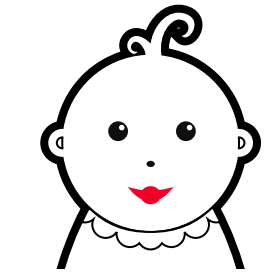
ORGANIZING
MOBILE WEB EXPERIENCES

EXTENSION LEARN

LUKE WROBLEWSKI

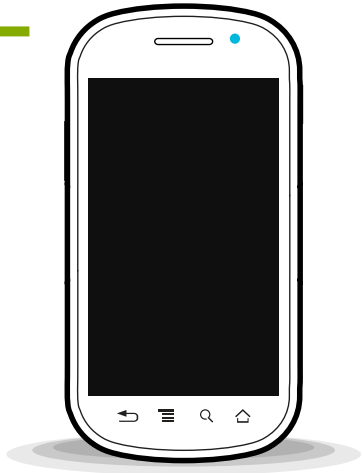
LUKEW
IDEATION + DESIGN



371K
Babies born per day

378K
iPhones sold per day

562K
iOS devices



1M
Android devices activated per day

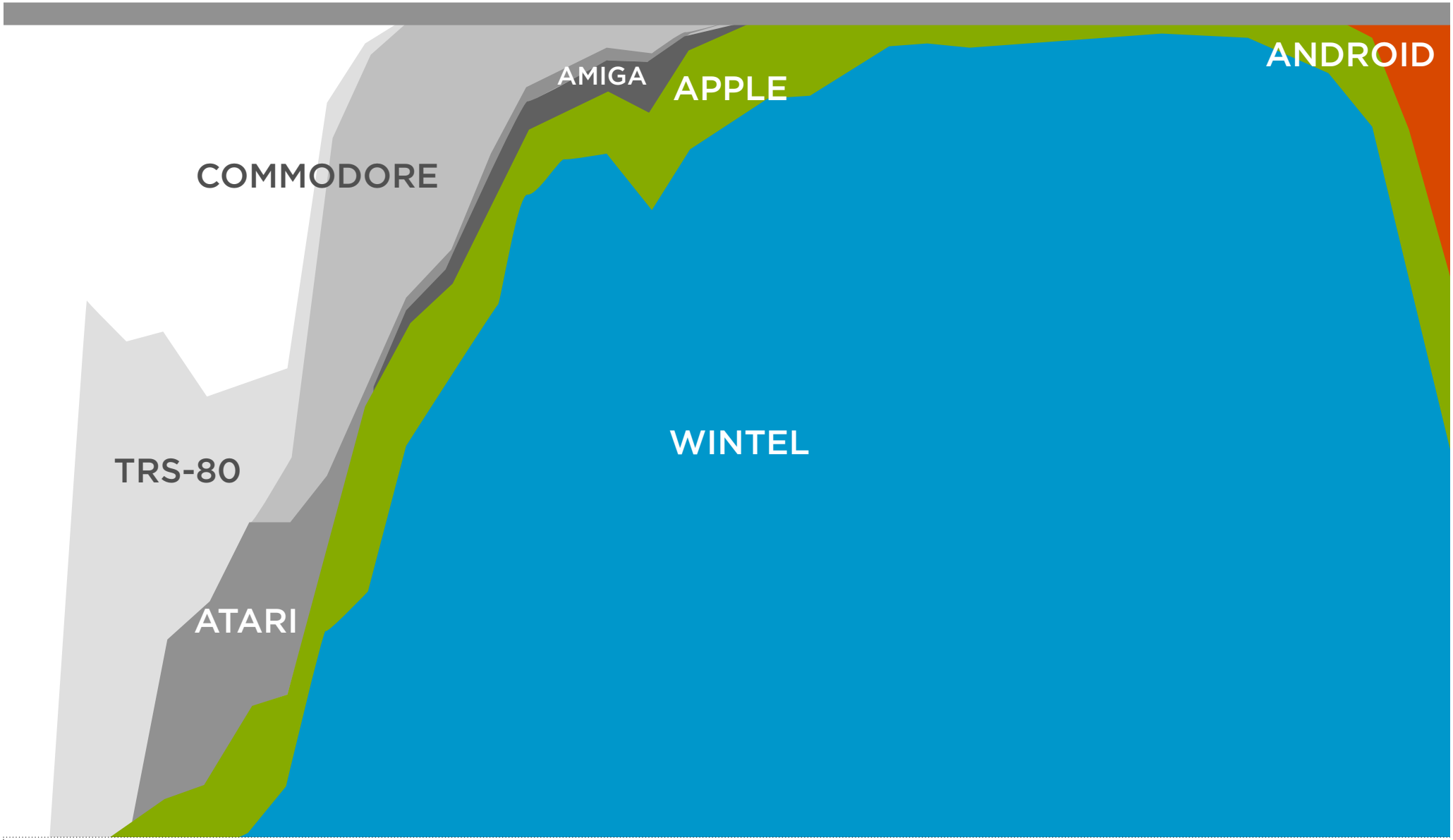
200K
Nokia smartphones

143k
Blackberry devices

LUKEW IDEATION + DESIGN

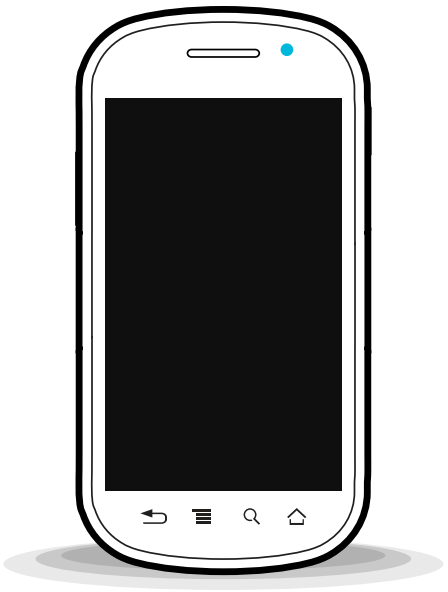
Source: http://tnw.co/yUafAx

Share of Personal Computing



Source: http://bit.ly/xDzag2

MOBILE

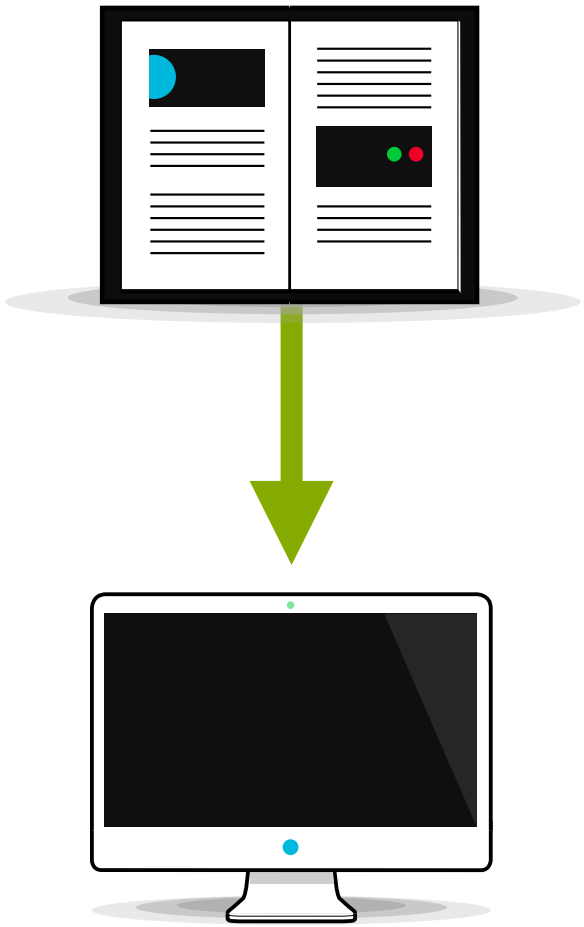


6B connections today

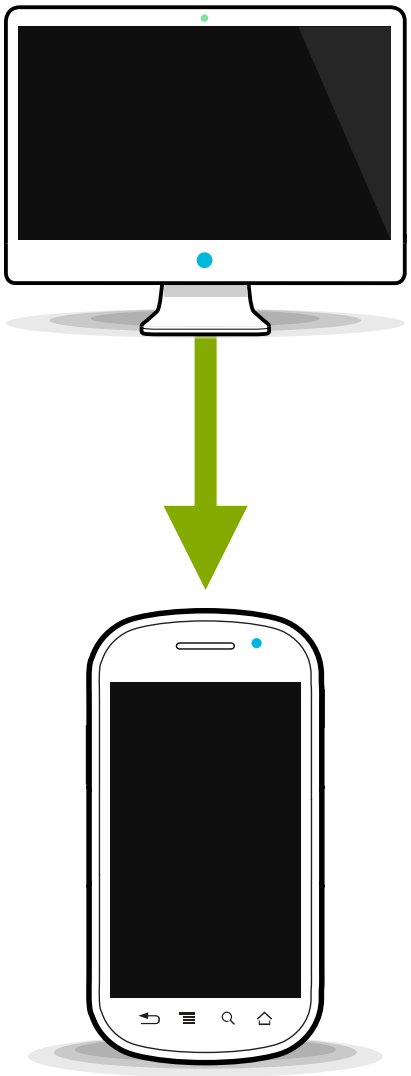
10B connections in 2016

26X worldwide traffic growth

Source: http://www.lukew.com/ff/entry.asp?1405



THE WEB IS NOT PRINT.



MOBILE IS NOT A DESKTOP PC.

Big Screen

Power Supply

Consistent Network

Keyboard

Mouse

Chair

Desk

Small Screen

Battery

Inconsistent Network

Fingers

Sensors

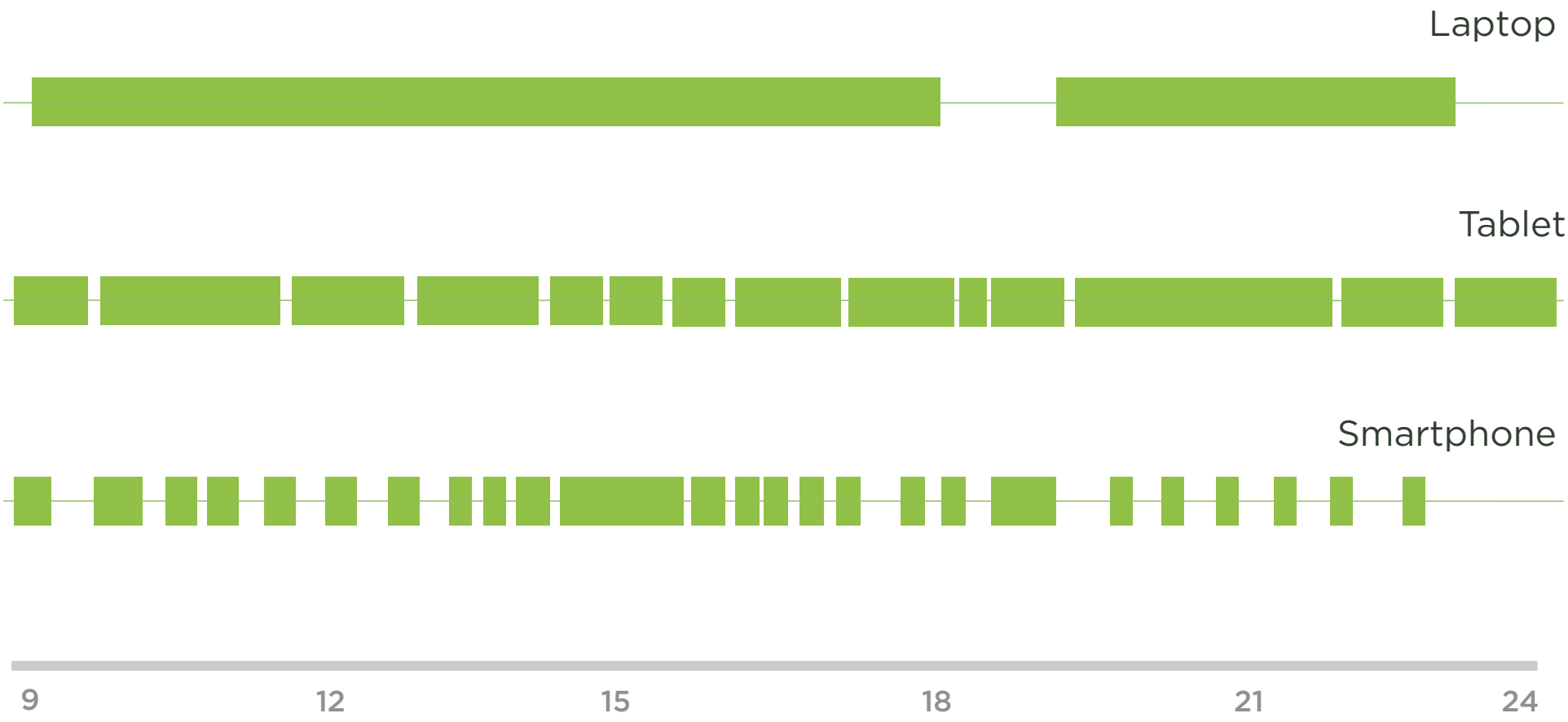
EVERYWHERE & ANYWHERE

84% at home
80% during misc. times
74% waiting in lines
64% at work

Photo by Steve Rhodes

When are we mobile?

Mobile 3G Traffic Patterns



LUKEW IDEATION + DESIGN

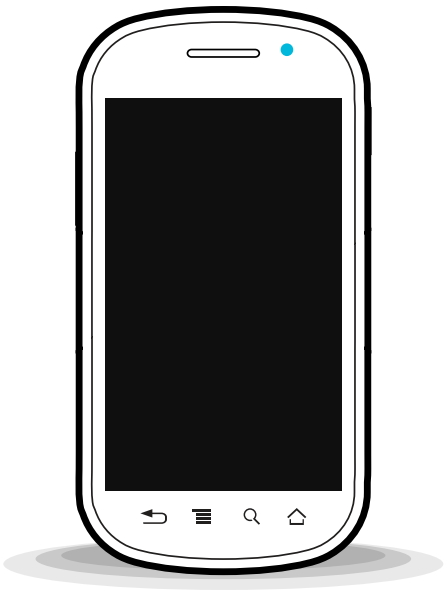
Source: http://bit.ly/qL5NdX

"...copy, extend, and finally, discovery of a new form. It takes a while to shed old paradigms." -Scott Jenson

Source: http://oreil.ly/w1INmt

Flickr Photo: by Gilles San Martin

MOBILE



PayPal™

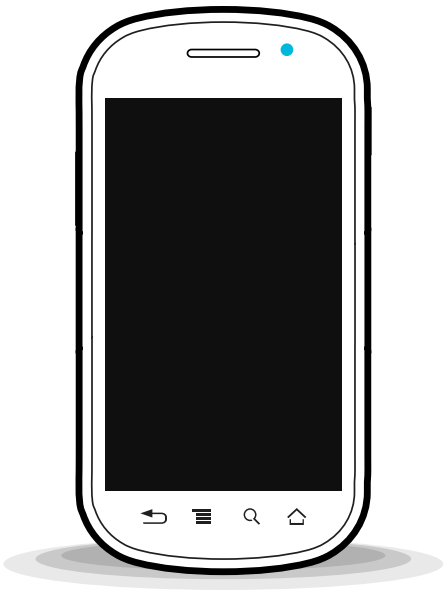
MOBILE PAYMENTS

$141M	2009
$750M	2010
$4B	2011

LUKEW IDEATION + DESIGN

Source: http://bit.ly/zZgrKu

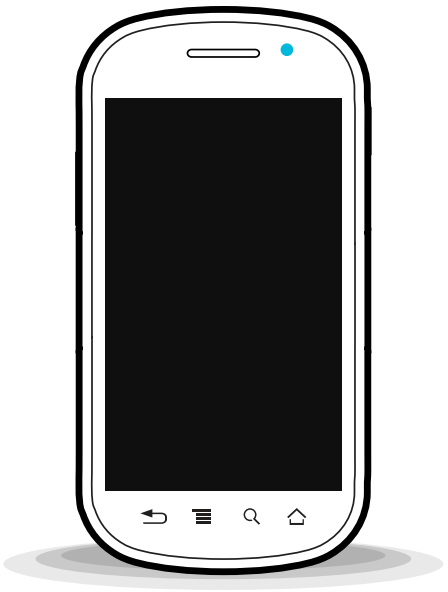
MOBILE



MOBILE PURCHASES

$600M	2009
$2B	2010
$5B	2011

MOBILE



2X more likely to buy on mobile

2.5X more likely to subscribe

3X engagement on mobile

Source: http://bit.ly/x0ZVZM
Source: http://bit.ly/sV01WV
Source: http://bit.ly/tv0KnK

MOBILE

"We're doing a complete relaunch [...] inspired by our mobile experience" -CEO Garrett Camp

