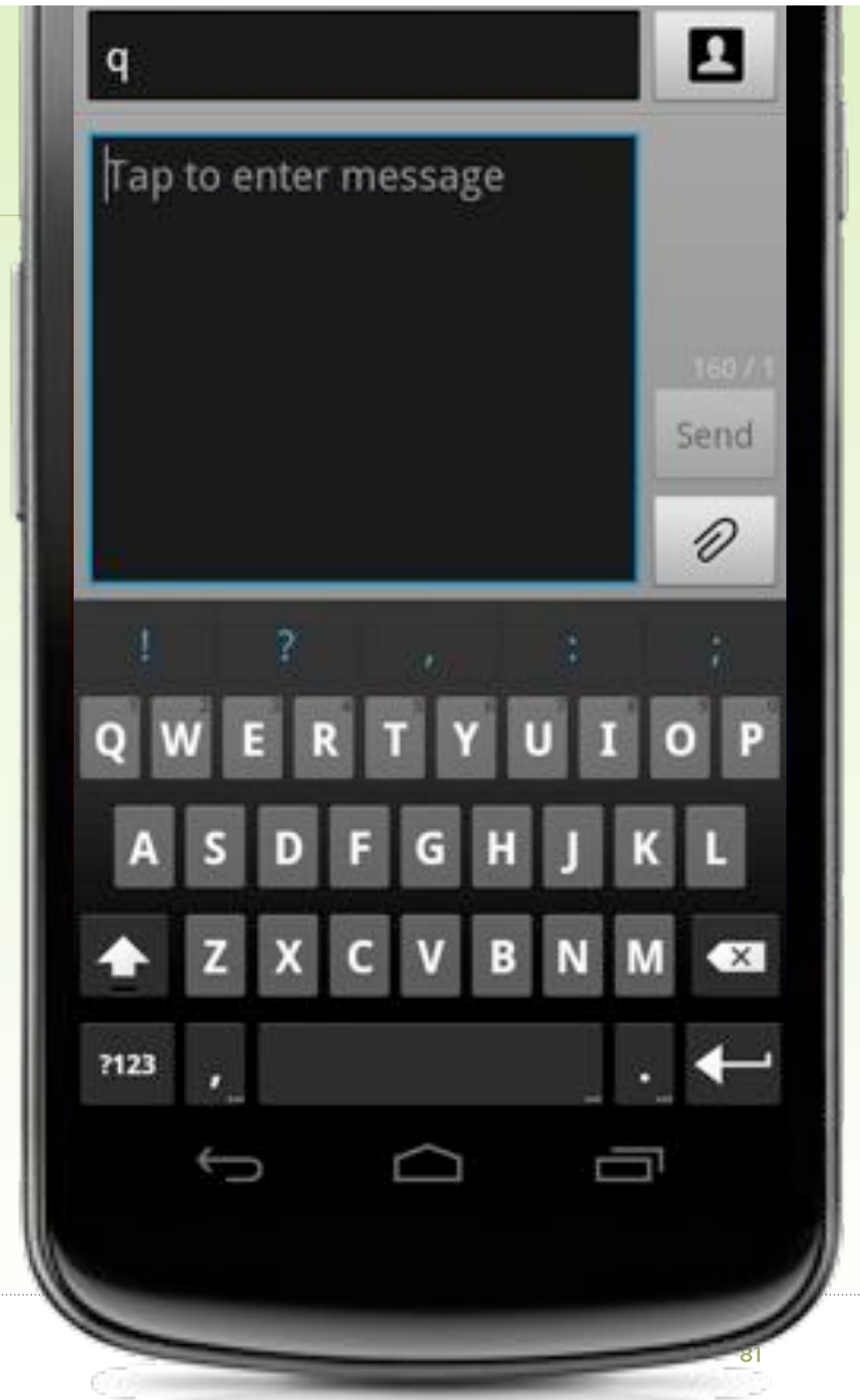
Fixed Bottom

- Requires Javascript
- Eats up Screen Space
- Physical Control Proximity



System Controls

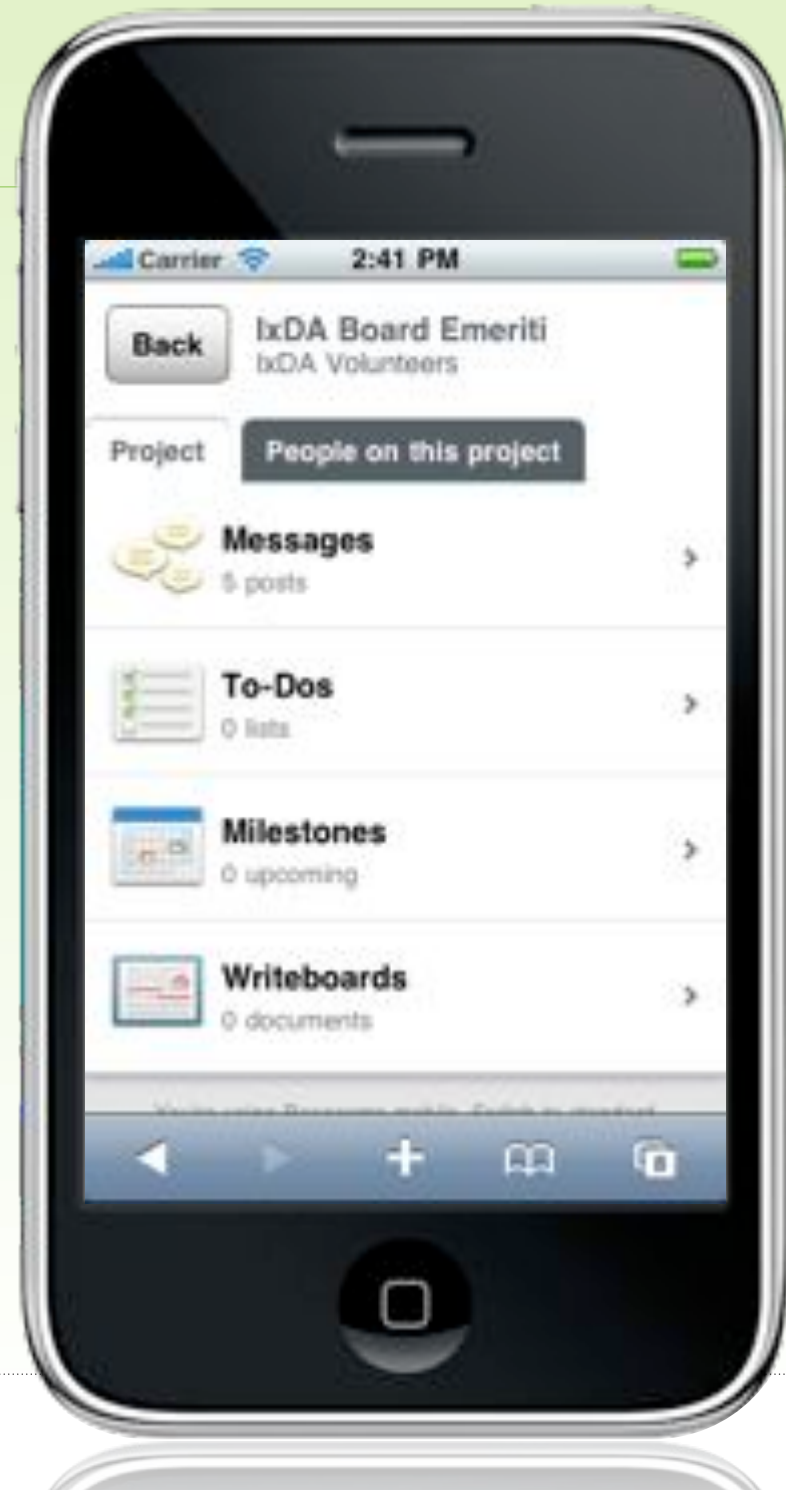
“I’m always hitting that home key by mistake rather than the space bar and so exit out of what I’m typing.”