800% mobile growth

LUKEW IDEATION + DESIGN

Source: http://bit.ly/zR92Vl
Source: http://www.lukew.com/ff/entry.asp?1463

ORGANIZATION

1. Mobile Behaviors
2. Content First
3. Navigation Elements
4. Clarity & Focus

URGENT
REPETITIVE
BORED
GOOGLE MOBILE
PHOTO BY HELLO TURKEY TOE

Lookup/Find

Explore/Play

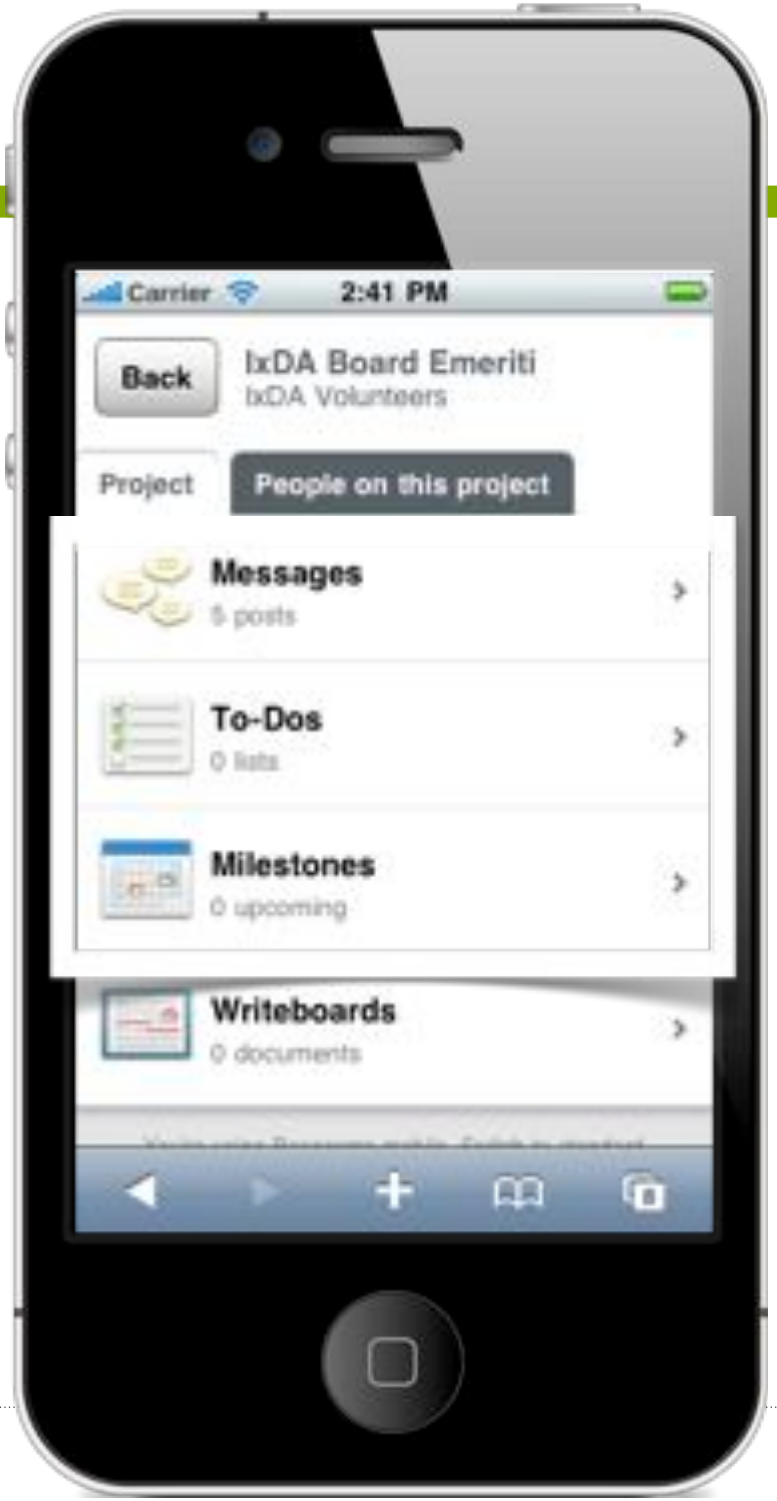
Check In/Status

Edit/Create

Check In/Status

Explore/Play

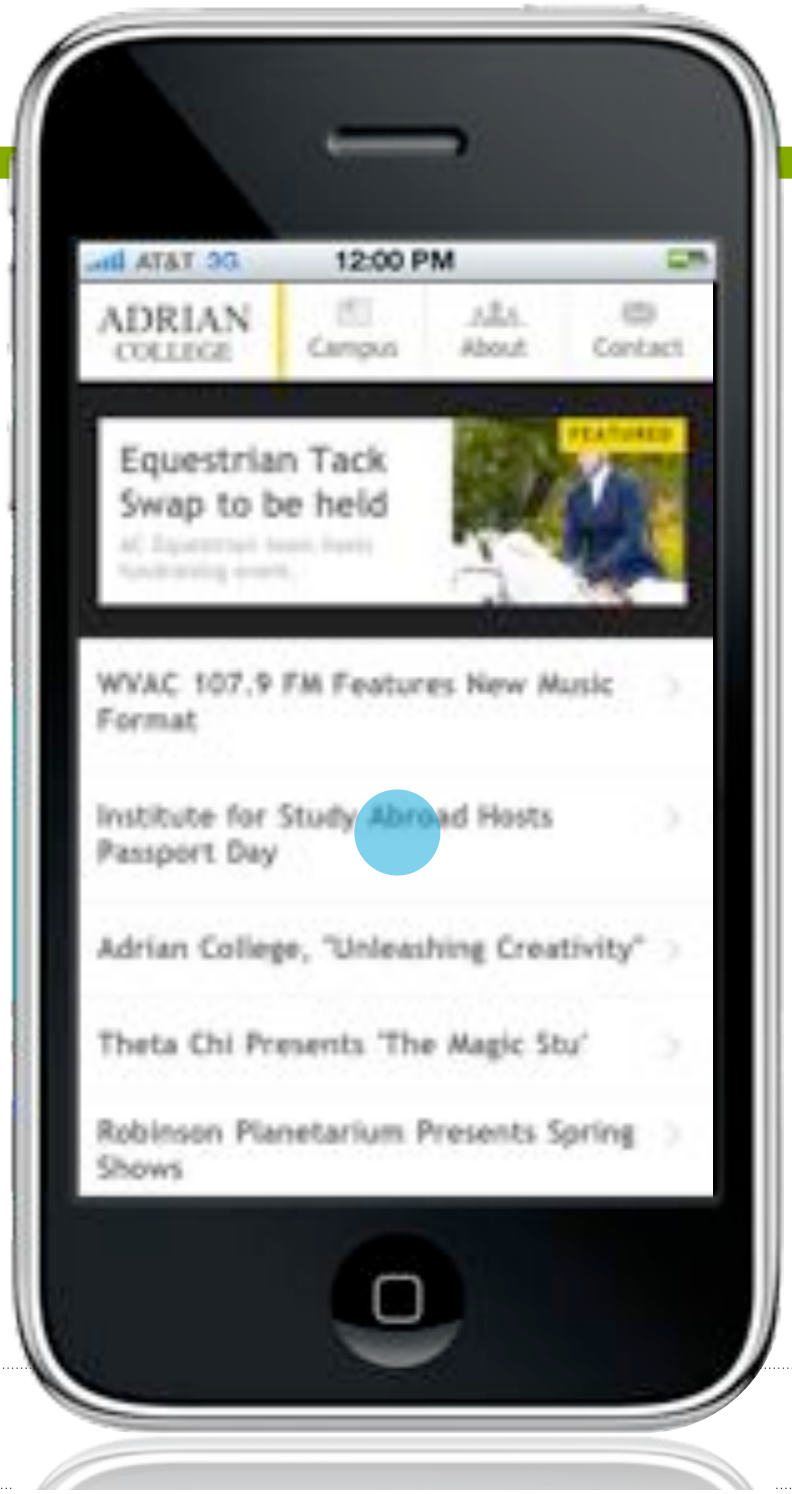
Check In/Status

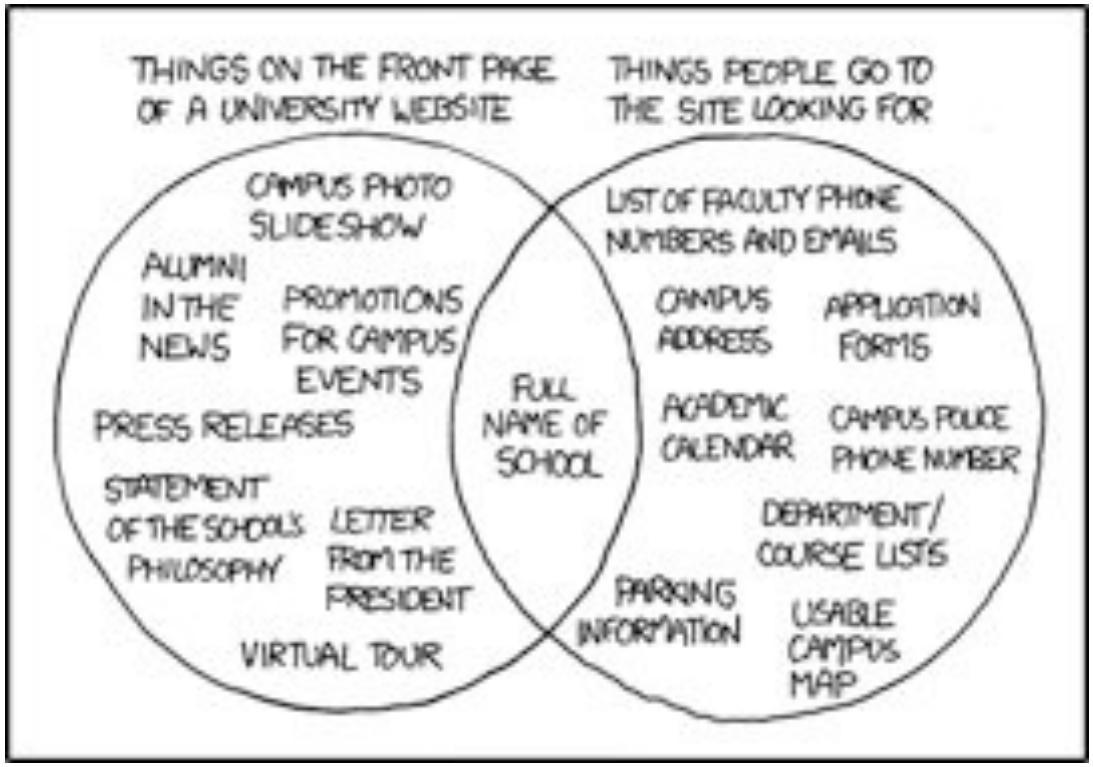


Edit/Create

Marketing

Menu


AT&T 3G
12:00 PM
ADRIAN COLLEGE
Campus
About
Contact
Equestrian Tack Swap to be held
FEATURED
WVAC 107.9 FM Features New Music Format
Institute for Study Abroad Hosts Passport Day
Adrian College, "Unleashing Creativity"
Theta Chi Presents 'The Magic Stu'
Robinson Planetarium Presents Spring Shows



"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."

Source: XKCD http://xkcd.com/773/ & http://www.dmolsen.com/mobile-in-higher-ed/?p=197

MOBILE FIRST

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

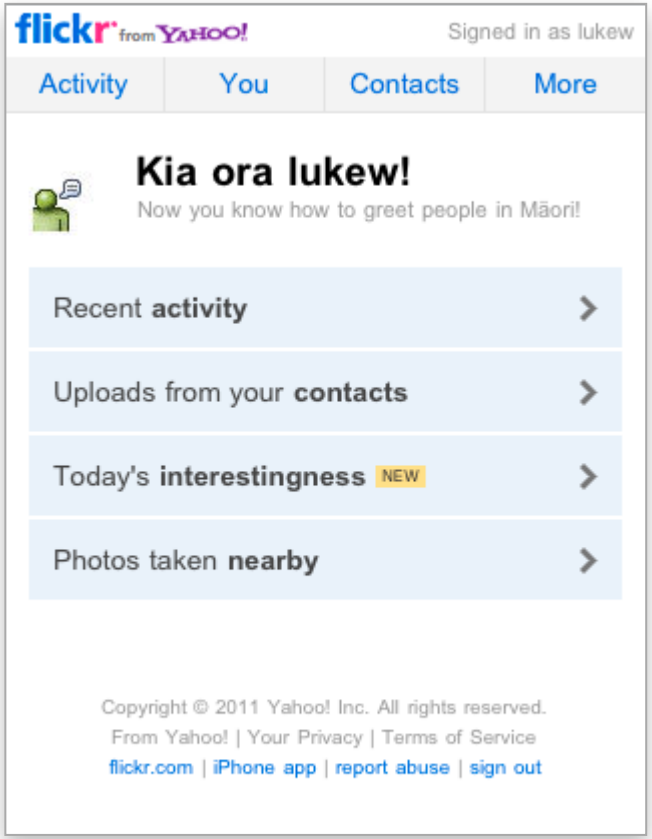
MOBILE BEHAVIORS

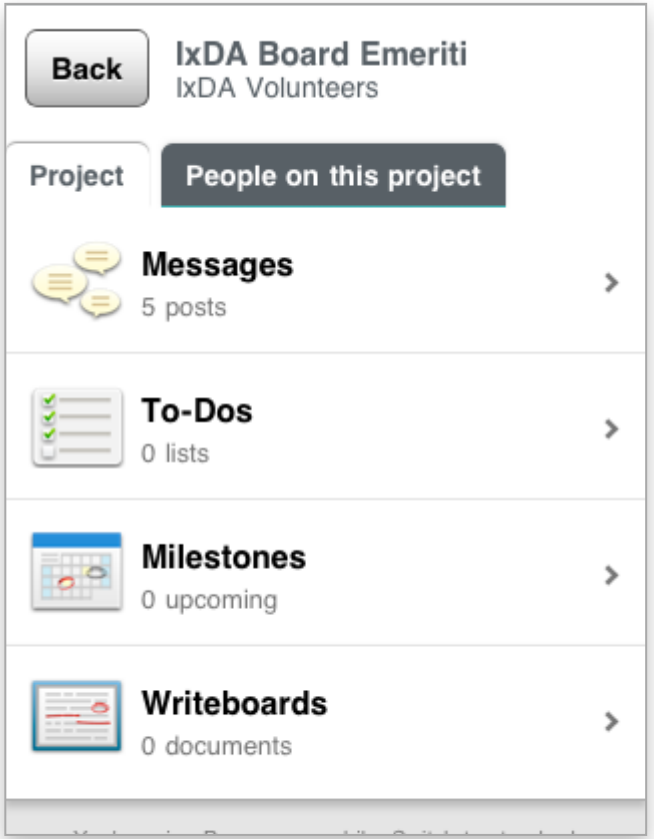
- Know what mobile is uniquely good at
- Adjust site organization accordingly

ORGANIZATION

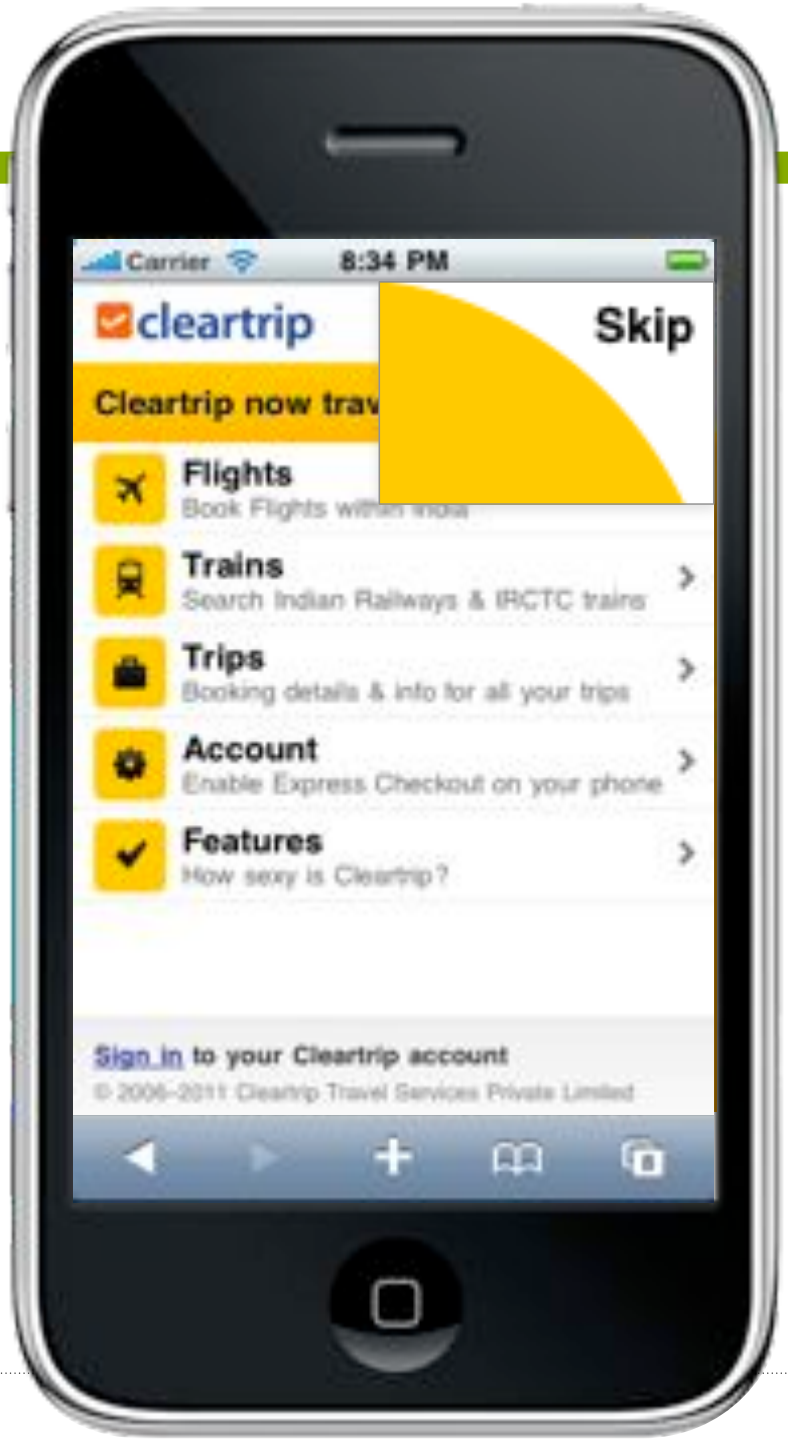
1. Mobile Behaviors
2. Content First
3. Navigation Elements
4. Clarity & Focus

Navigation First, Content Second

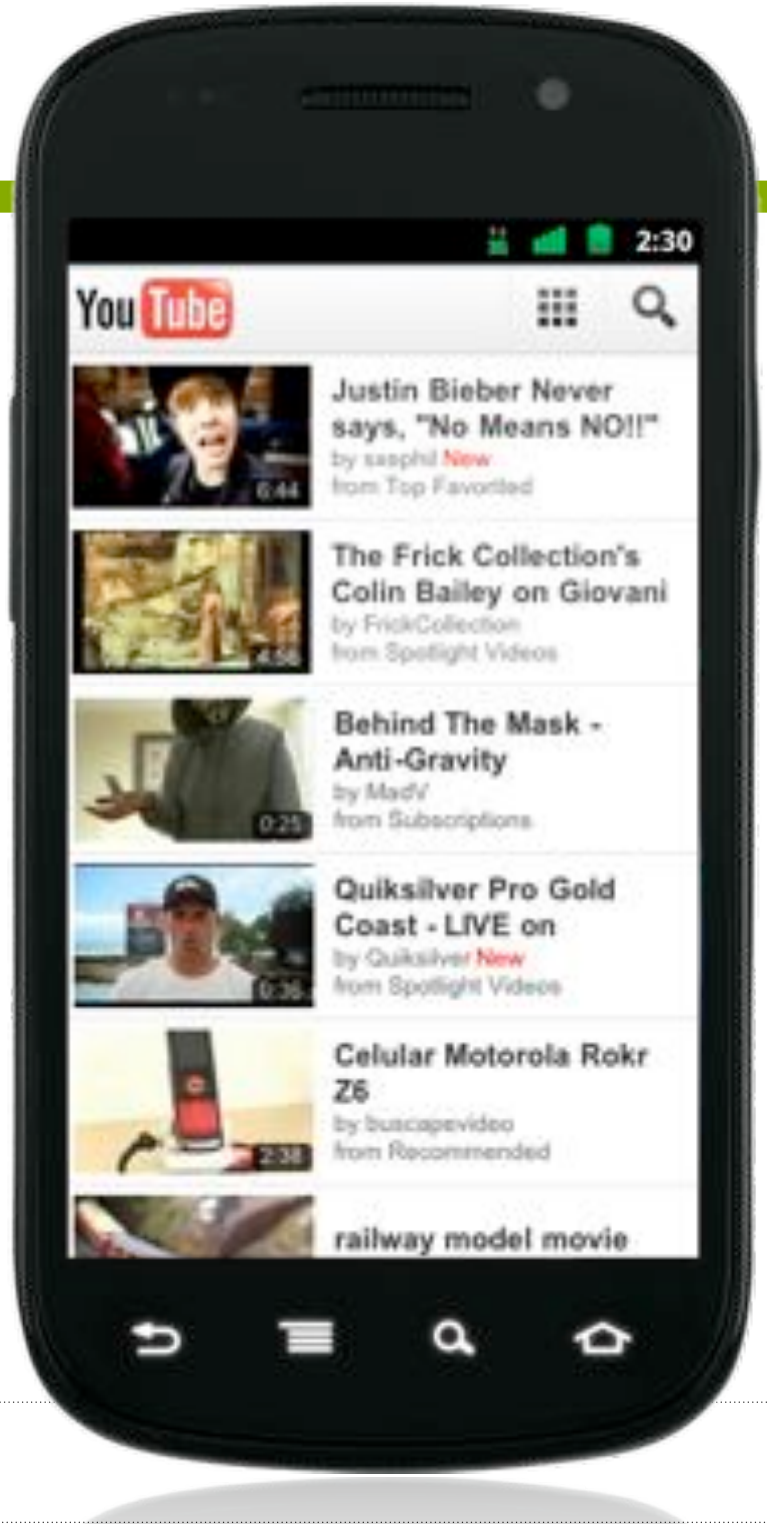




Skip Intro

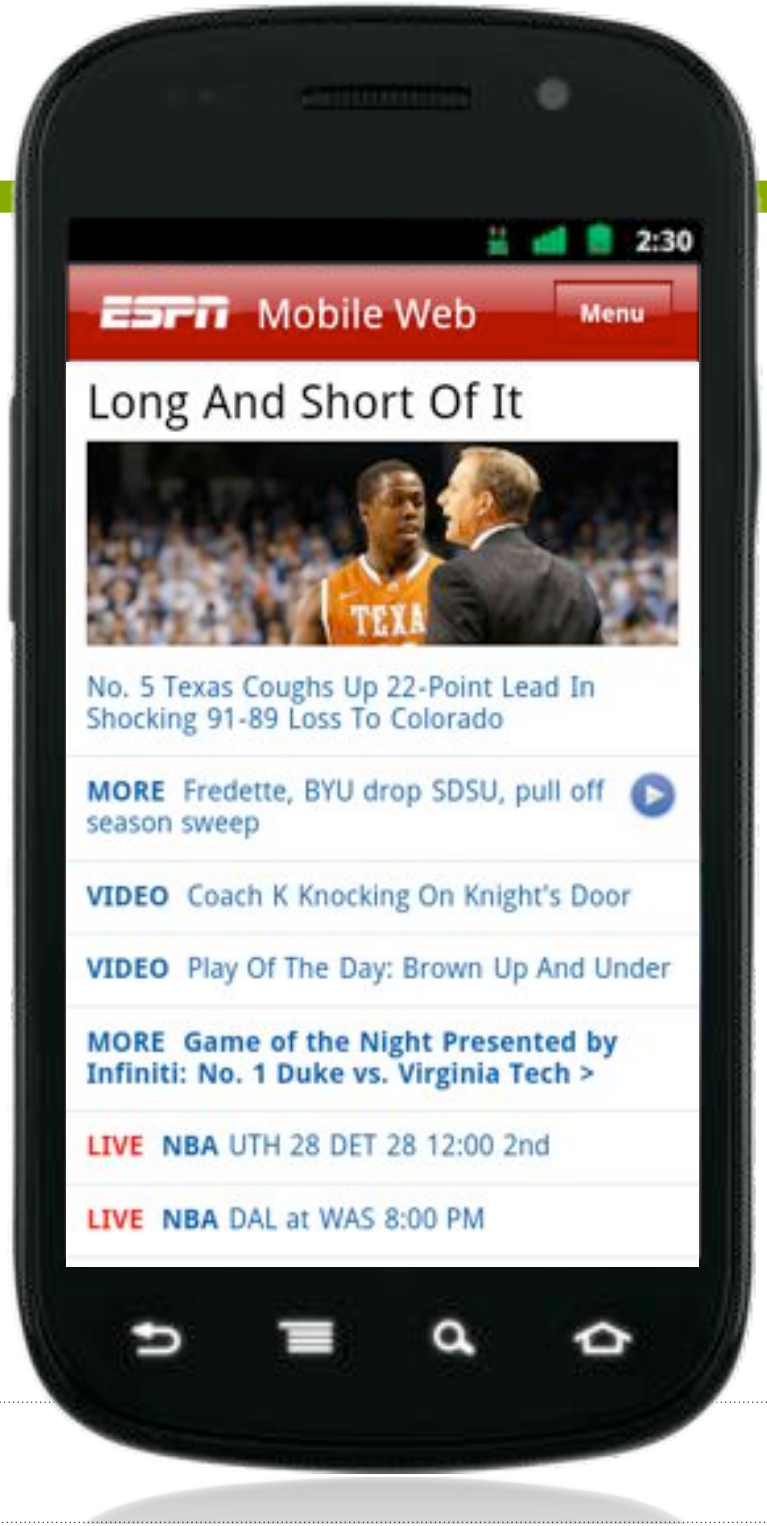

Carrier
8:34 PM
cleartrip
Skip
Cleartrip now trav
Flights
Book Flights within India
Trains
Search Indian Railways & IRCTC trains
Trips
Booking details & info for all your trips
Account
Enable Express Checkout on your phone
Features
How sexy is Cleartrip?
Sign in to your Cleartrip account
© 2006–2011 Cleartrip Travel Services Private Limited

Minimal Navigation



Maximum Content

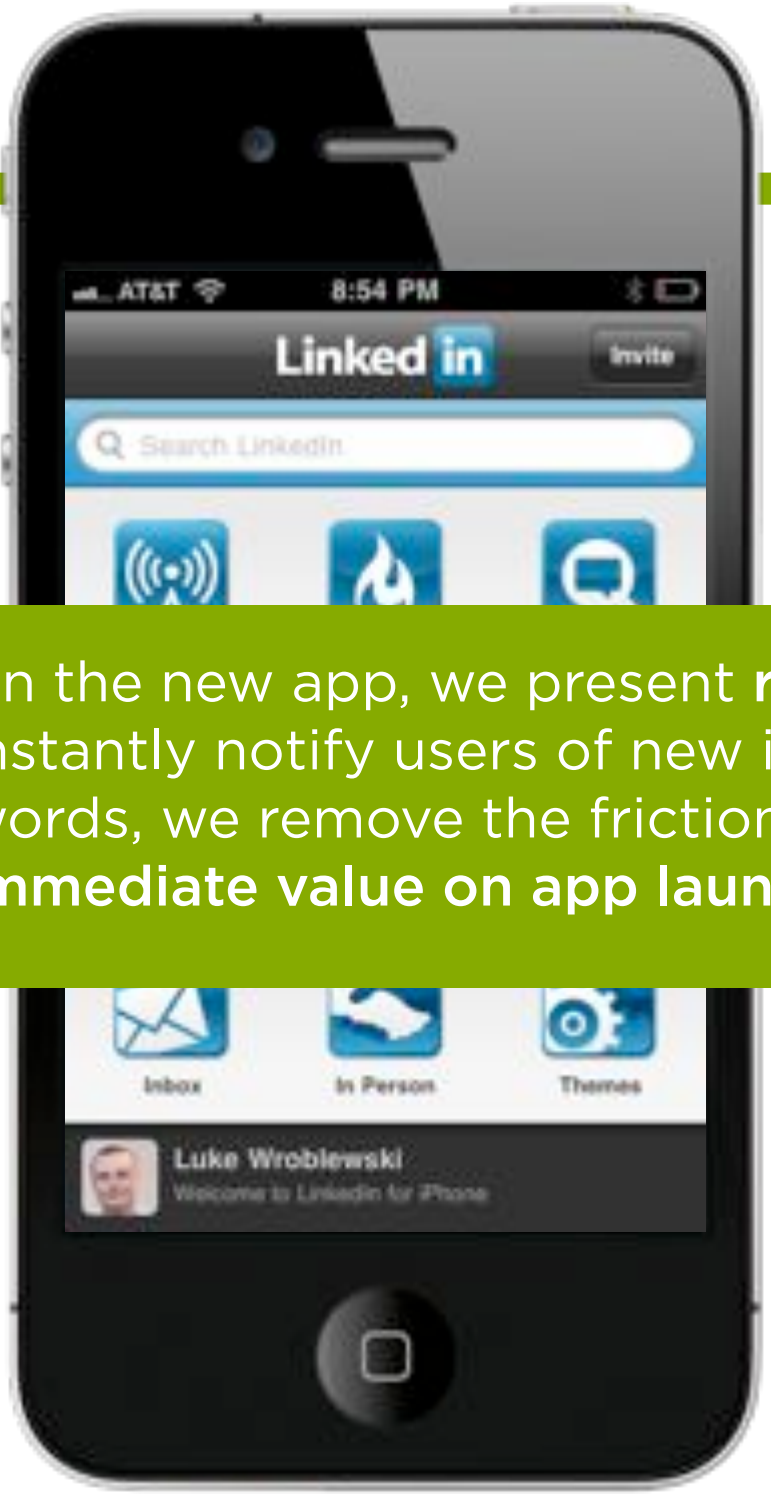
Minimal Navigation

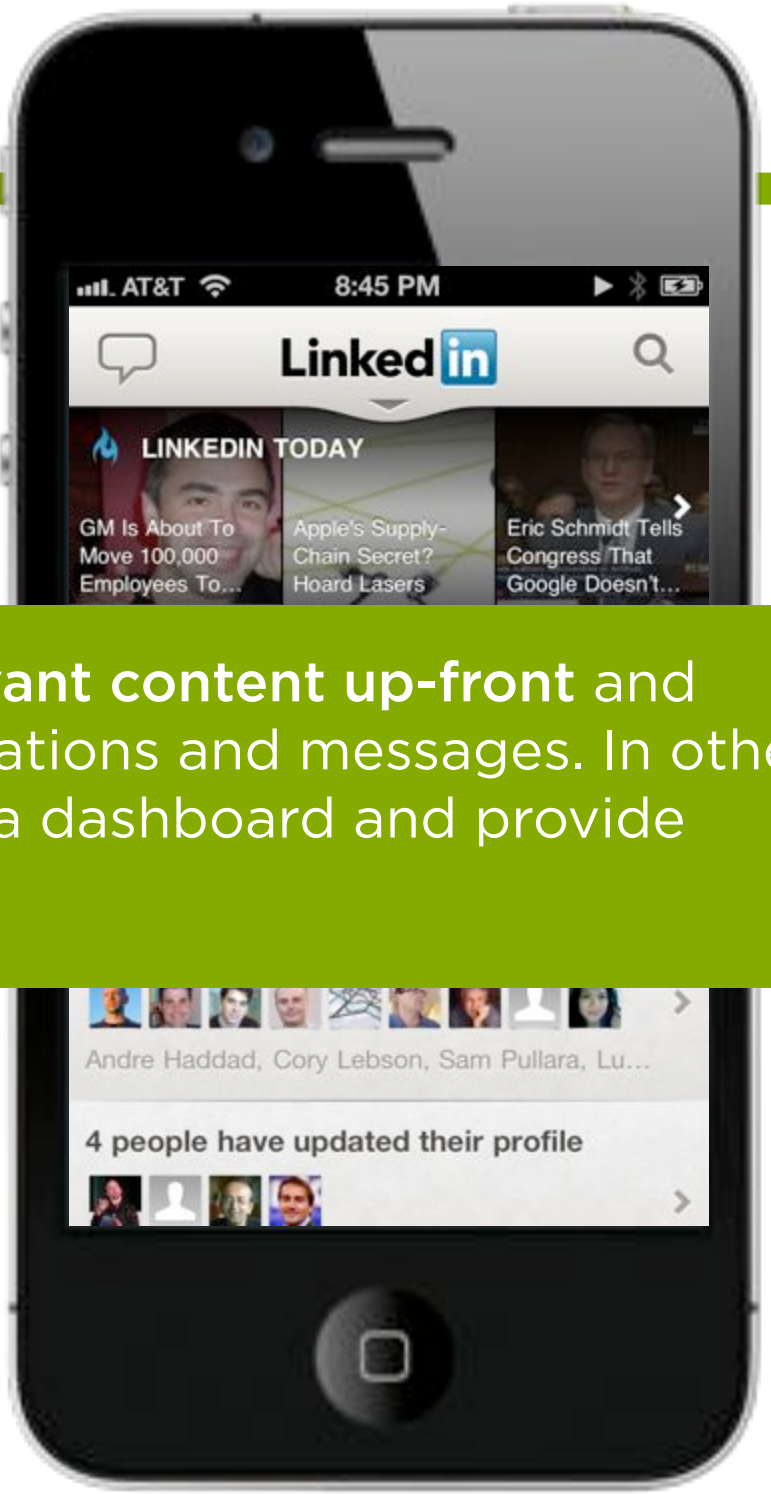


Maximum Content

Carrier
4:06 PM
flickr from YAHOO!
Activity
You
Contacts
More
Kia ora lukew!
Recent activity
Uploads from your contacts
Today's interestingness
Photos taken nearby

AT&T 3G
12:00 PM
lyzadanger
linuxaid, reidab, brad_frost, dtboyd
brad_frost Did you take this picture on your hoverboard???
Feed
Popular
Share
News
@lukew

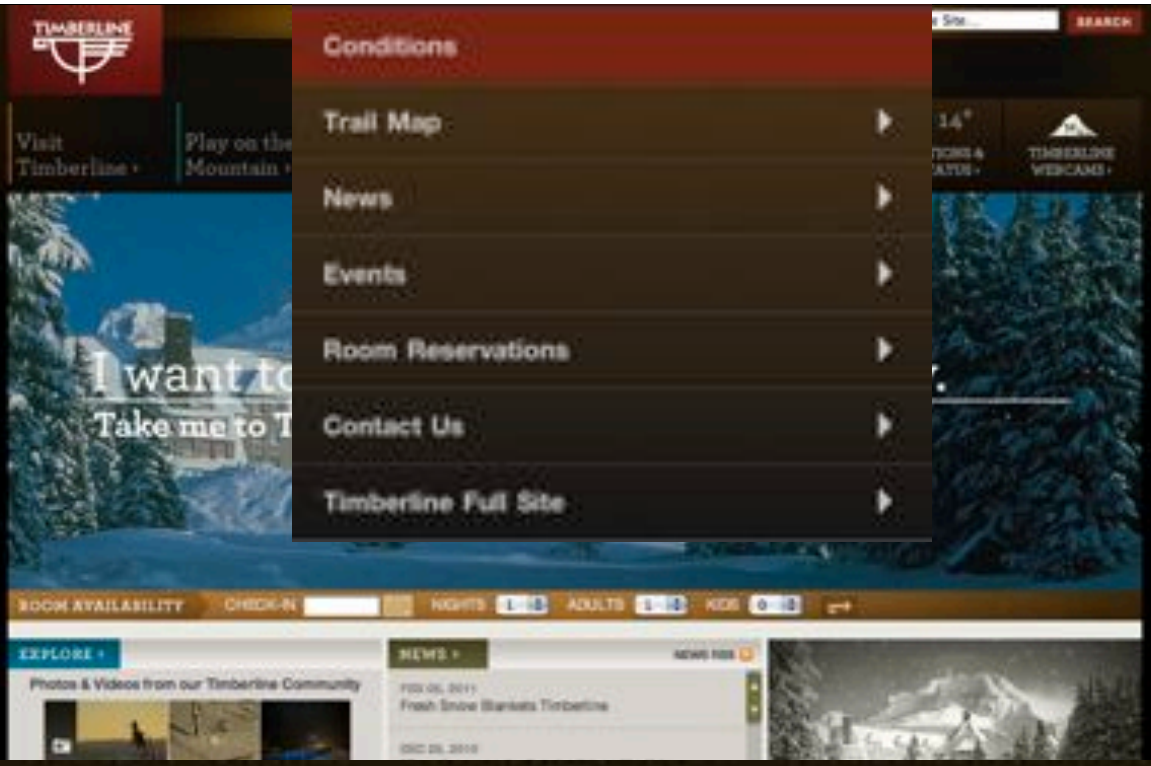




"In the new app, we present **relevant content up-front** and instantly notify users of new invitations and messages. In other words, we remove the friction of a dashboard and provide **immediate value on app launch**."