Getting Back

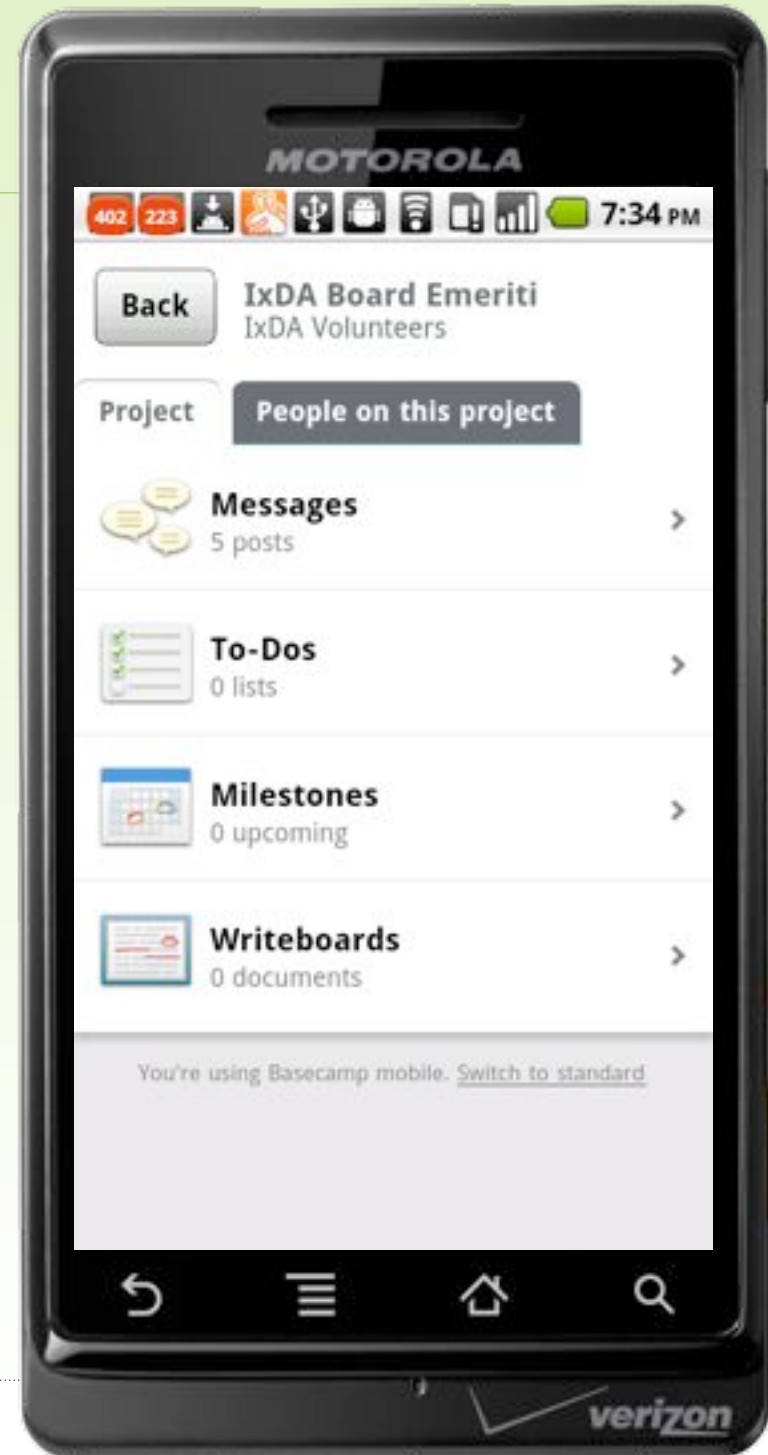
Back Button

Back Button



Getting Back

Back Button



Back Button



MOBILE WEB **DESIGN** MOVES

1. Organize Yourself
2. Use your Head
3. Bottom Out
4. Take it In



TAKE IT IN



Photo by armadillo444

Input Type	HTML
checkbox	<code><input type="checkbox"></code>
radio button	<code><input type="radio"></code>
password field	<code><input type="password"></code>
drop-down lists	<code><select><option>...</code>
file picker	<code><input type="file"></code>
submit button	<code><input type="submit"></code>
plain text	<code><input type="text"></code>

select on iPhone

Device Optimized
UI Control

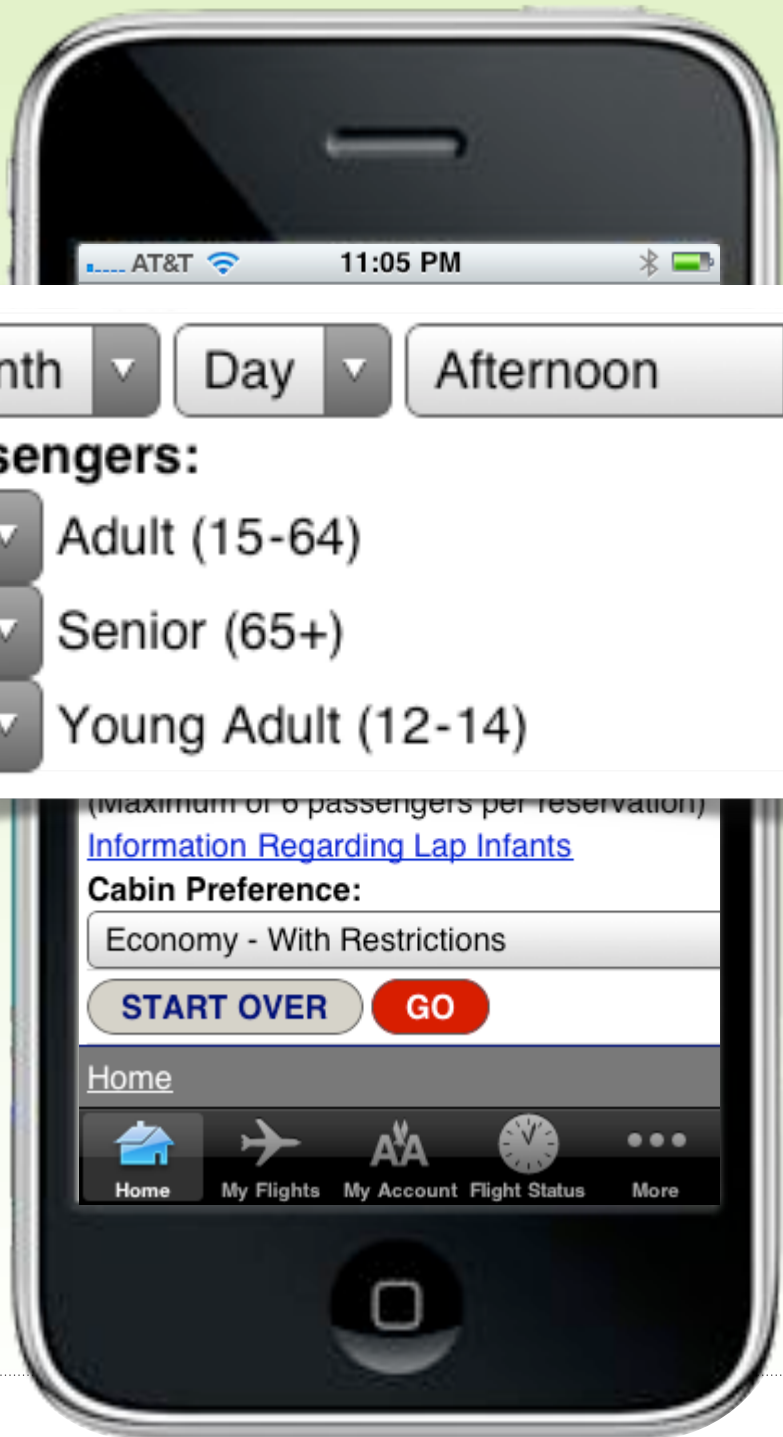


select on Android

Device Optimized
UI Control







Month ▾

Day ▾

Afternoon ▾

Passengers:

1 ▾

Adult (15-64)

0 ▾

Senior (65+)