Check In/Status

Navigation Second



Visit Timberline

Introduction
Heritage
Winemaker's Dinner Series
Spend The Night
Dining
Tours & Activities
Camping
Shopping
Weddings
Meetings & Get Togethers
Bikes Hut
Guest Services
Transportation

Play on the Mountain

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

Learn at Timberline

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

Connect with Timberline

Introduction
News
Events
Contact Us
Deals
Newsletter
Surveys

Explore the Gallery

Photos and Videos

Company Info

About
Sustainability
Jobs
Privacy Policy
Press Room
Partners
Charitable Contributions

TICKETS 503.272.3158 | RESERVATIONS 800.547.1406 | GROUP SALES 503.272.3251 | SNOW PHONE 503.222.2211

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@wilto
Mat "Wilto" 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
Retweet
Reply
Retweeted by lilbra 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]

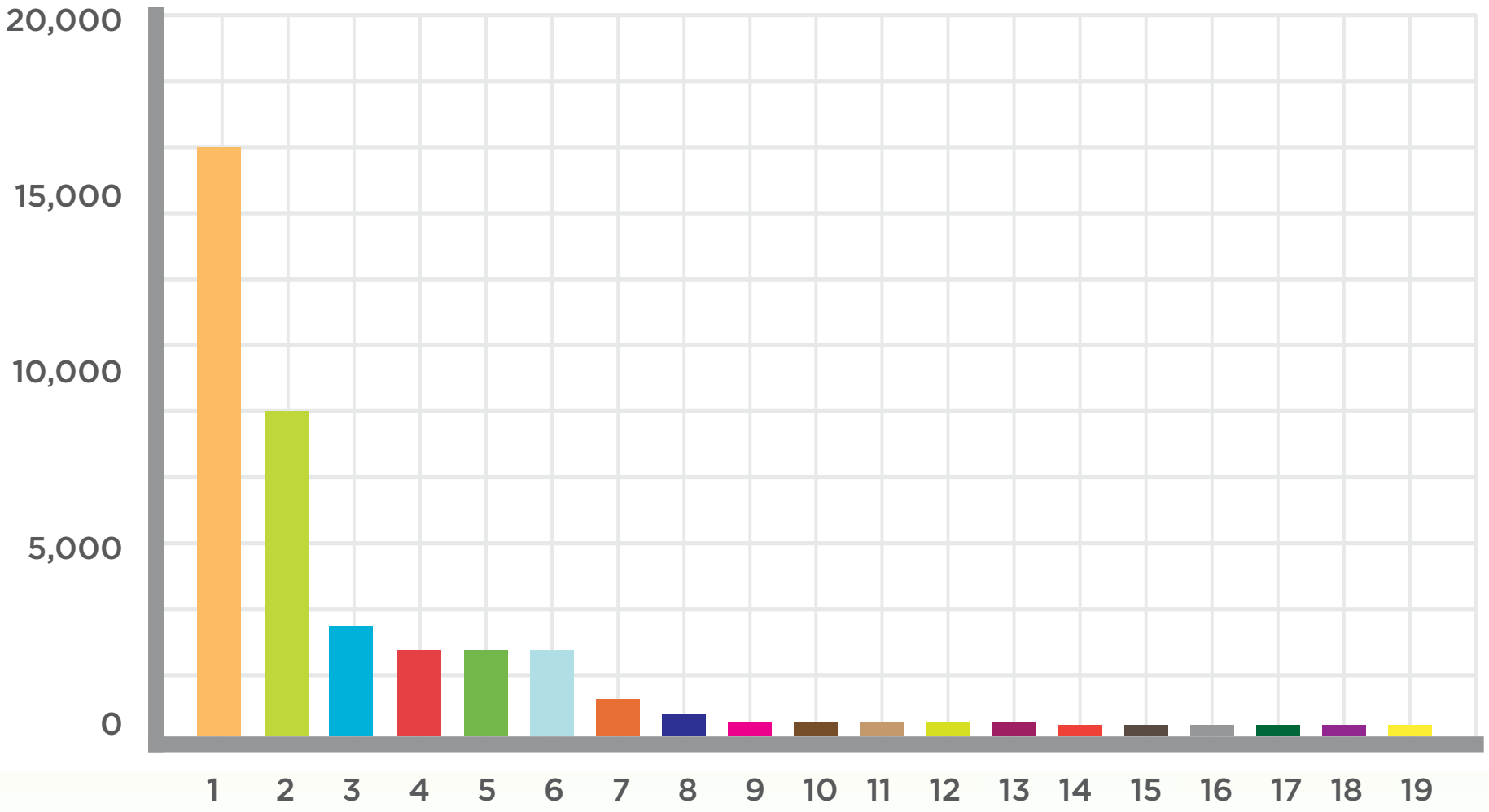
scottjehl
Scott Jehl

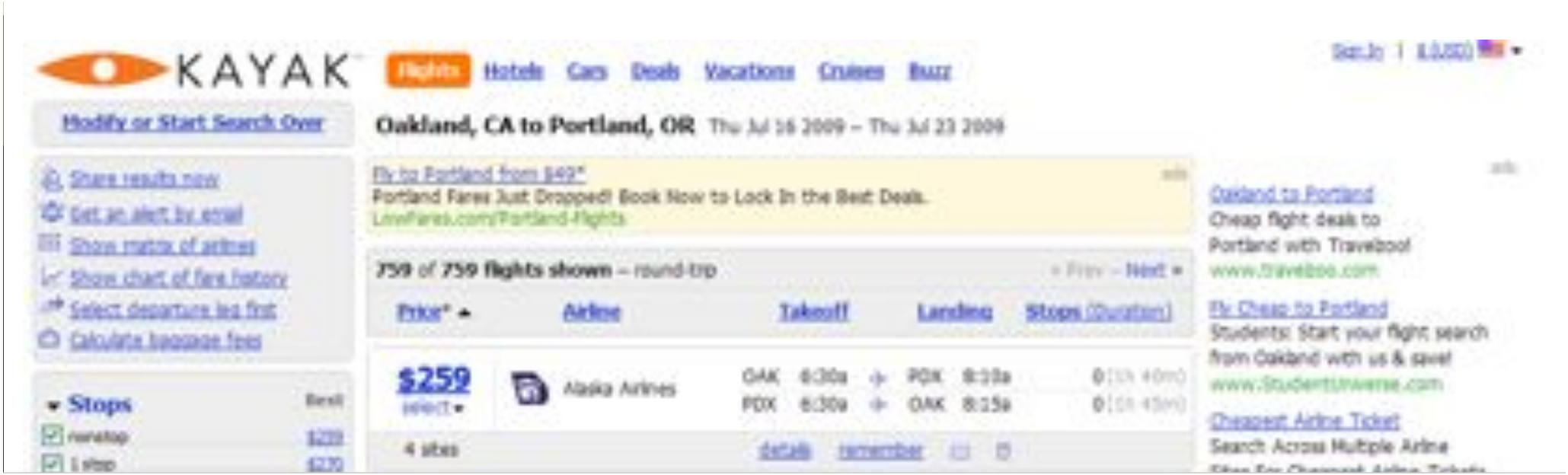
Thought of the day: we'll know the mobile web is "ready" when links to the desktop version are understood to be unnecessary.

10:43pm Mar 4th 2011 via TweetDeck #11 [x]

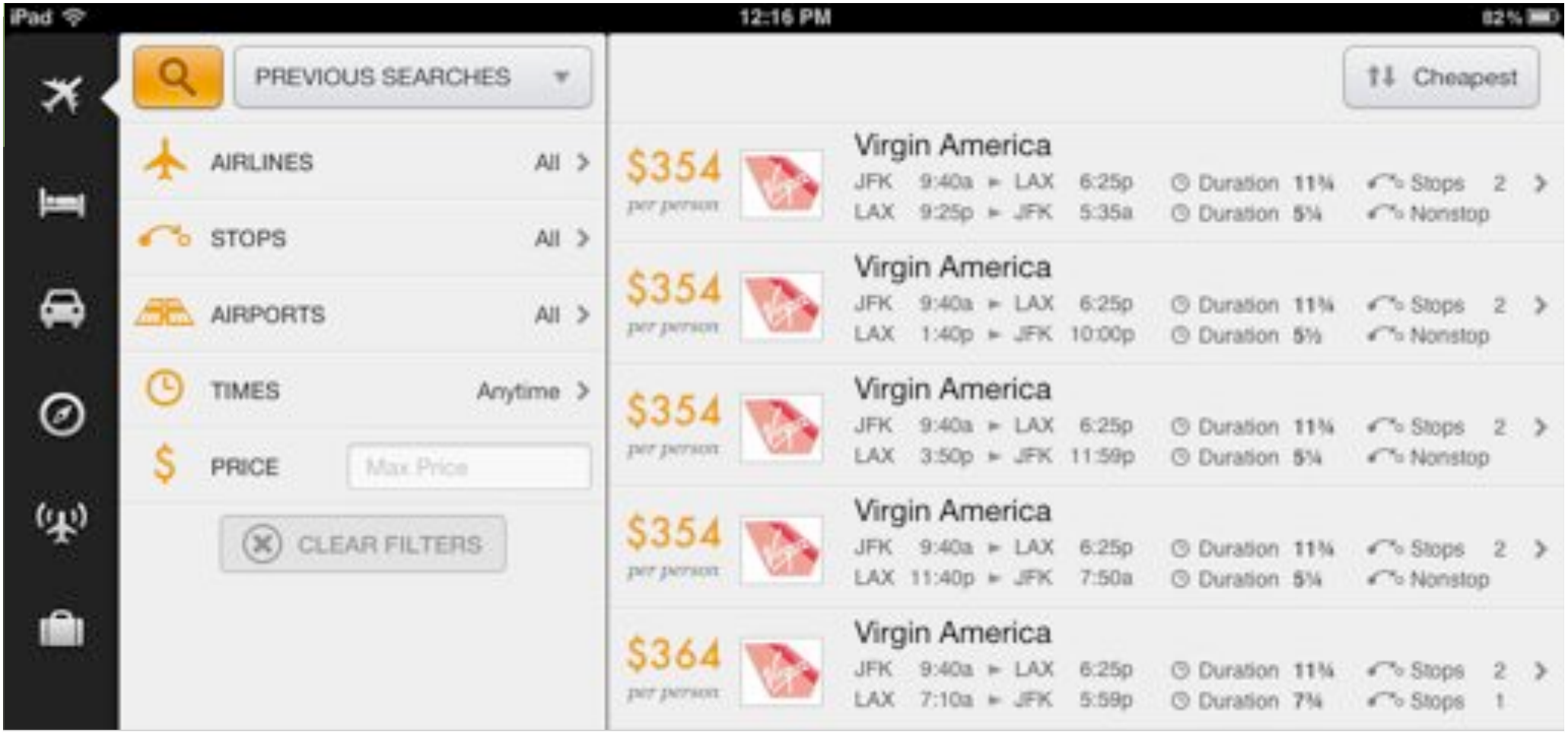
grigs
Jason Grigsby

Top Pages by Visit



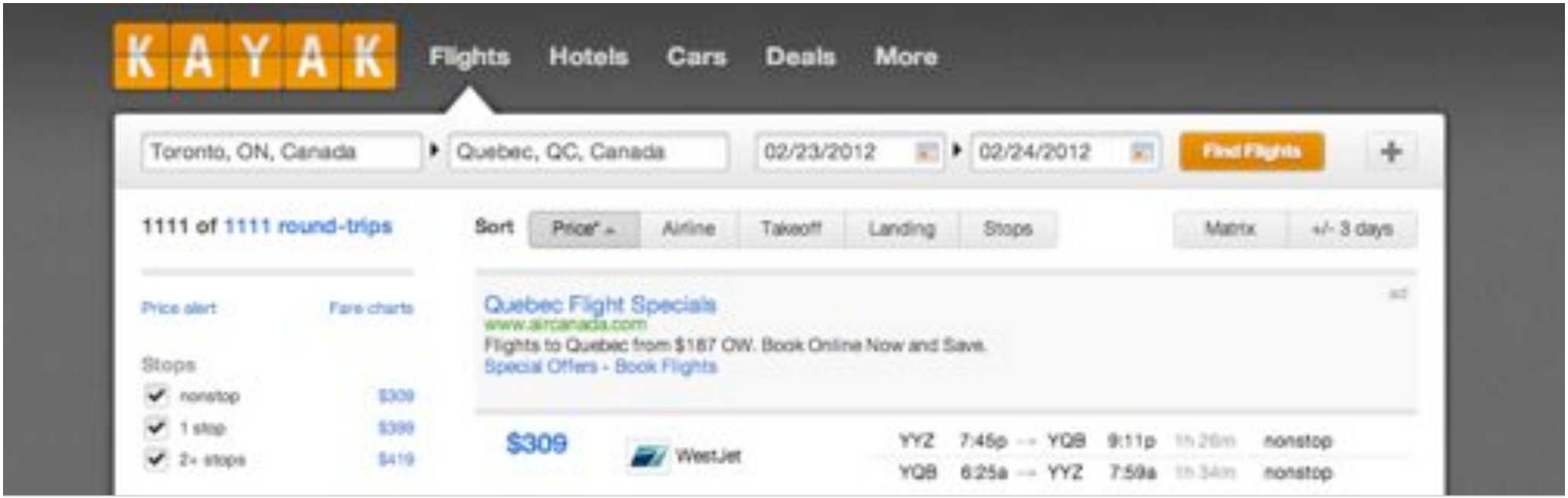


"Kayak is now consciously taking design cues from its recently updated iPad and iPhone apps"



"The goal in making the site more like a mobile app is to shed unnecessary details and simplify"

Source: http://gigaom.com/2012/01/30/why-kayak-prefers-mobile/



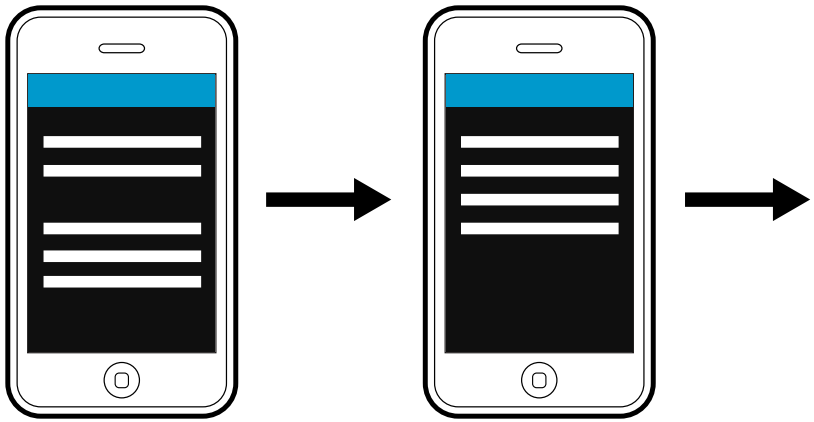
"If something is on the screen and people aren't clicking on, we remove it"

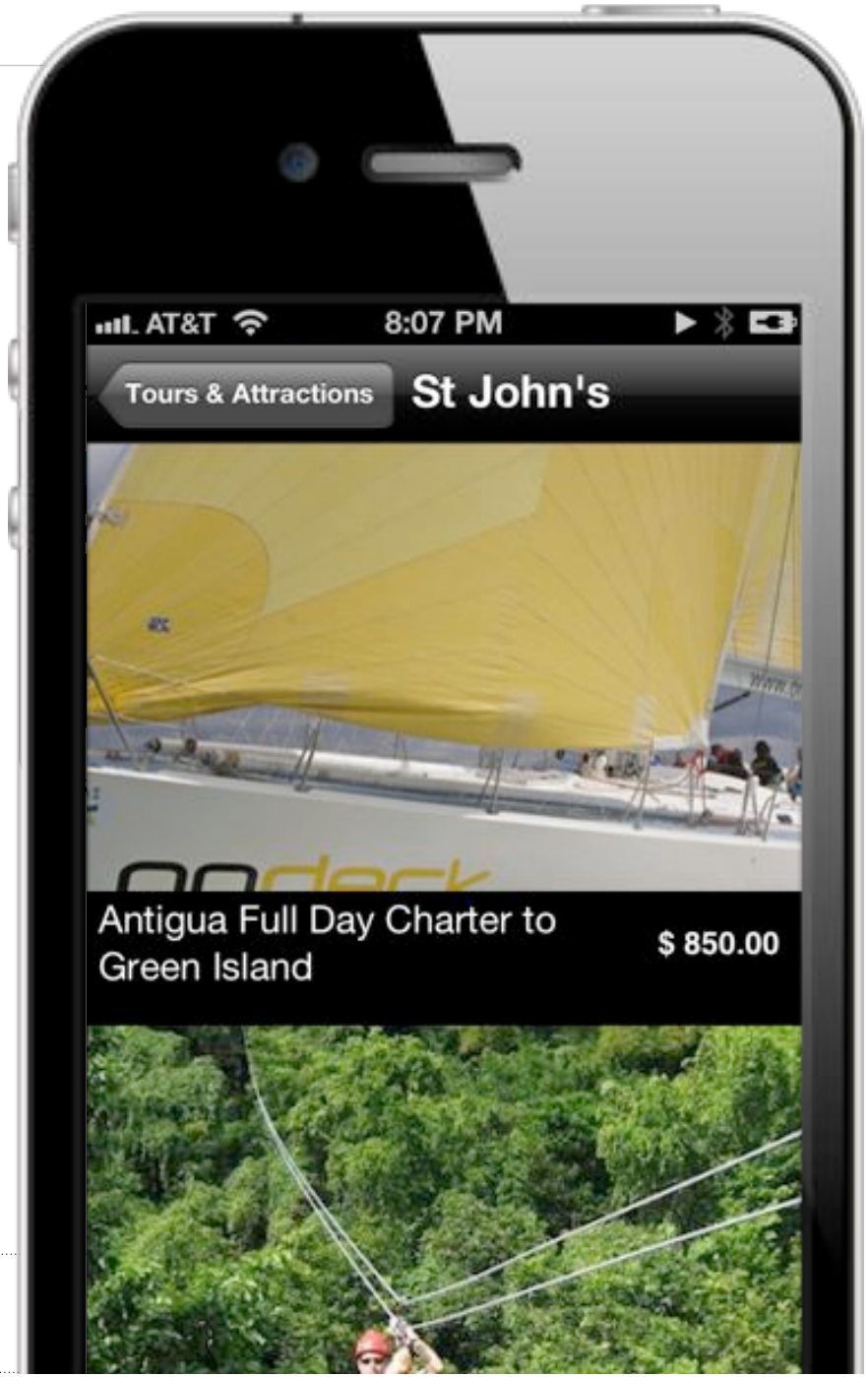
“How do you gradually reveal mobile experiences?”

1. Nested Doll
2. Hub & Spoke
3. Bento Box
4. Filtered View

Source: http://slidesha.re/yNf7Qw

1. Nested Doll

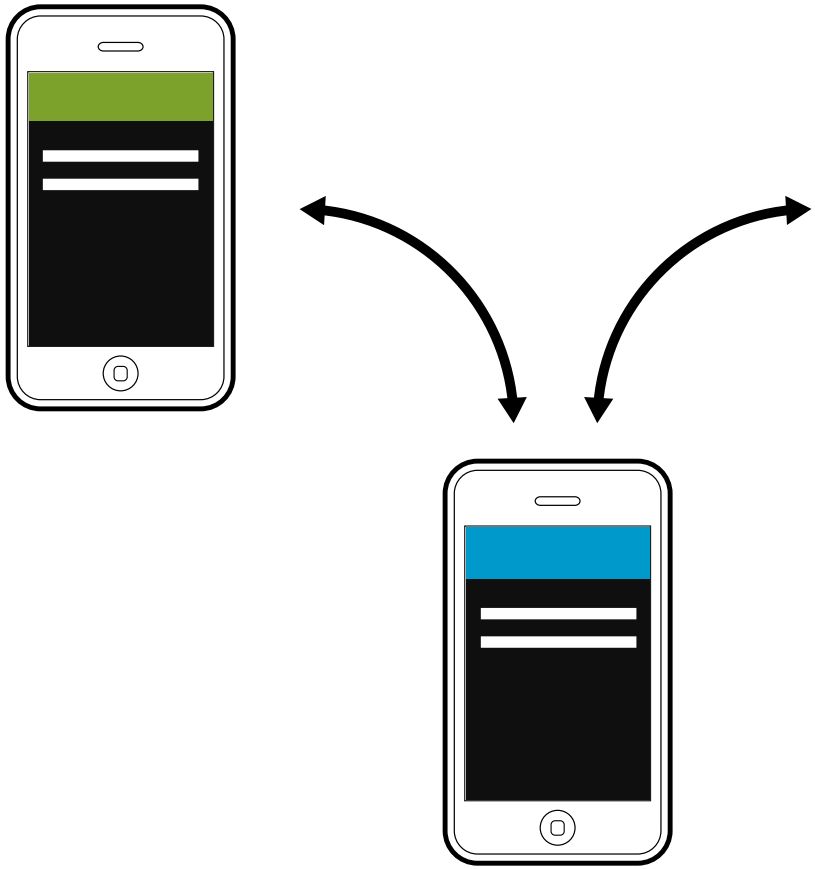




LUKEW IDEATION + DESIGN

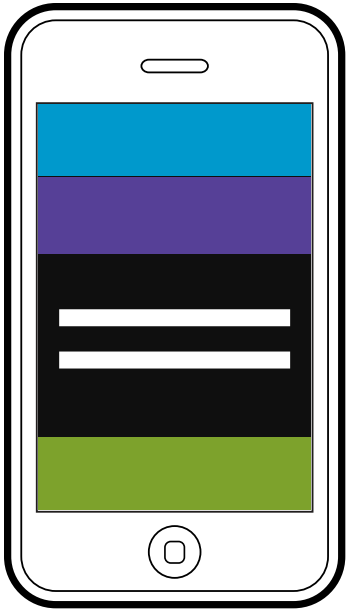
Source: http://slidesha.re/yNf7Qw

2. Hub & Spoke



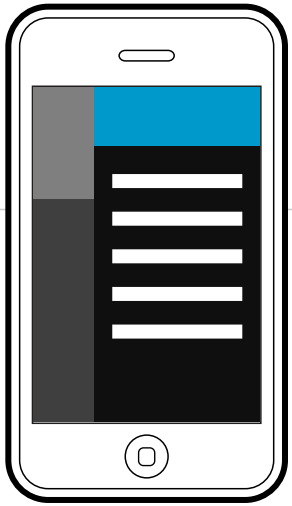
Source: http://slidesha.re/yNf7Qw

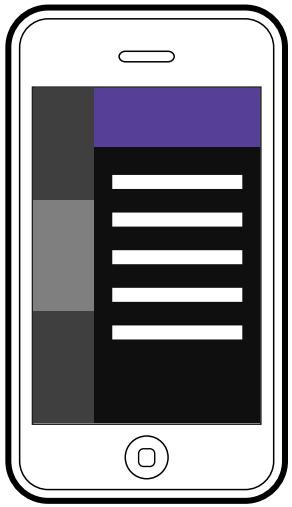
3. Bento Box

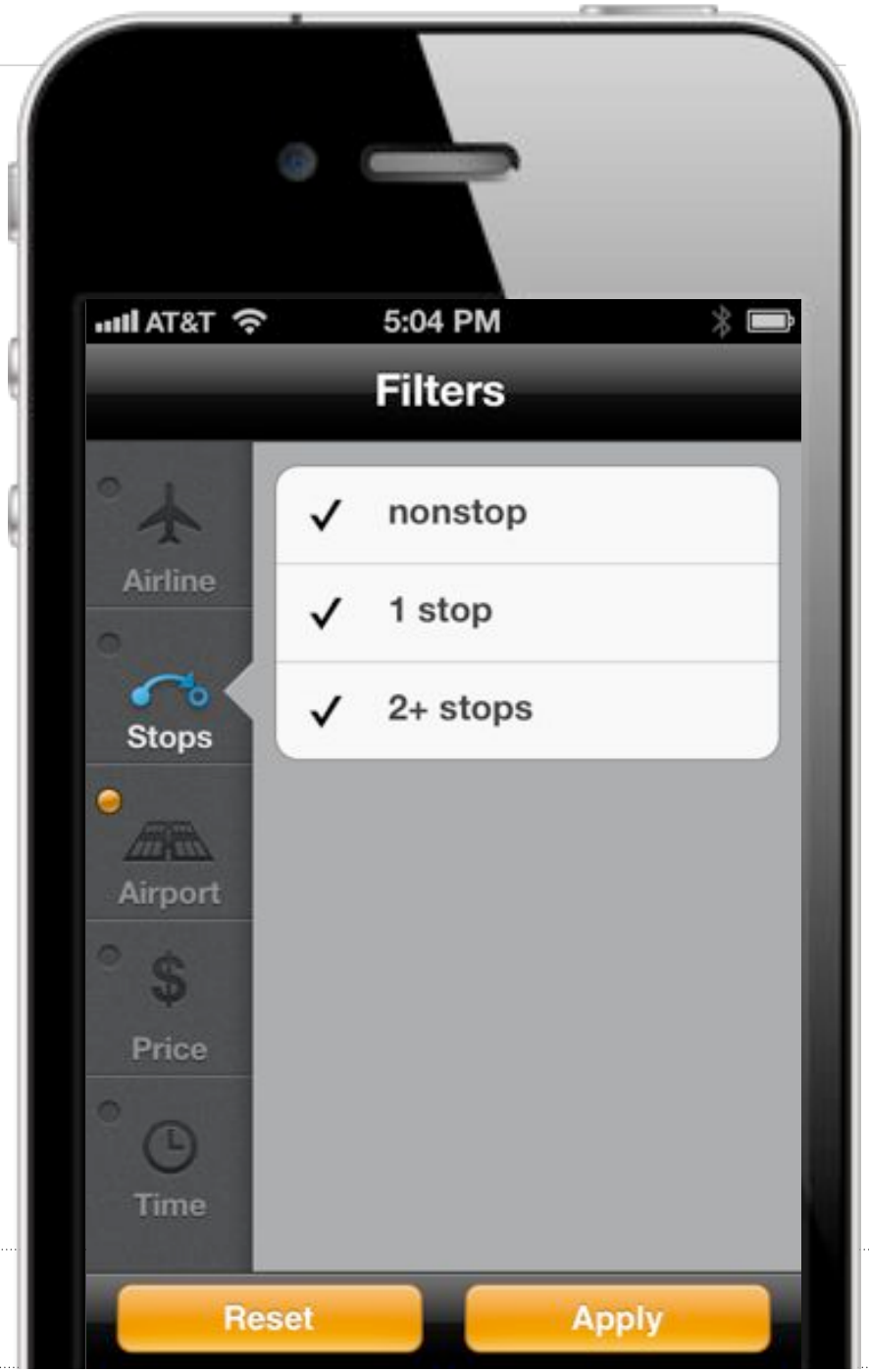


Source: http://slidesha.re/yNf7Qw

4. Filtered View







Source: http://slidesha

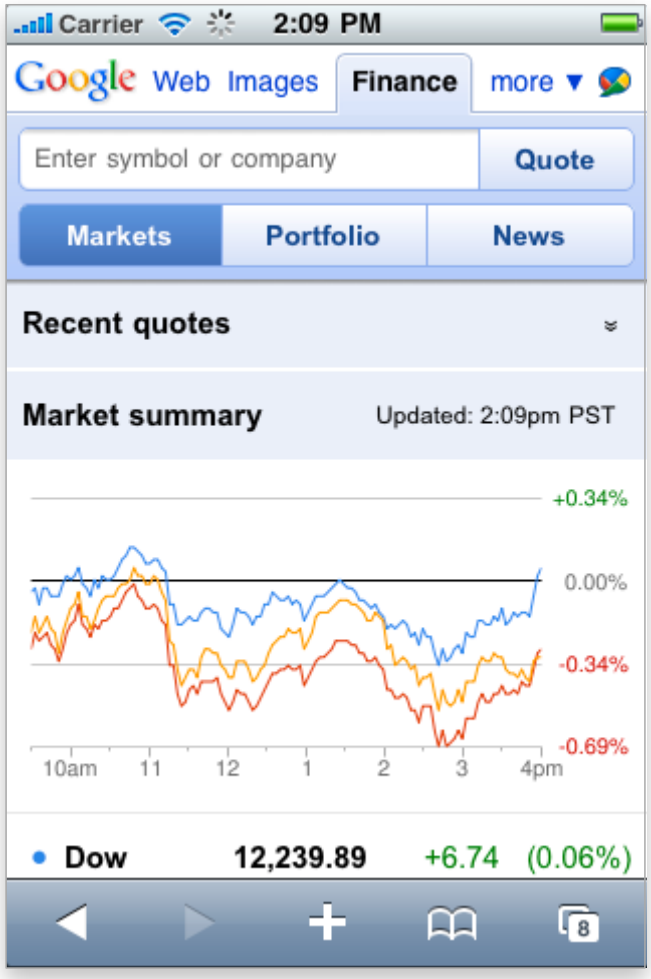
CONTENT FIRST, NAV 2ND

- Minimal navigation, maximum content
- Focus on what matters most
- Gradually reveal experiences

ORGANIZATION

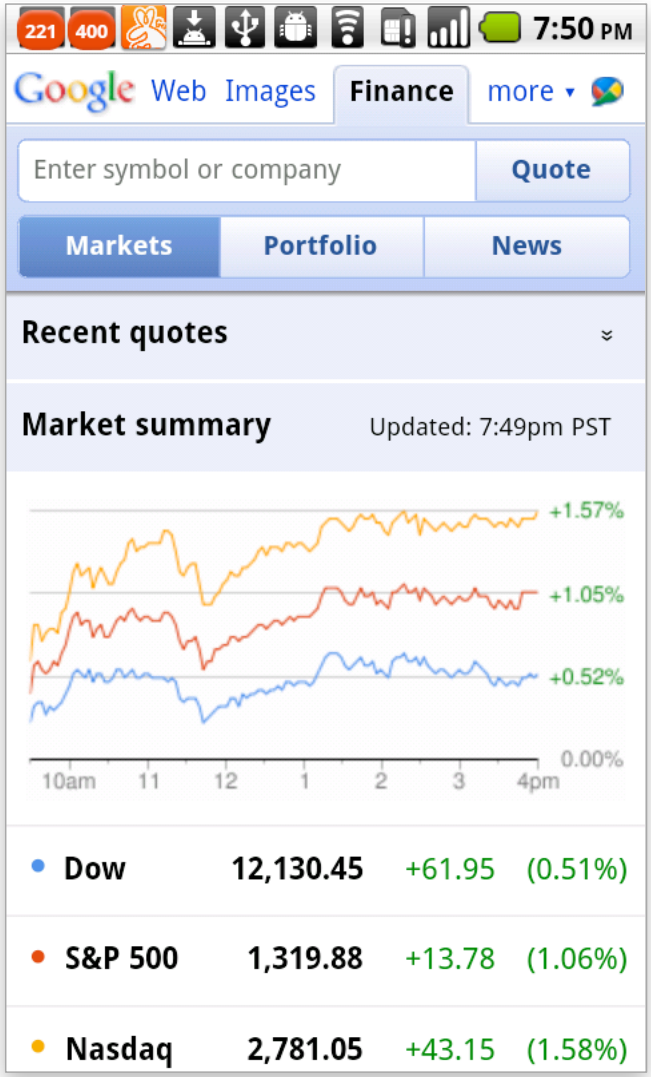
1. Mobile Behaviors
2. Content First
3. Navigation Elements
4. Clarity & Focus