0 ▾

Young Adult (12-14)

(maximum of 6 passengers per reservation)

[Information Regarding Lap Infants](#)

Cabin Preference:

Economy - With Restrictions

START OVER

GO

Home



Home



My Flights



My Account



Flight Status



More

Spinners



Touch Target Sizes

Input Type

HTML

number

```
<input type="number"  
      min="2" max="10"  
      step="2" value="6">
```

email

```
<input type="email">
```

url

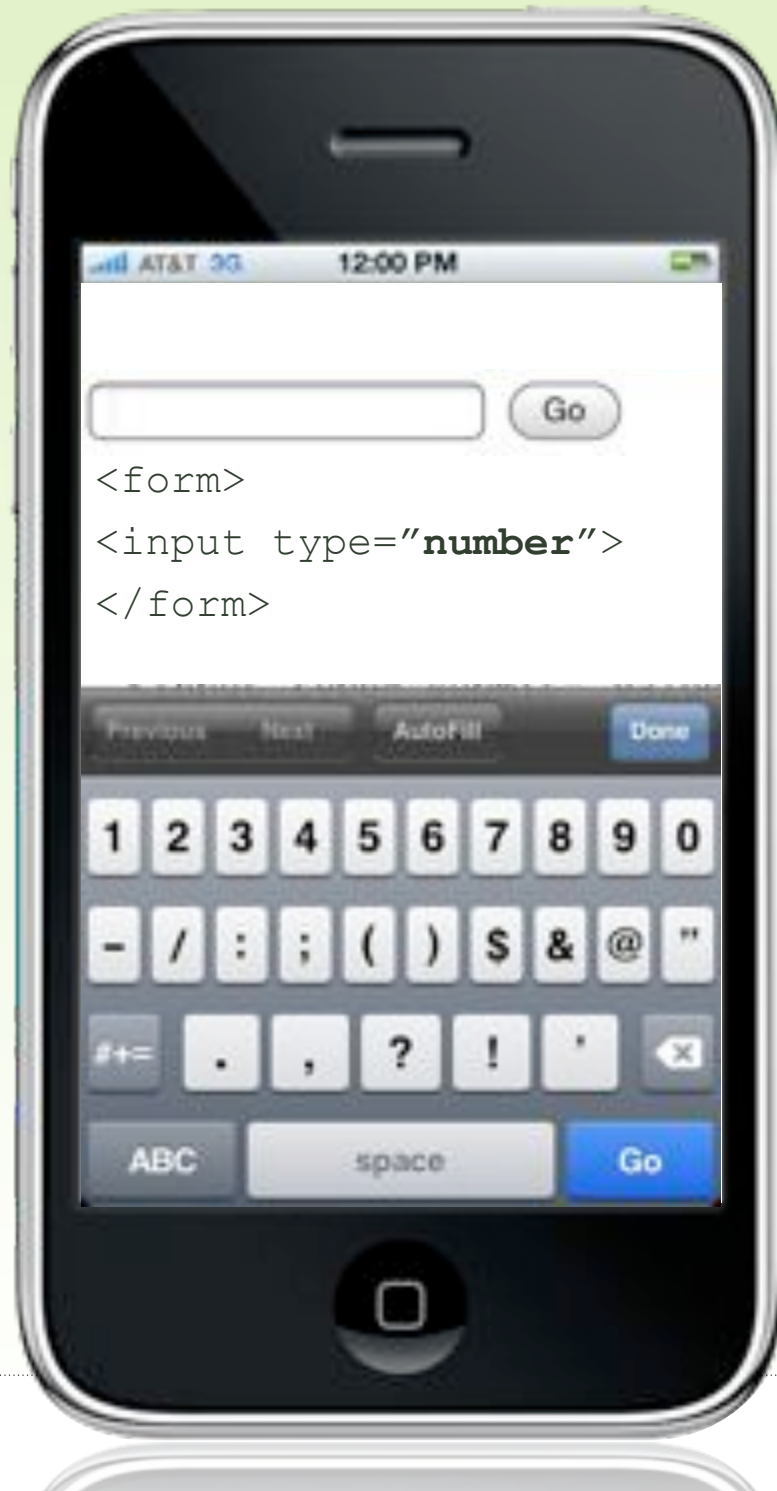
```
<input type="url">
```

date

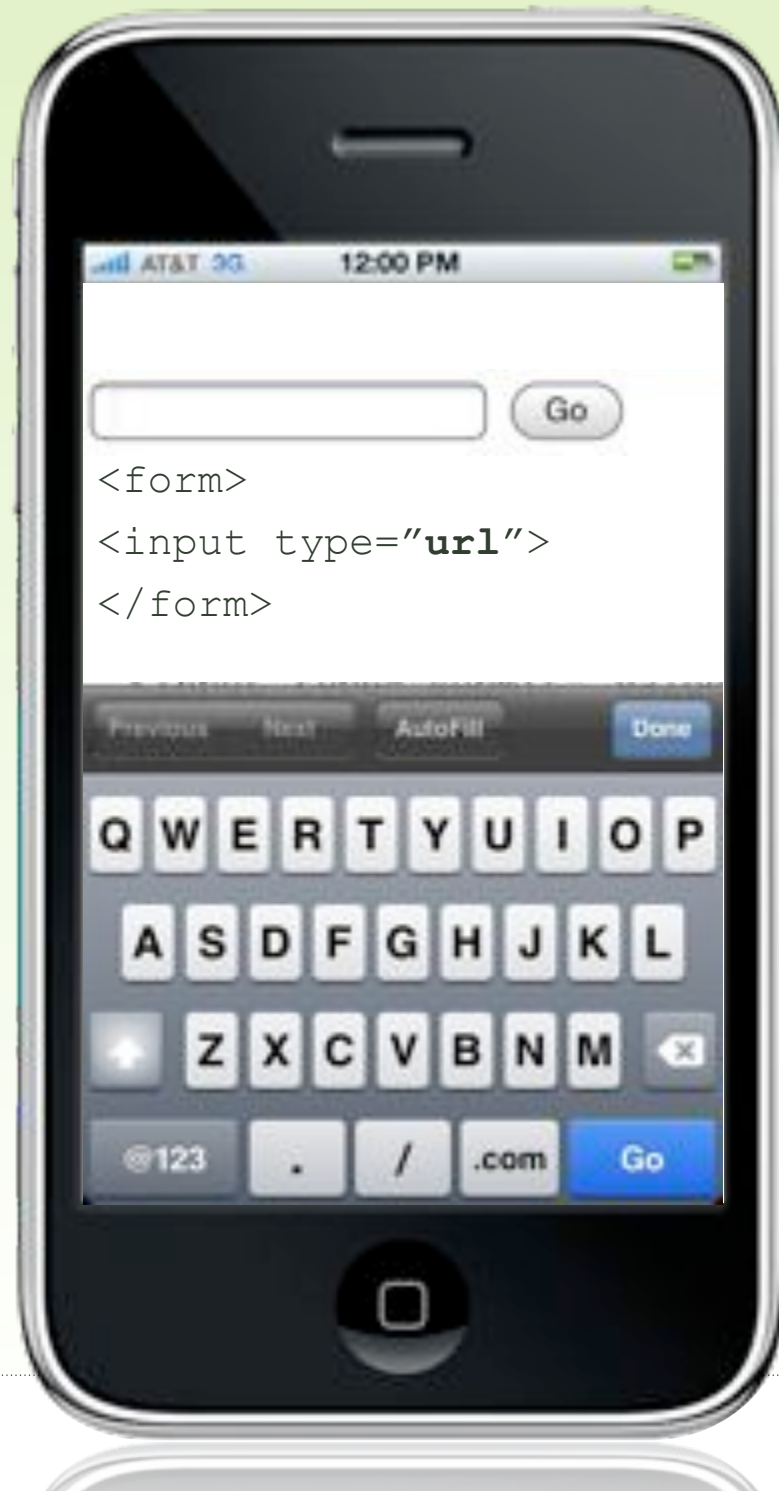
```
<input type="date">
```

range

```
<input type="range"  
      min="2" max="10"  
      step="2" value="6">
```