Navigation Elements

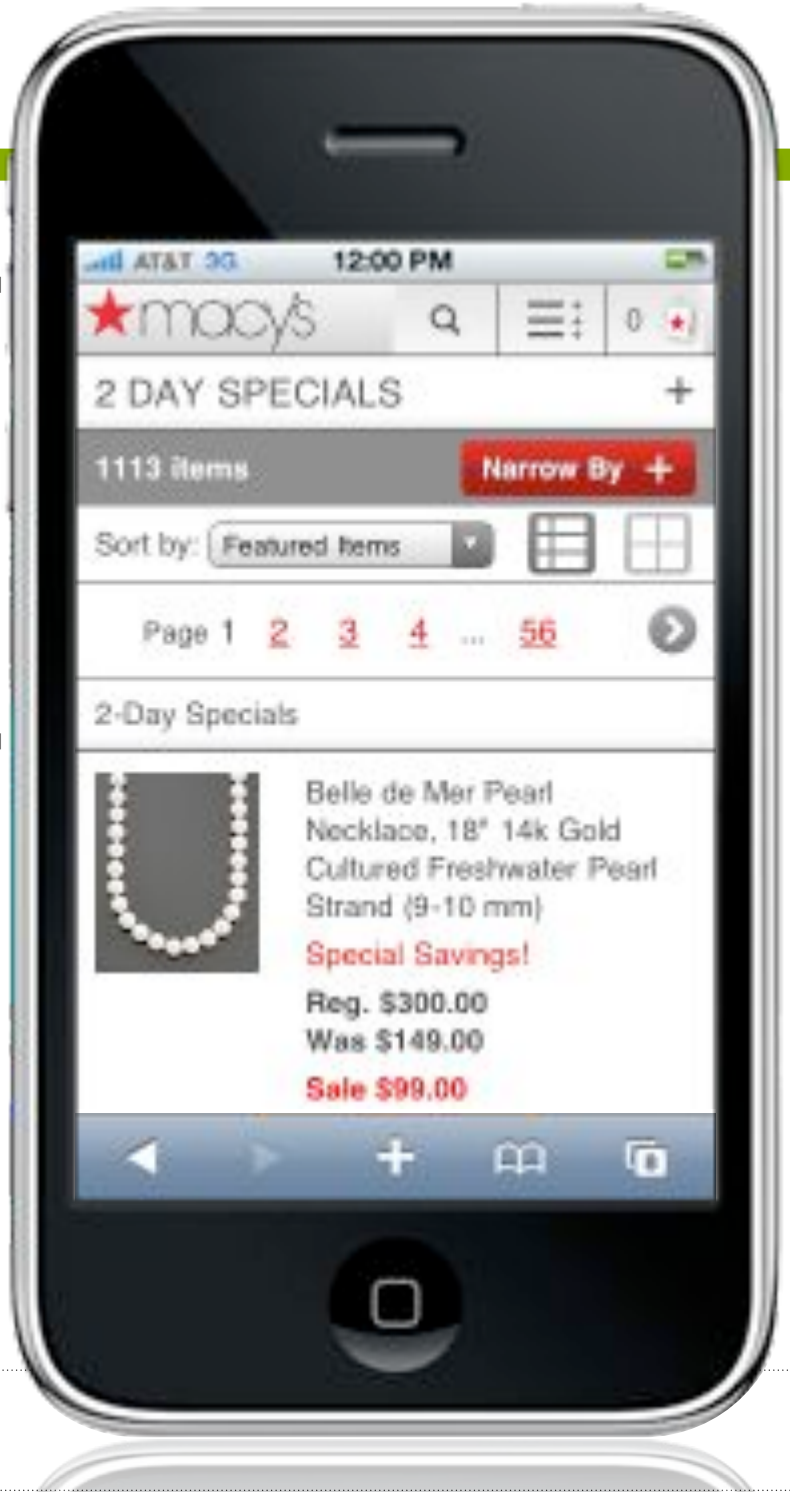


56% NAV/CHROME

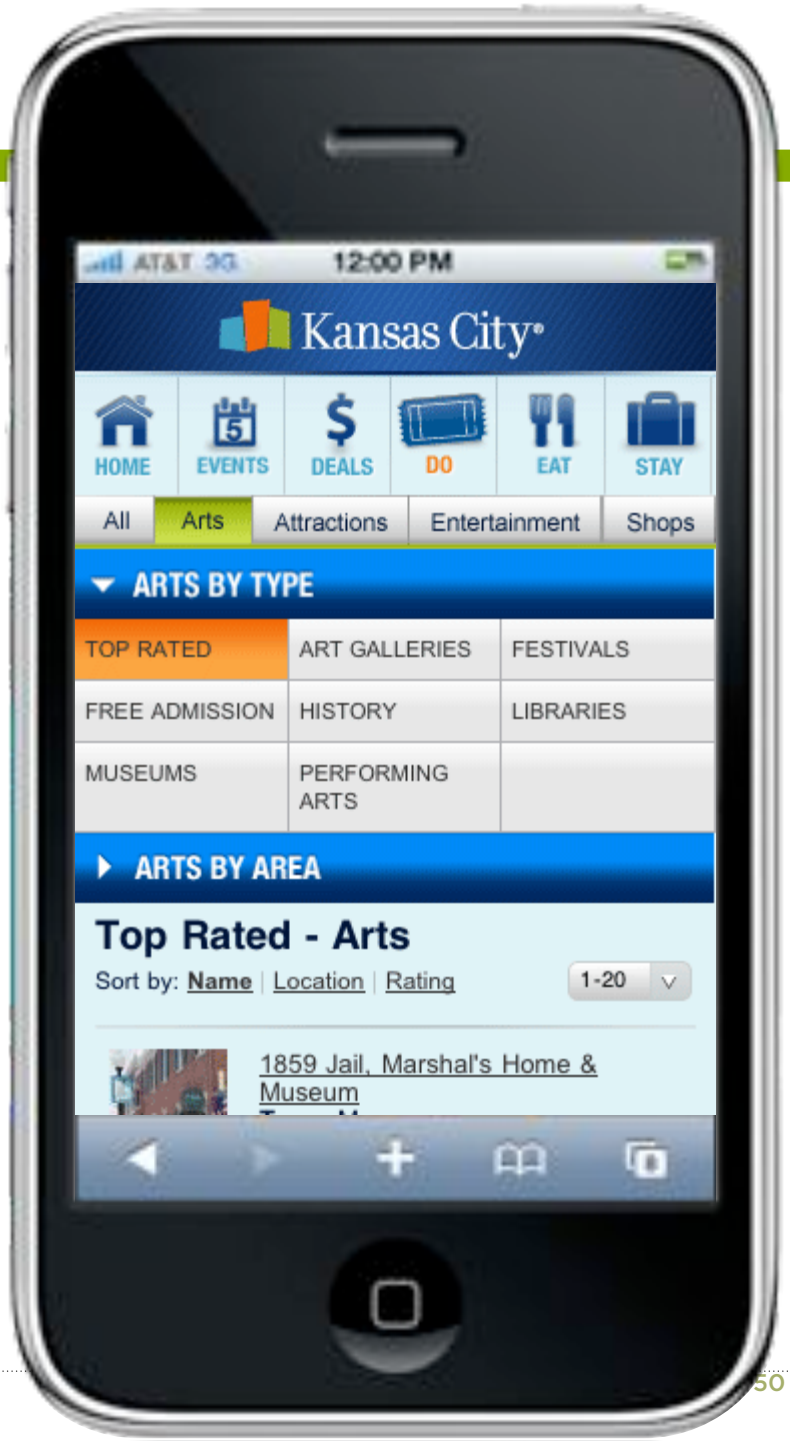
44% CONTENT



55% NAV OPTIONS

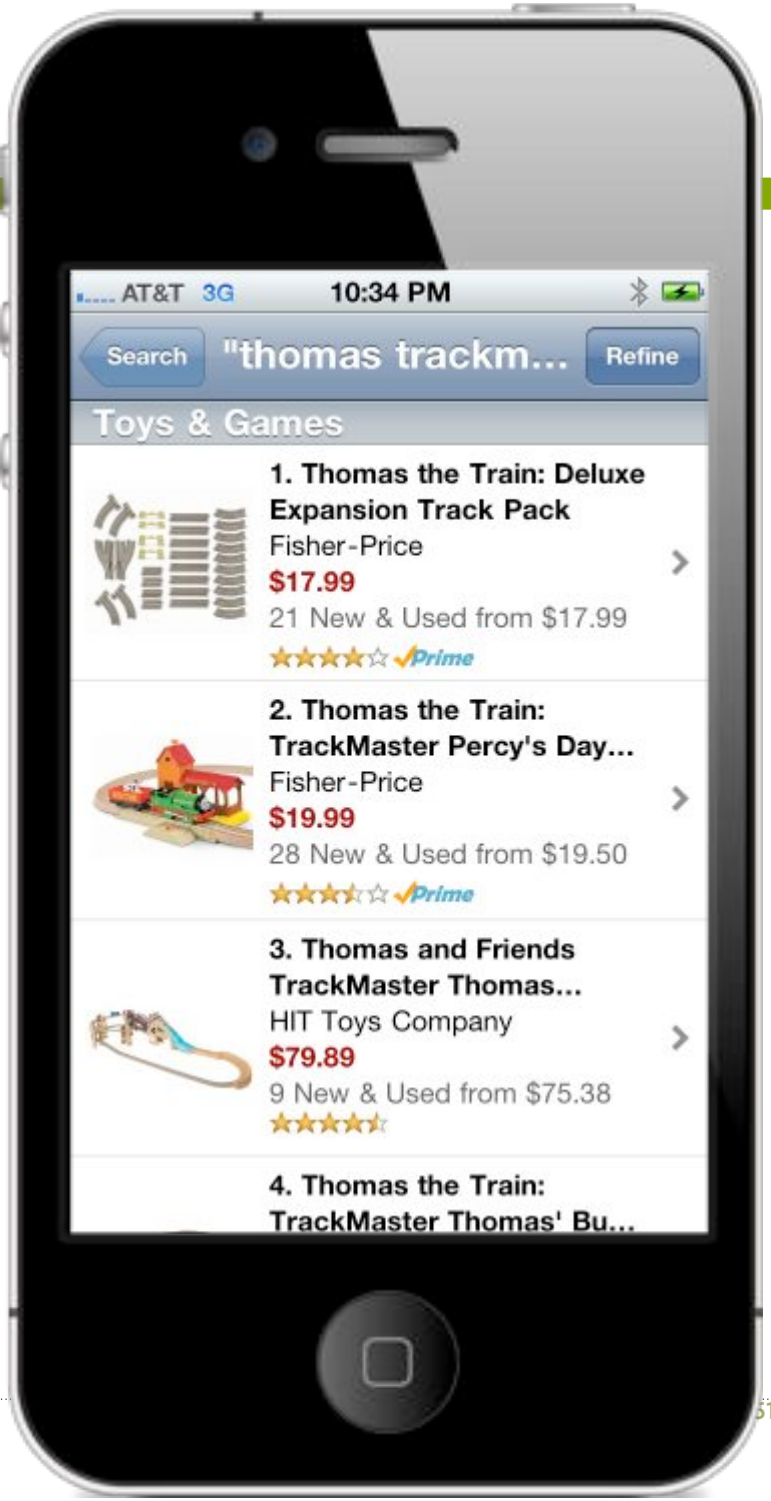


90% NAV OPTIONS



LUKEW IDEATION + DESIGN

90% RESULTS



LUKEW IDEATION + DESIGN

13 NAV ELEMENTS

TOUCH TARGETS

5 NAV ELEMENTS

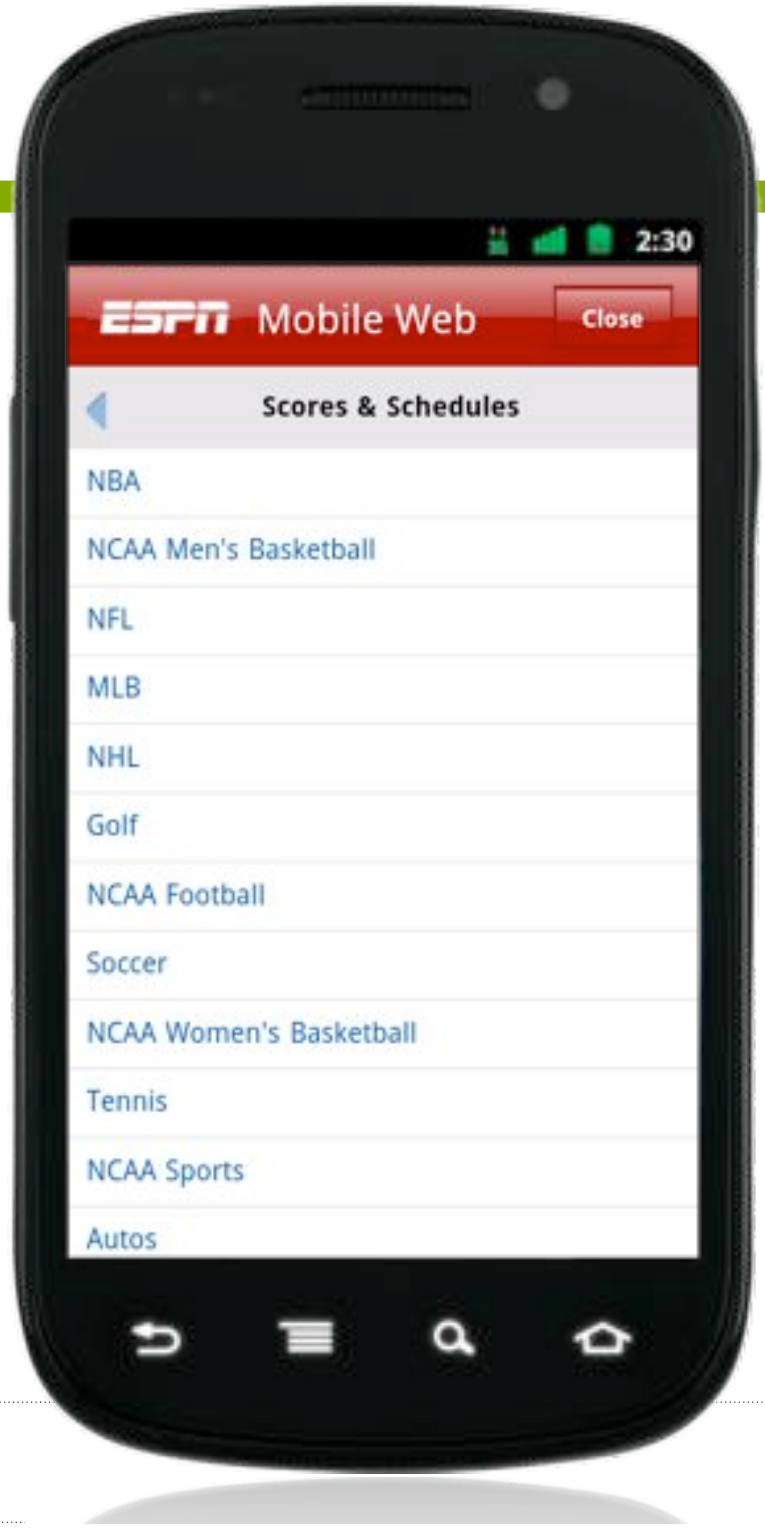
LUKEW IDEATION + DESIGN

4 NAV ELEMENTS

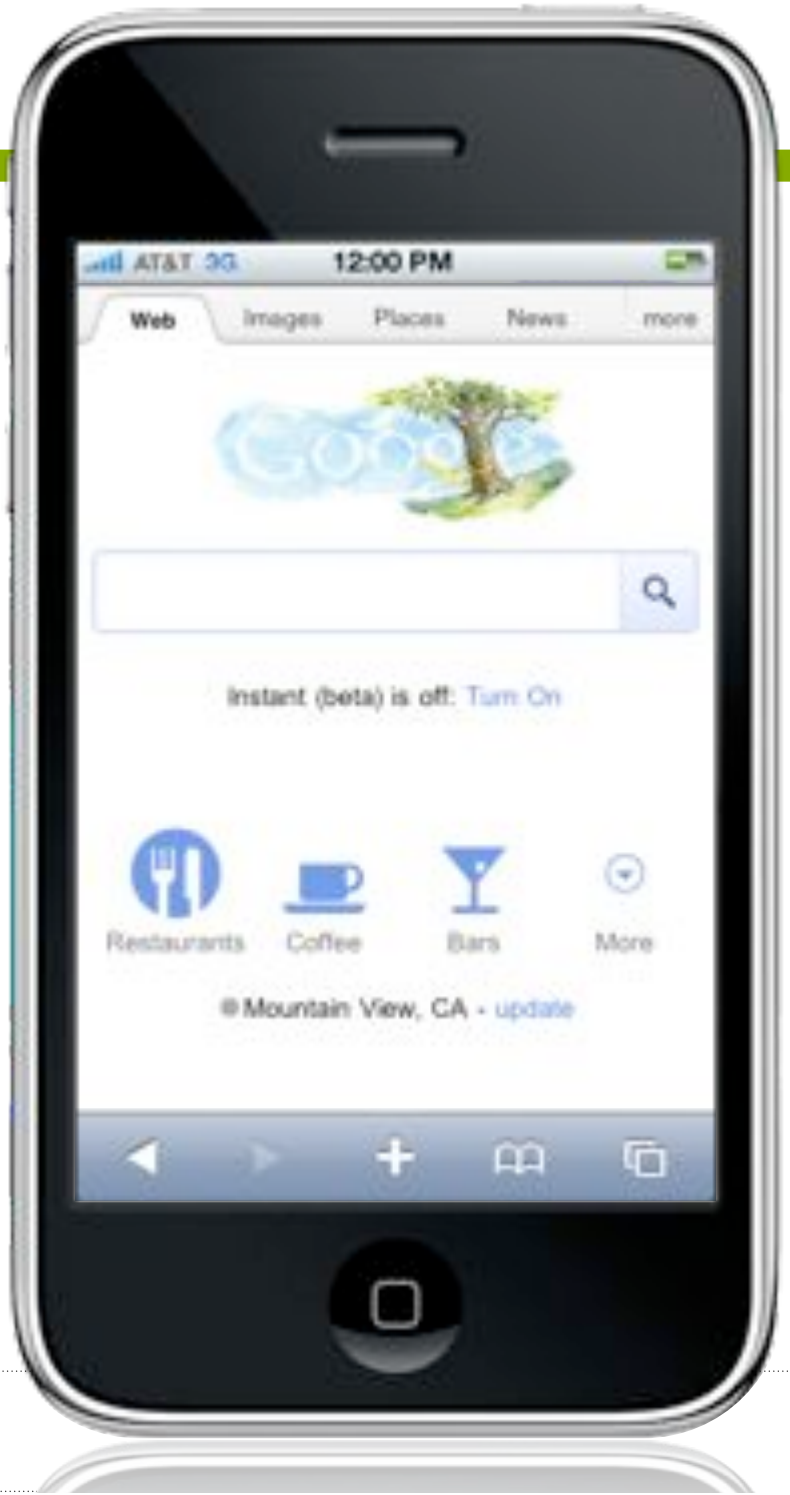
LUKEW IDEATION + DESIGN

Full Navigation Page

Top Navigation Overlay



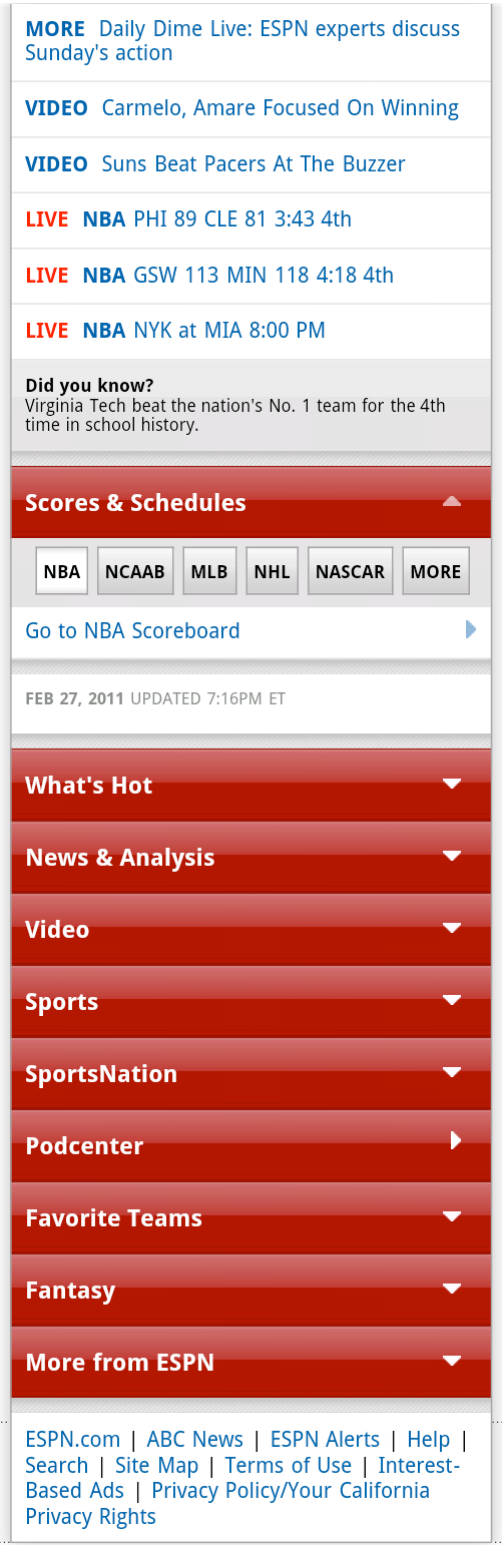
Side Navigation Expand



Top Navigation Expand

Pivot & Explore

Bottom Navigation Menu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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
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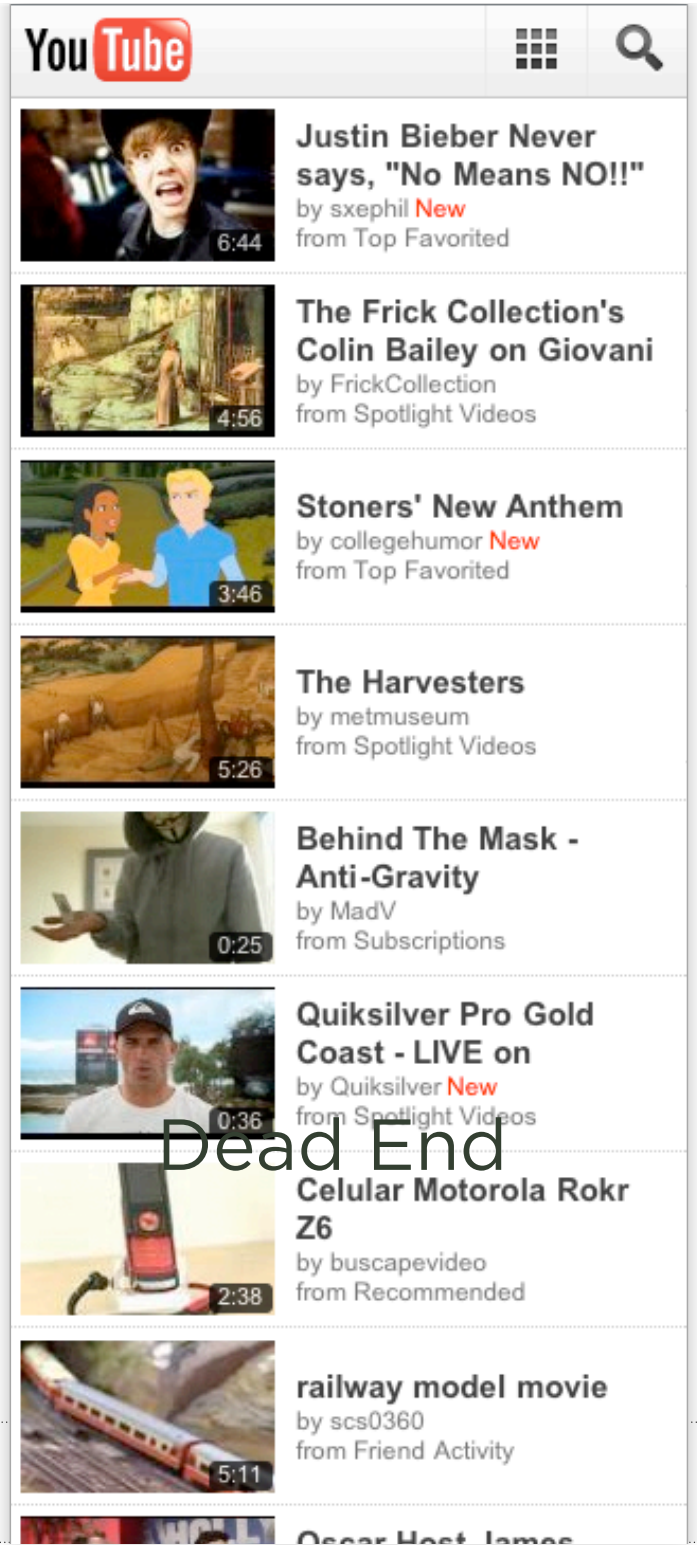
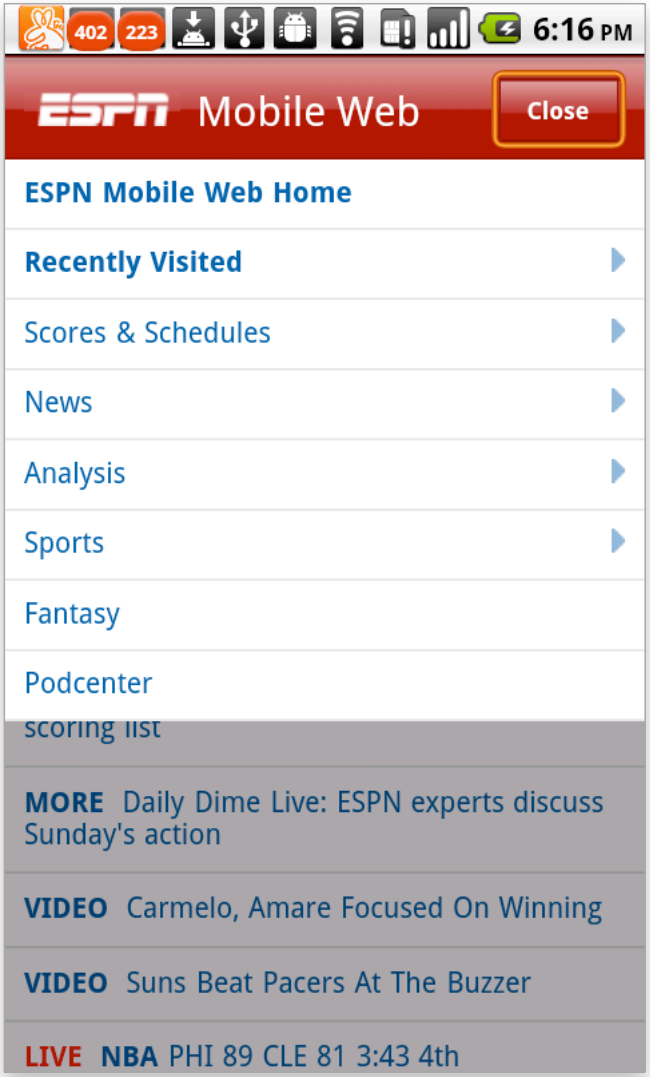
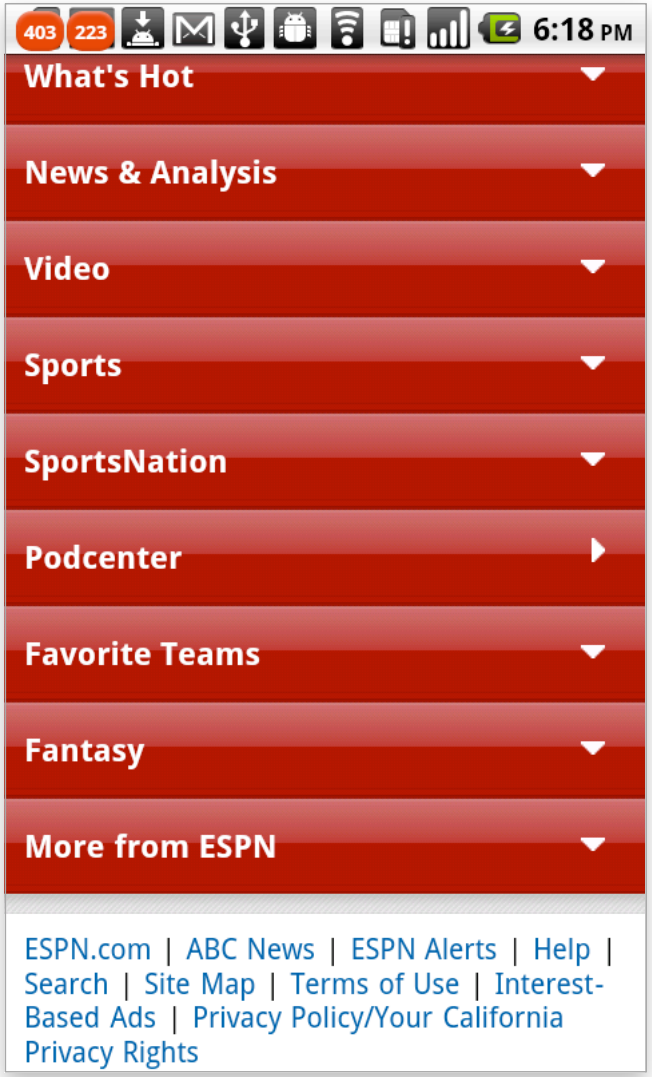

YouTube
6:44
Justin Bieber Never says, "No Means NO!!"
by sxephil New
from Top Favorited
4:56
The Frick Collection's Colin Bailey on Giovani
by FrickCollection
from Spotlight Videos
3:46
Stoners' New Anthem
by collegehumor New
from Top Favorited
5:26
The Harvesters
by metmuseum
from Spotlight Videos
0:25
Behind The Mask - Anti-Gravity
by MadV
from Subscriptions
0:36
Quiksilver Pro Gold Coast - LIVE on
by Quiksilver New
from Spotlight Videos
2:38
Celular Motorola Rokr Z6
by buscapevideo
from Recommended
5:11
railway model movie
by scs0360
from Friend Activity

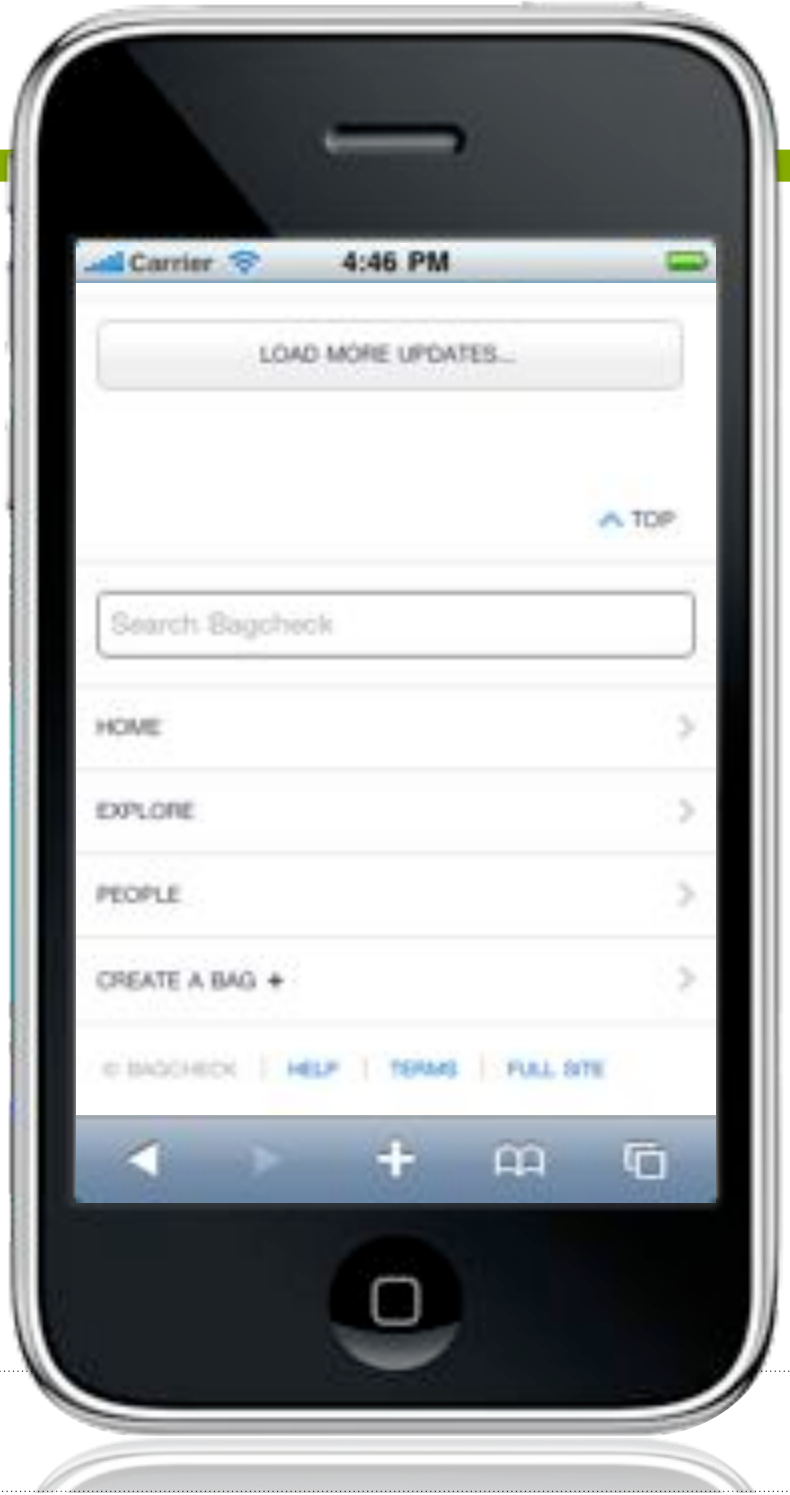
Dead End

Duplicative Menus