Available in iOS 5



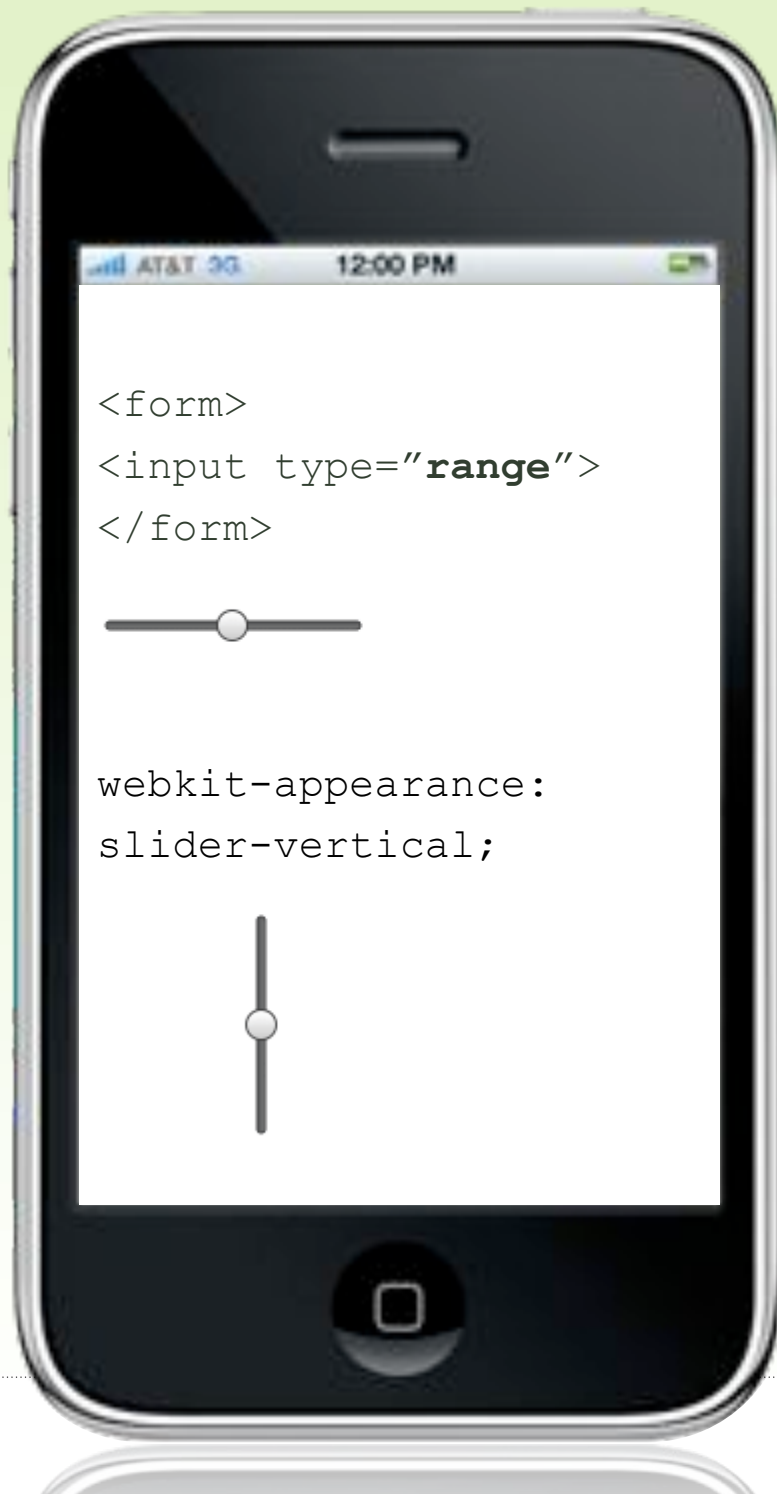
Available in iOS 5



Available in iOS 5



Available in iOS 5



Available in iOS 5

text Inputs



auto-capitalize

- Turn off on email, password, URL, and other case-sensitive inputs

auto-correct

- Turn off on email, password, URL, and other non-alpha inputs
- Trim trailing spaces that may come from auto-correct

Language, Mode, Format

- Specify if supported by devices

Numerical Inputs



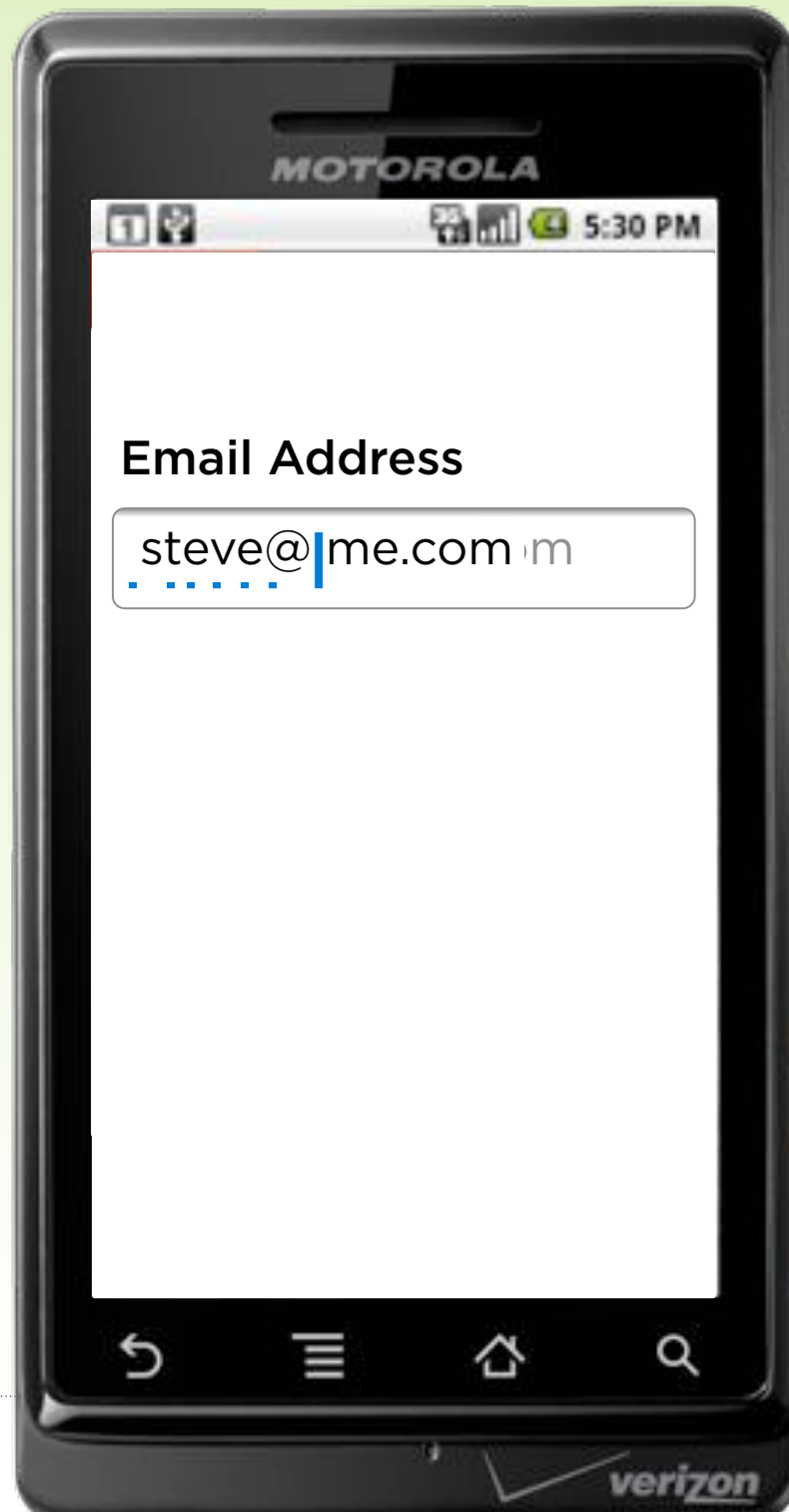
Number Declarations

- Define input types using HTML5, Wireless CSS, or CSS-MP
- On devices without virtual keyboards, people will not have to switch into number mode