Top Navigation Link

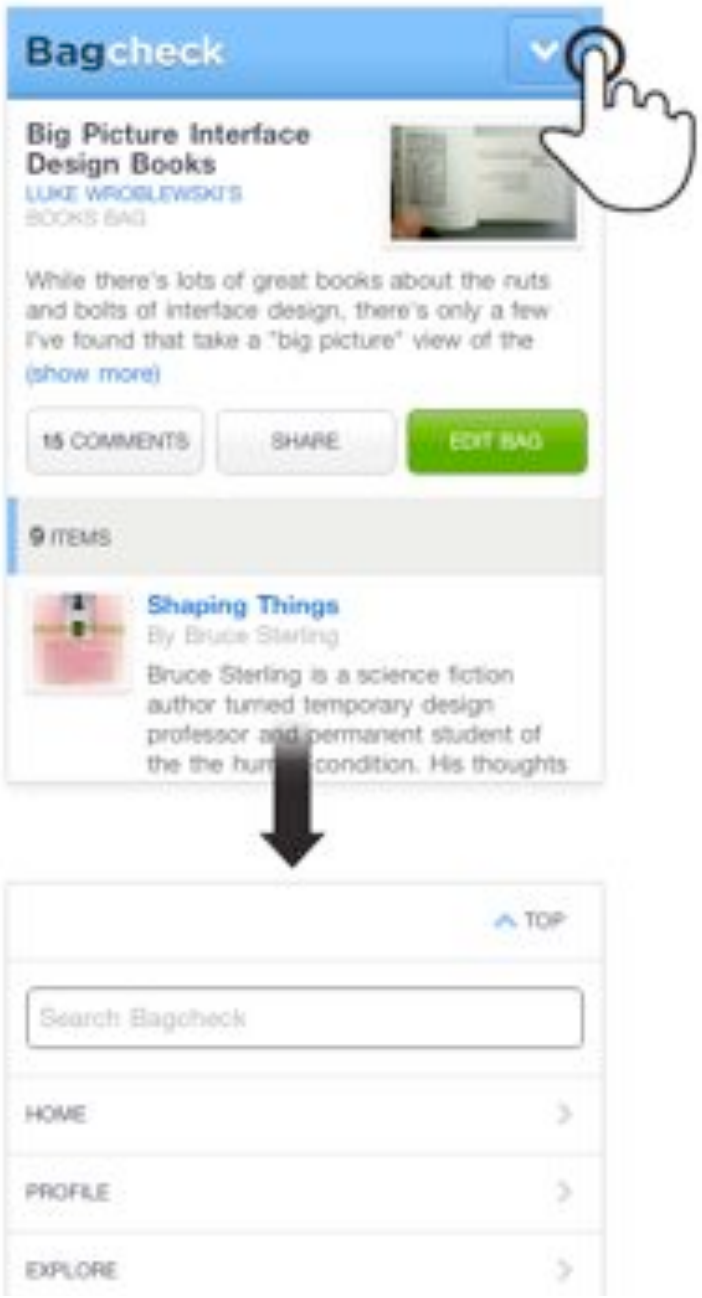


Bottom Navigation Menu

Best of Both Worlds?

Minimal Navigation

No Duplicative Menus



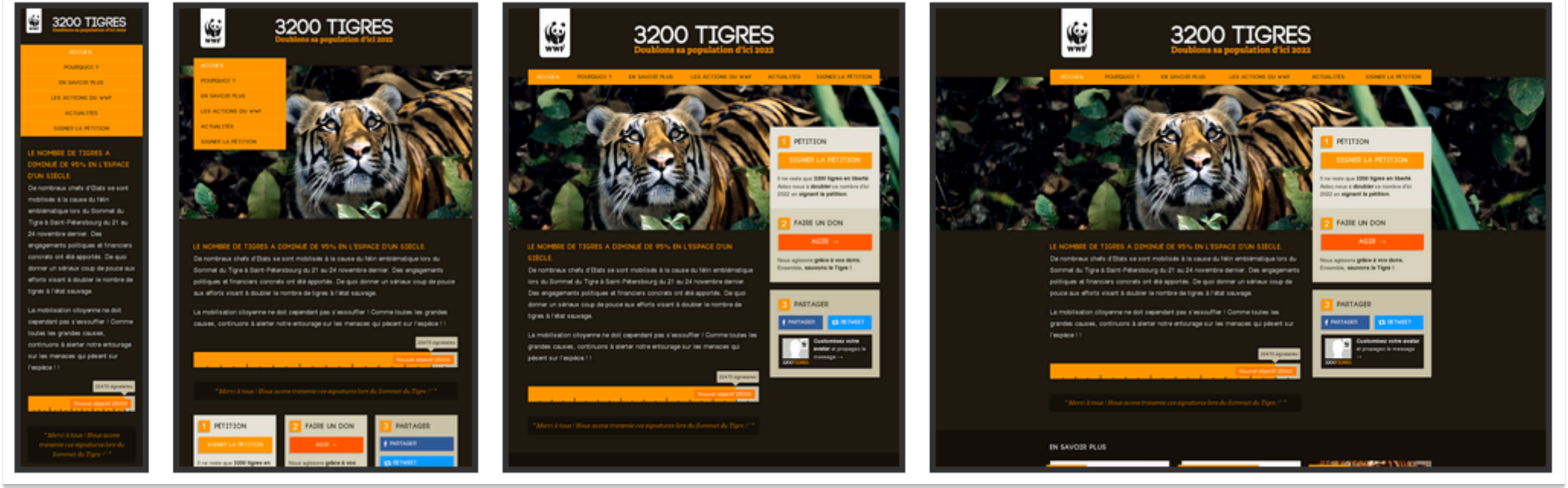
Just an Anchor Link

Pivot & Explore

80-90% of people are right handed

Source: Tapworthy: Designing Great IPhone Apps By Josh Clark
Source: http://www.kickerstudio.com/blog/2011/01/activity-zones-for-touchscreen-tablets-and-phones/

Responsive Web Design



Fluid grids • Flexible images • Media queries

contents

ARCHIVE · ABOUT · WRITE FOR US

Space To Breathe

by ***Nicole Jones*** *for* ***Issue № 2***

The universe overwhelms me at times.

Things are complicated. Time is fragmented. Attention is scarce. Technology encourages interruption. As I get older, I find it harder and harder to function in the noise. I need space to breathe to make anything worthwhile. And I'm not alone in this. The New York Times and The Atlantic have ongoing features about how computers affect our quality of life. Harvard Business Review offers advice on training your brain to focus and making room for reflection.

Linda Stone, a tech writer and consultant, has studied this problem for years. "We've been operating in an increasingly noisy world and taking on the job of staying on top of everything," she said in 2007. "Even though the world may continue to be noisy, increasingly we are craving stillness, meaningful connections, and we're yearning to get to the bottom of things." There are more people, more problems, and more things to do. It's hard to find quiet in such a connected world.