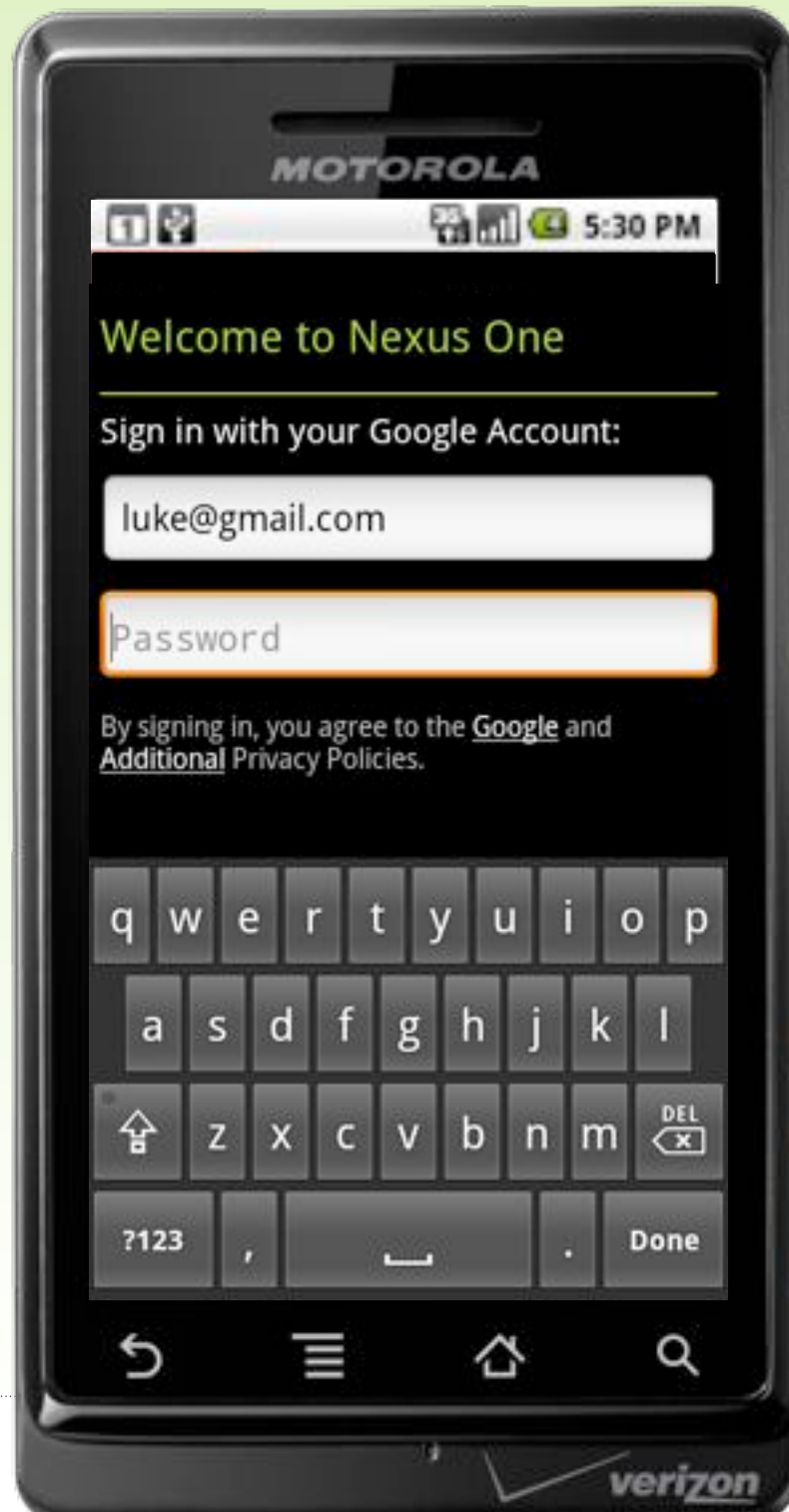
Common Numerical Inputs

- Use a single line field for phone numbers
- Don't split up price fields (period is present on keyboards)

Input Masks

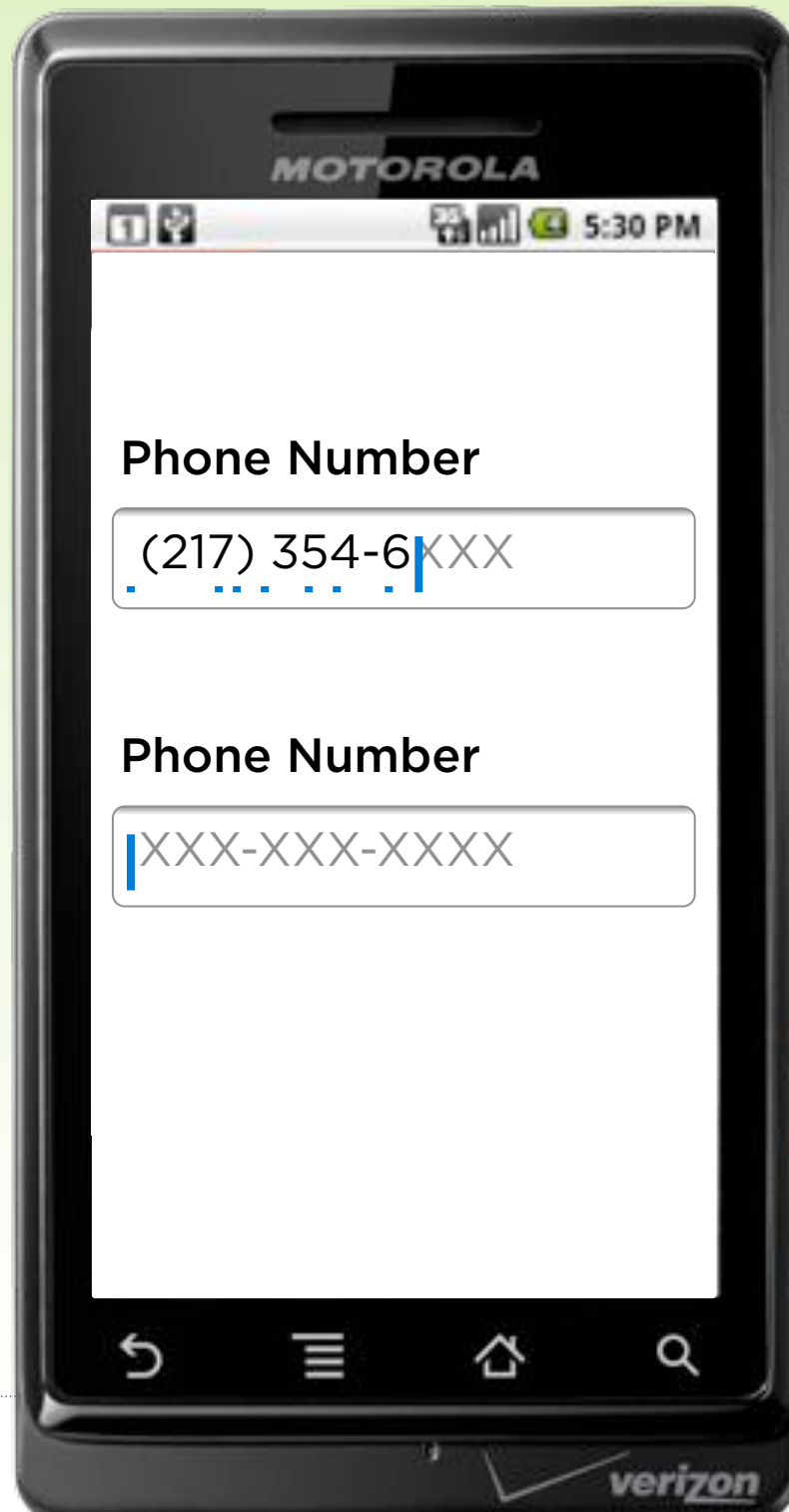






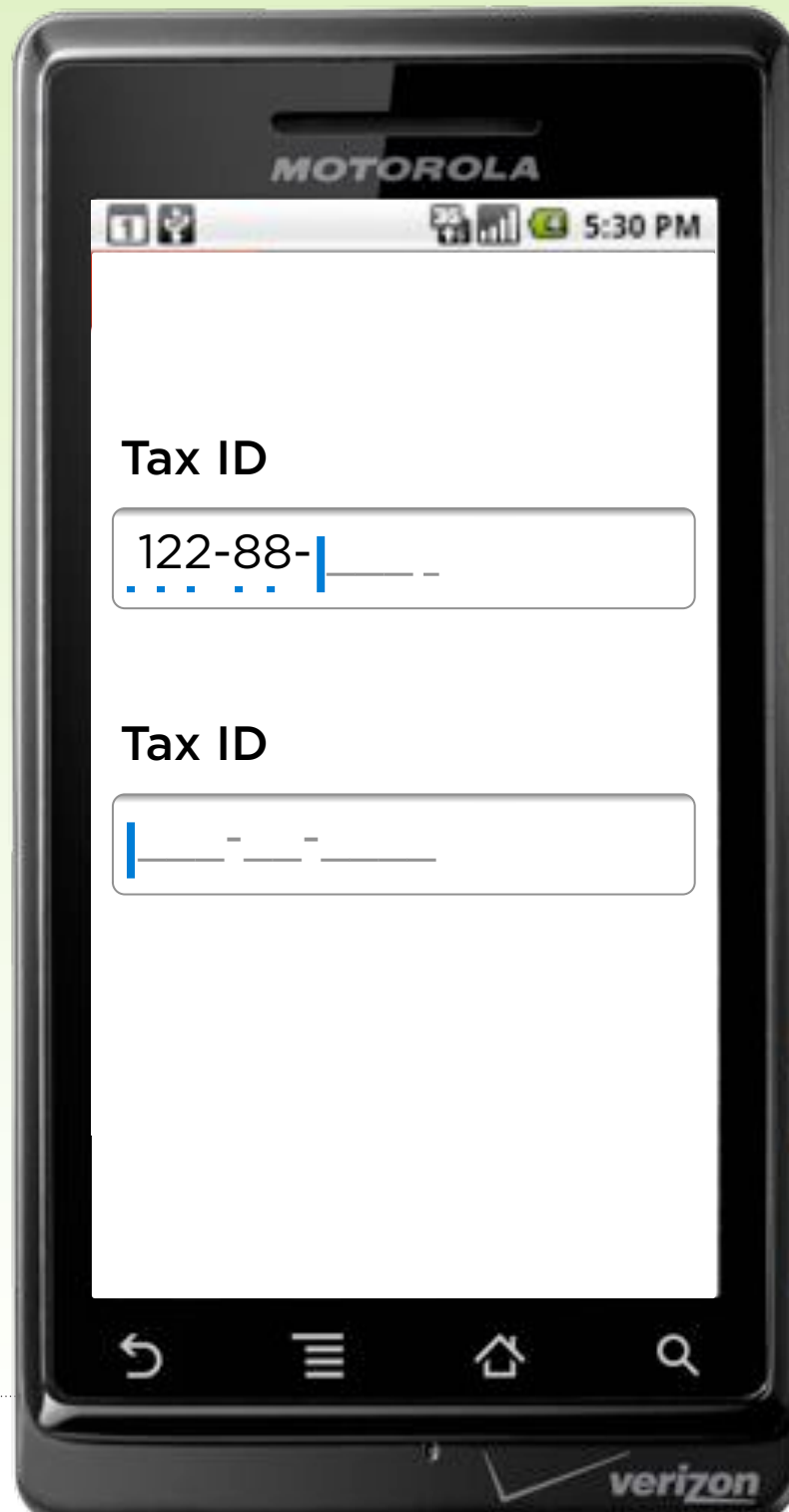
Formatting After the Fact

Set Correct
Expectations



Avoid the
Gradual Reveal

Maintain
Format



Don't Look
Like an Answer

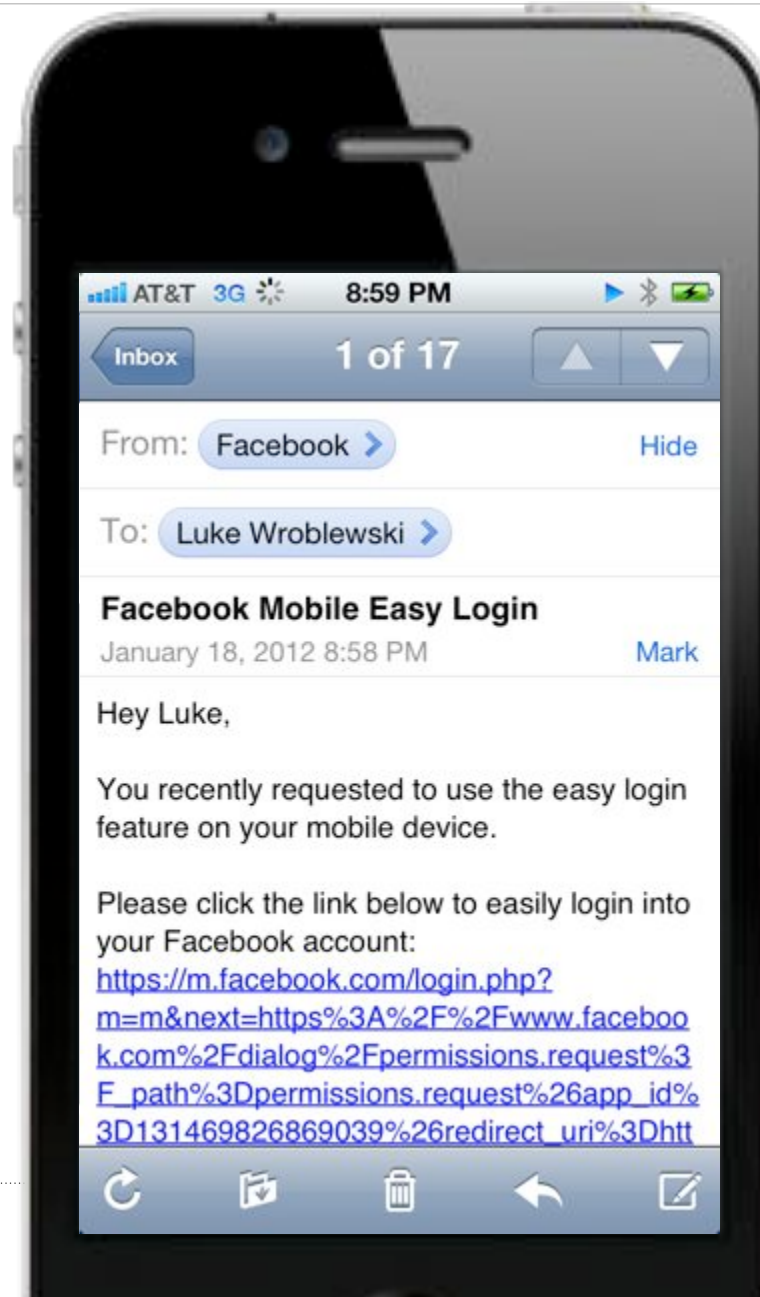
Input Masks



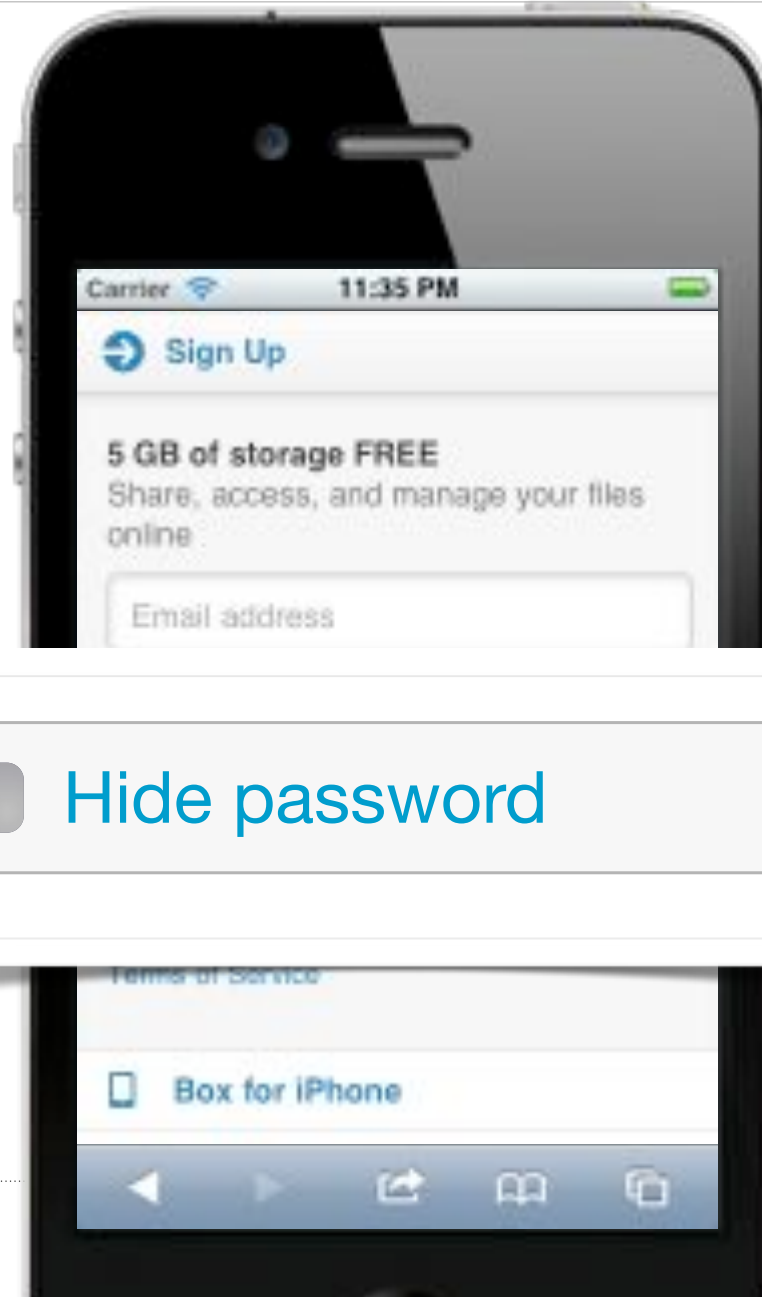
Username @lukew|



Show Passwords



Show Passwords



Smart
Defaults

Credit Cards

`input type="text"`
`pattern="[0-9]*"`



Credit Cards



Credit or Debit Card



5123 4356 1234 1905

Enter card number, expiration date & CVV code

Card

5678 9012 3456

expiration date & CVV code

Previous

Next

Done

1

2

3

ABC

DEF

4

5

6

GHI

JKL

MNO

7

8

9

PQRS

TUV

WXYZ


+ * #

0

⌫

Credit Cards

Credit or Debit Card

 5123 4356 12 912

Enter card number, expiration date & CVV code

Card

5678 9012 3456

expiration date & CVV code

reduced number of controls/inputs

Stay on the keys



TAKE IT IN

- Take advantage of standard inputs
- Specify types & attributes to ease input
- Consider input masks for formatting/accuracy



MOBILE WEB **DESIGN** MOVES

1. Organize Yourself
2. Use your Head
3. Bottom Out
4. Take it In
5. Make Your Moves

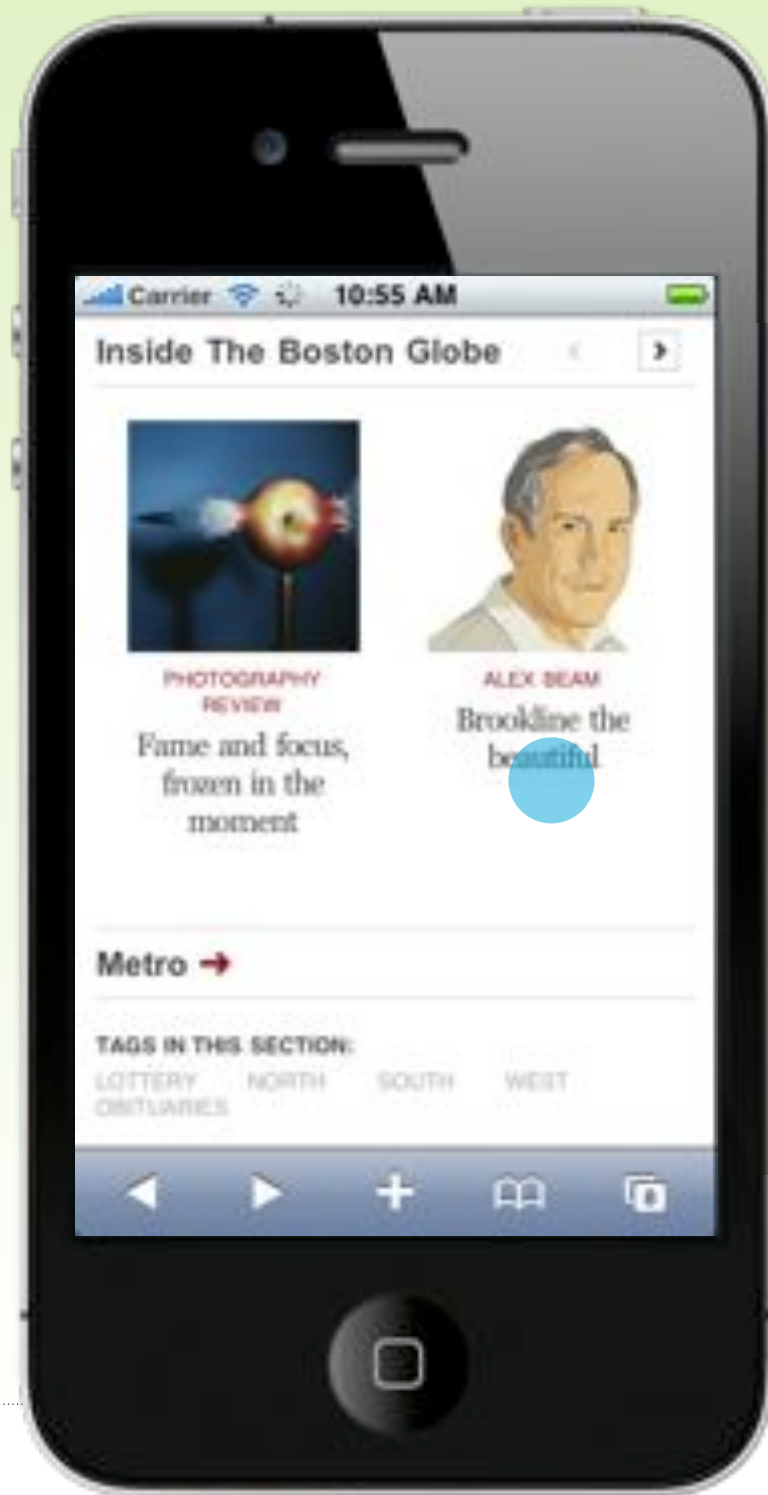
MAKE YOUR MOVES

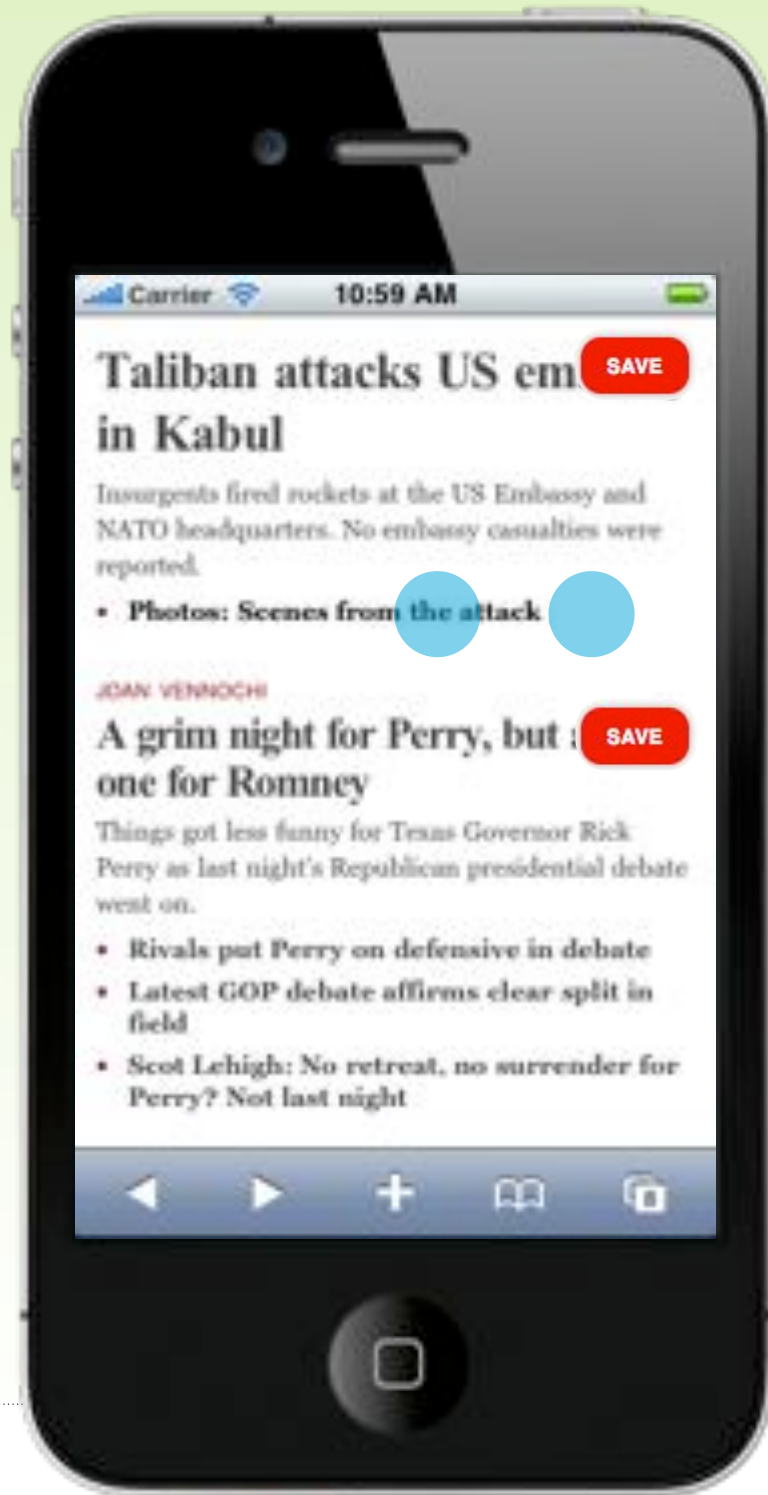


Photo by yago1.com

Drag to Refresh

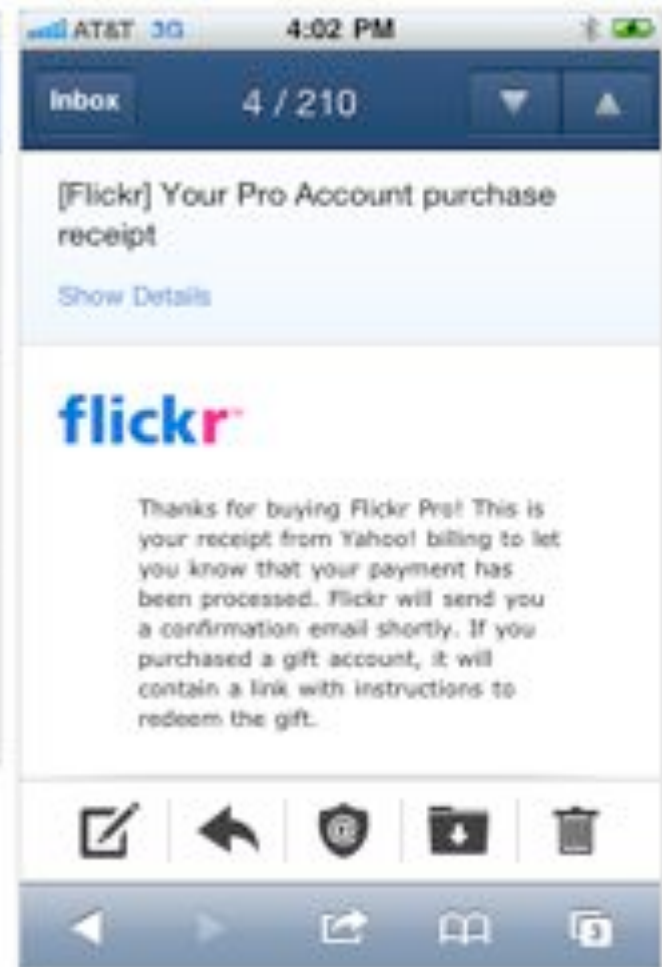
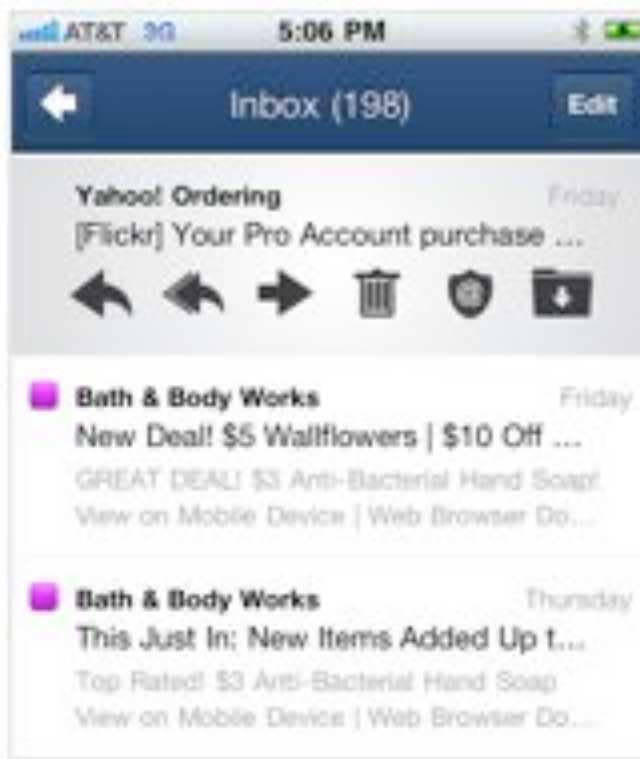






Drag to Reveal





Drag to Reveal



Drag to Reveal

- Feature overview



Natural User Interfaces (NUI)

“NUI exploits skills that we have acquired through a lifetime of living in the World” -Bill Buxton



- Content is the UI (the action)
- Reduce the distance as much as possible between user & content
- Enable direct manipulation of objects & content
- Guessable, predictable, physical, realistic
- Reduce Visuals that are Not Content



Safari Accelerometer Access

iPhone 4 accelerometer experiment
<http://pus.hu/g6pKPI>



Safari Gyroscope Access



MAKE YOUR MOVES

- Rate of innovation is unprecedented
- Rethink, relearn, & recharge the Web



Photo by yago1.com



MOBILE WEB DESIGN MOVES

1. Organize Yourself
2. Use your Head
3. Not your Bottom!
4. Take it In
5. Make Your Moves



MOBILE WEB DESIGN MOVES

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Mobile First

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