If technology overload isn't reason enough to bring a peaceful conviction to our work, there are millions of people with anxiety disorders to consider. About 18% of U.S. adults have issues with anxiety, myself included.[1]

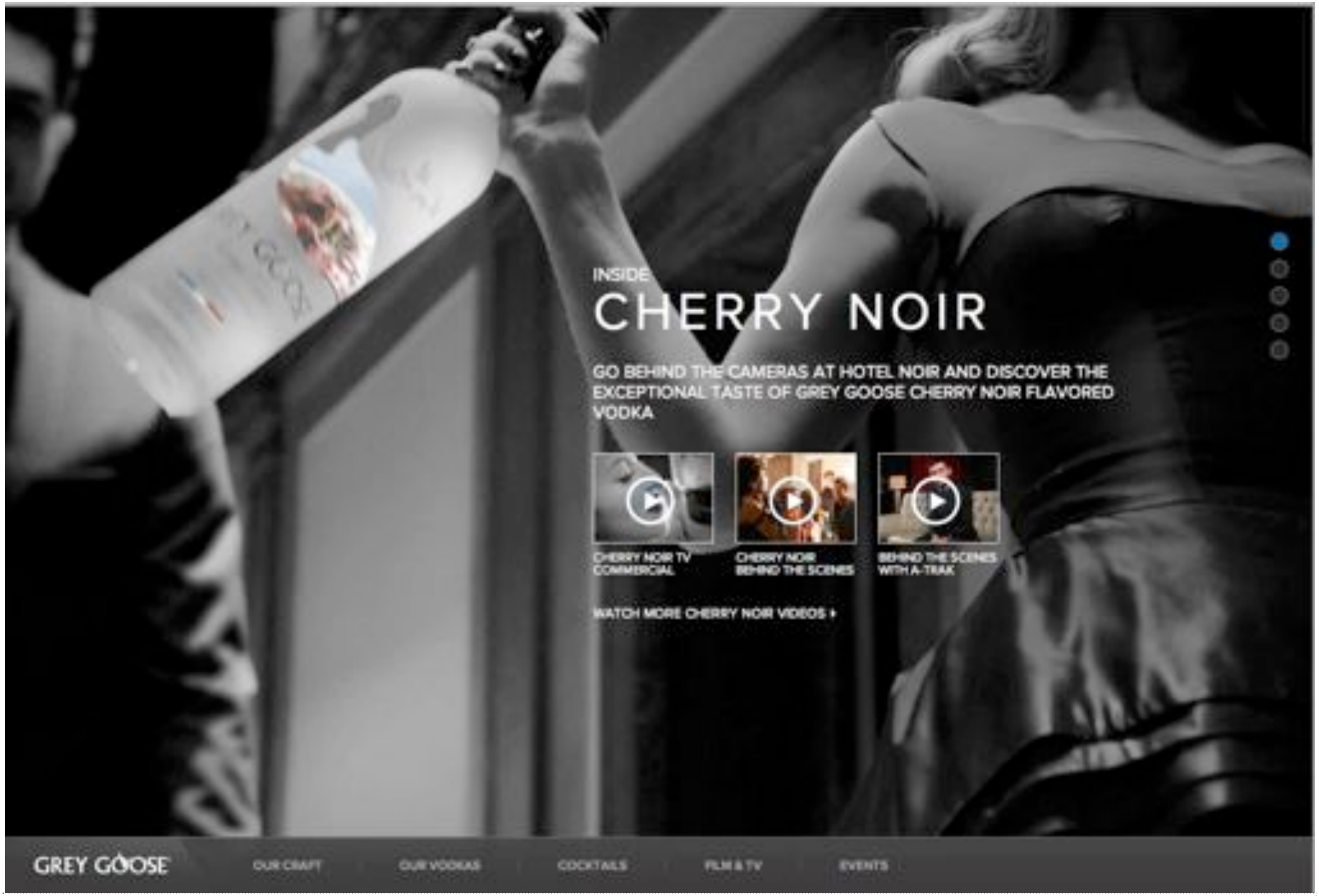
Anxiety pulls the mind from the present to another moment, just out of reach. When we're anxious, we experience the tension of being in one time and place while thinking about another. Whether concerned for the future or replaying bits of the past, someone in this mindset might feel hurried, tired, agitated, or distracted. Like an overwhelmed multi-tasker, they need space to breathe and time for reflection.

The anti-calm culture

Responsive Navigation Patterns

1. Footer Anchor
2. Toggle Menu
3. Select Menu
4. Top Navigation

Source: http://bit.ly/zwyv2d


INSIDE
CHERRY NOIR
GO BEHIND THE CAMERAS AT HOTEL NOIR AND DISCOVER THE EXCEPTIONAL TASTE OF GREY GOOSE CHERRY NOIR FLAVORED VODKA
CHERRY NOIR TV COMMERCIAL
CHERRY NOIR BEHIND THE SCENES
BEHIND THE SCENES WITH A-TRAK
WATCH MORE CHERRY NOIR VIDEOS +
GREY GOOSE
OUR CRAFT
OUR VODKAS
COCKTAILS
FILM & TV
EVENTS

1. Footer Anchor

PROS	CONS
• Minimal navigation at top • One tap access to navigation • No dead ends • Comfortable for touch • No Javascript dependency • Scalable (high)	• Anchor jump can be awkward • No smooth motion (might be expected on mobile)

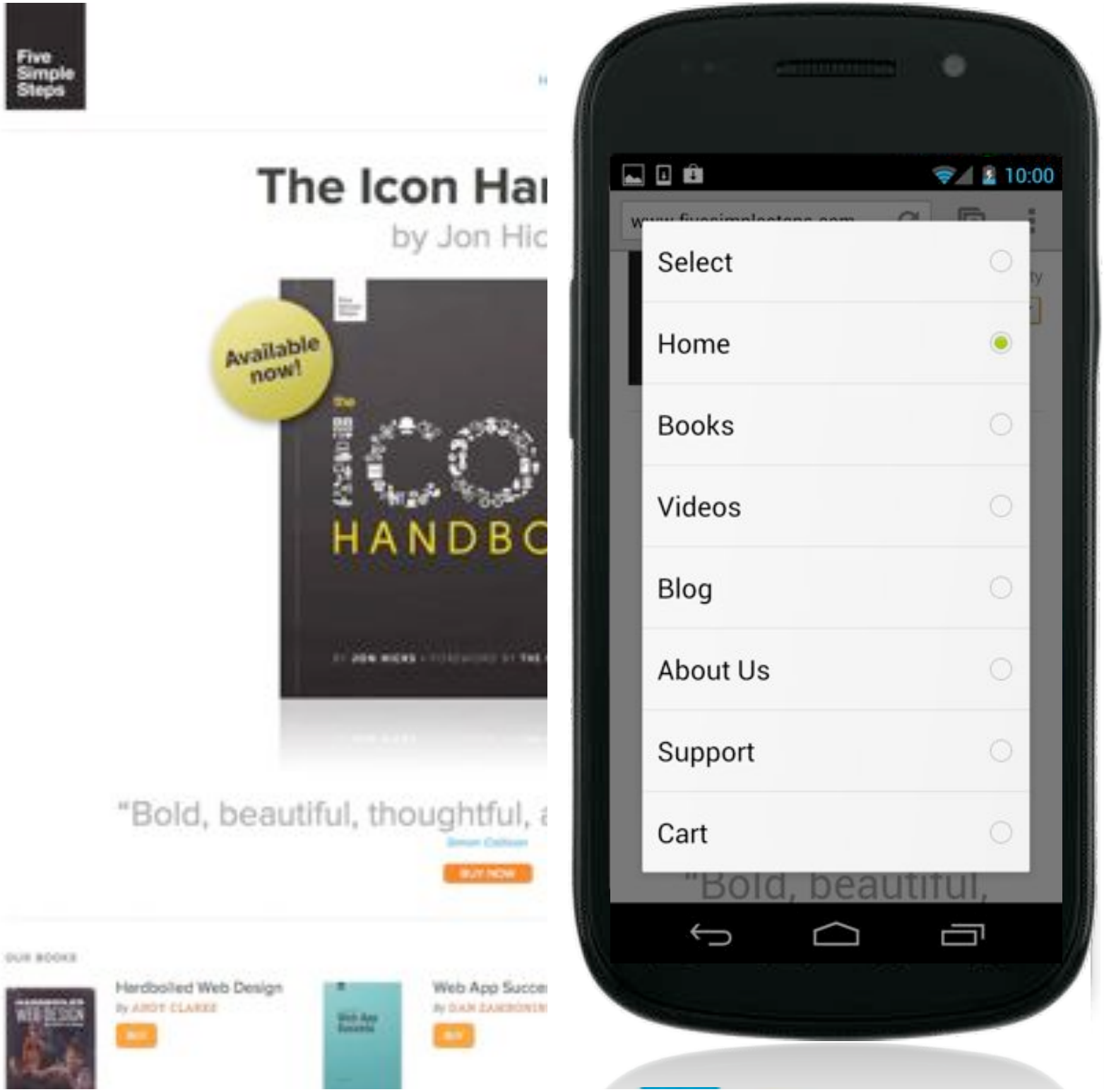
Source: http://bit.ly/zwyv2d

Starbucks Coffee Company
Sign In Find a Store
SPEND $5,
AND GET A $10
STARBUCKS CARD EGIFT
AND HELP CREATE JOBS IN AMERICA
For one day only, spend $5 and get a $10 Starbucks Card eGift, while they last. It's for a great cause: for each offer sold, Google Offers will donate $3 (up to $3MM) to OFN for the Create Jobs for USA Fund. Buy now.
What's New
We Live Together, Let's Give Together
See More
It's Your Vanilla Latte

2. Toggle Menu

PROS	CONS
• Keeps user in context • Smooth animation • Minimal navigation at top • One tap access to navigation • Scalable (med)	• Animation performance • Javascript dependency • Potential dead ends • Less optimized for touch

Source: http://bit.ly/zwyv2d


Five Simple Steps
The Icon Ha
by Jon Hic
Available now!
HANDBO
"Bold, beautiful, thoughtful,
BUY NOW
OUR BOOKS
Hardboiled Web Design
By ANDY CLARKE
Web App Succe
10:00
Select
Home
Books
Videos
Blog
About Us
Support
Cart

3. Select Menu

PROS	CONS
• Minimal navigation at top • Pulls up native controls • Scalable (med)	• Lack of styling • Handling second-level navigation • Javascript dependency • Multi-tap operation

Source: http://bit.ly/zwyv2d

MINNEAPOLIS

CONFAB

The Content Strategy Conference

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The Content Strategy Conference Is Back (And Sold Out)!

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Lou Rosenfeld
Ann Rockley
Dan Roam
Karen McGrane
Colleen Jones
Kevin Cheng

and many more...

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Get the latest Confab info every which way outside of a carrier pigeon.

Confab 2012 is SOLD OUT

By Erik Westra on Jan 30, 2012

It's official: Confab 2012 is sold out and the waiting list is now closed. If

4. Top Navigation

PROS	CONS
• Easy to implement • No Javascript dependencies • Single source order • Scalability (low/med)	• Navigation first, content second (height issues) • Touch target proximity • Cross-device line-breaking issues

Source: http://bit.ly/zwyv2d

Responsive Navigation Patterns

1. Footer Anchor
2. Toggle
3. Select Menu
4. Top Navigation

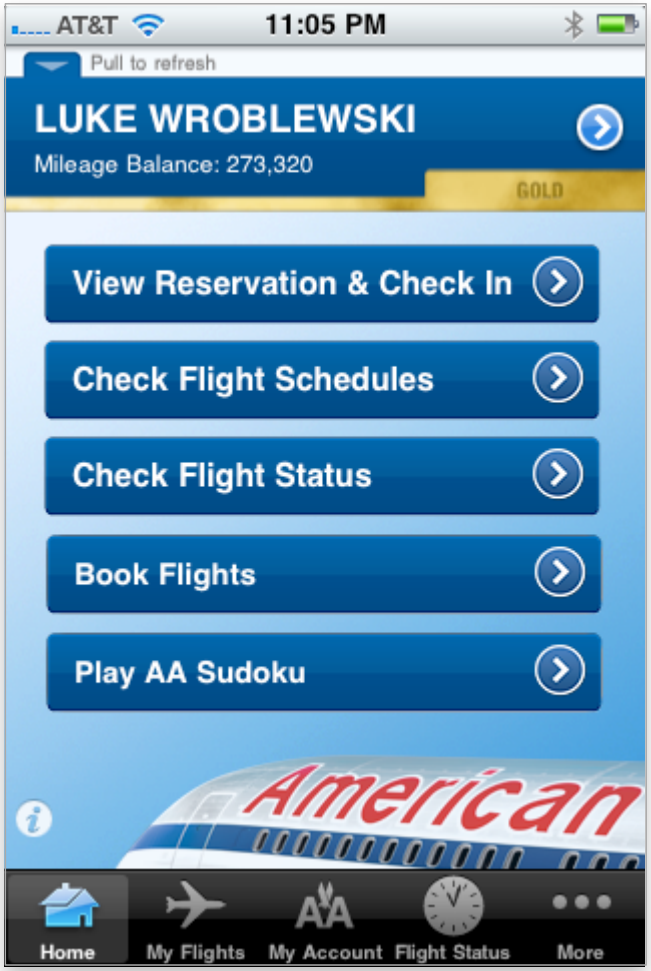
In-Context Actions

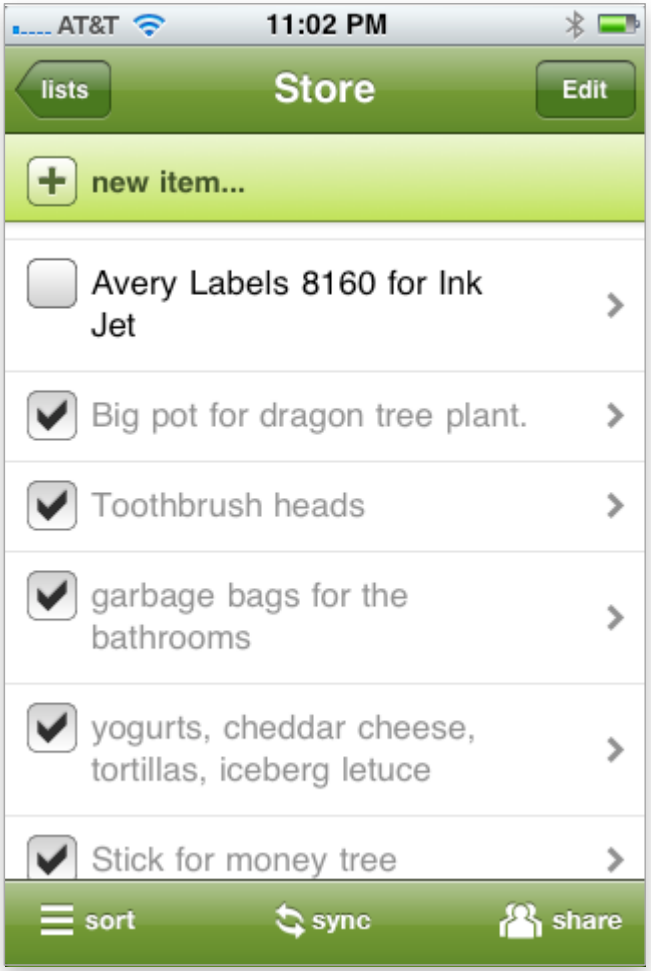
Global Navigation

In Context Navigation

In Context Navigation

What About Fixed Position Menus?





80-90% of people are right handed

Source: Tapworthy: Designing Great IPhone Apps By Josh Clark
Source: http://www.kickerstudio.com/blog/2011/01/activity-zones-for-touchscreen-tablets-and-phones/

Fixed Bottom

- Requires Javascript
- Eats up Screen Space

Fixed Position Support

Mobile Safari	iOS4	iOS5
	treats as static elements & scrolls with rest of page	strong support

Android	2.1	2.2	2.3	3 & 4
	no support	awkwardly snaps fixed elements back when scrolled	supported but disabling page scaling is required	supported with decent performance

Source: http://bit.ly/svHYGn

Fixed Position Support

Blackberry	5.0	7.0	Playbook
	supported but fixed elements are jittery	supported	supported but text is jagged in fixed position elements

Other Browsers	Opera Mobile	Opera Mini	Firefox Mobile	Windows Phone	Amazon Silk
	awkward snap & miscalc	no support	supported on version 6.0+	Ignore & treat elements as static	supported but disabling page scaling is required

Source: http://bit.ly/svHYGn

Fixed Bottom

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

Physical Controls Below Screen

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."

Source: http://bit.ly/ttmqlg

Android Design

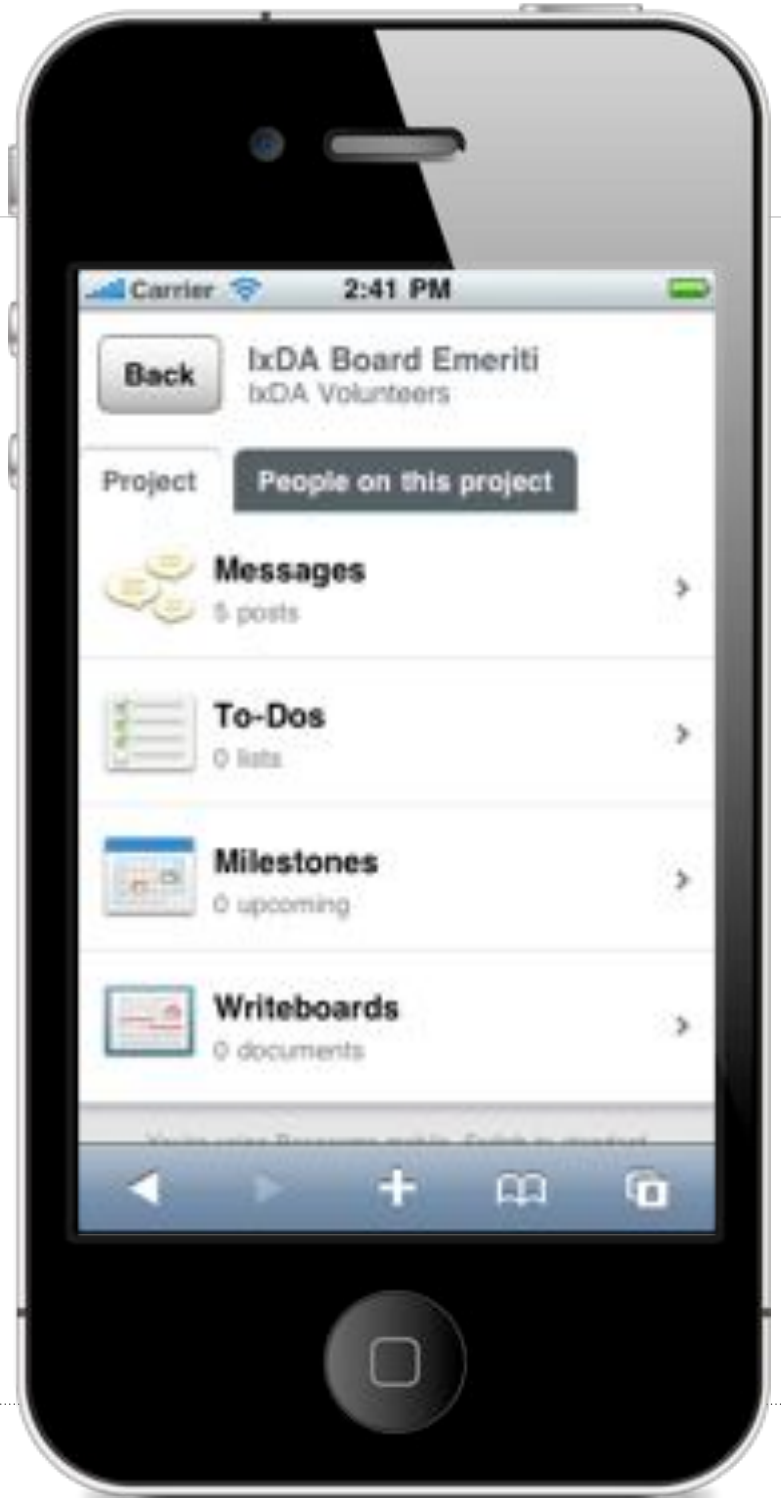
Don't use bottom tab bars

1. Other platforms use the bottom tab bar
2. Android's tabs for view control are shown in action bars at the top of the screen

Source: http://developer.android.com/design/patterns/pure-android.html

Getting Back

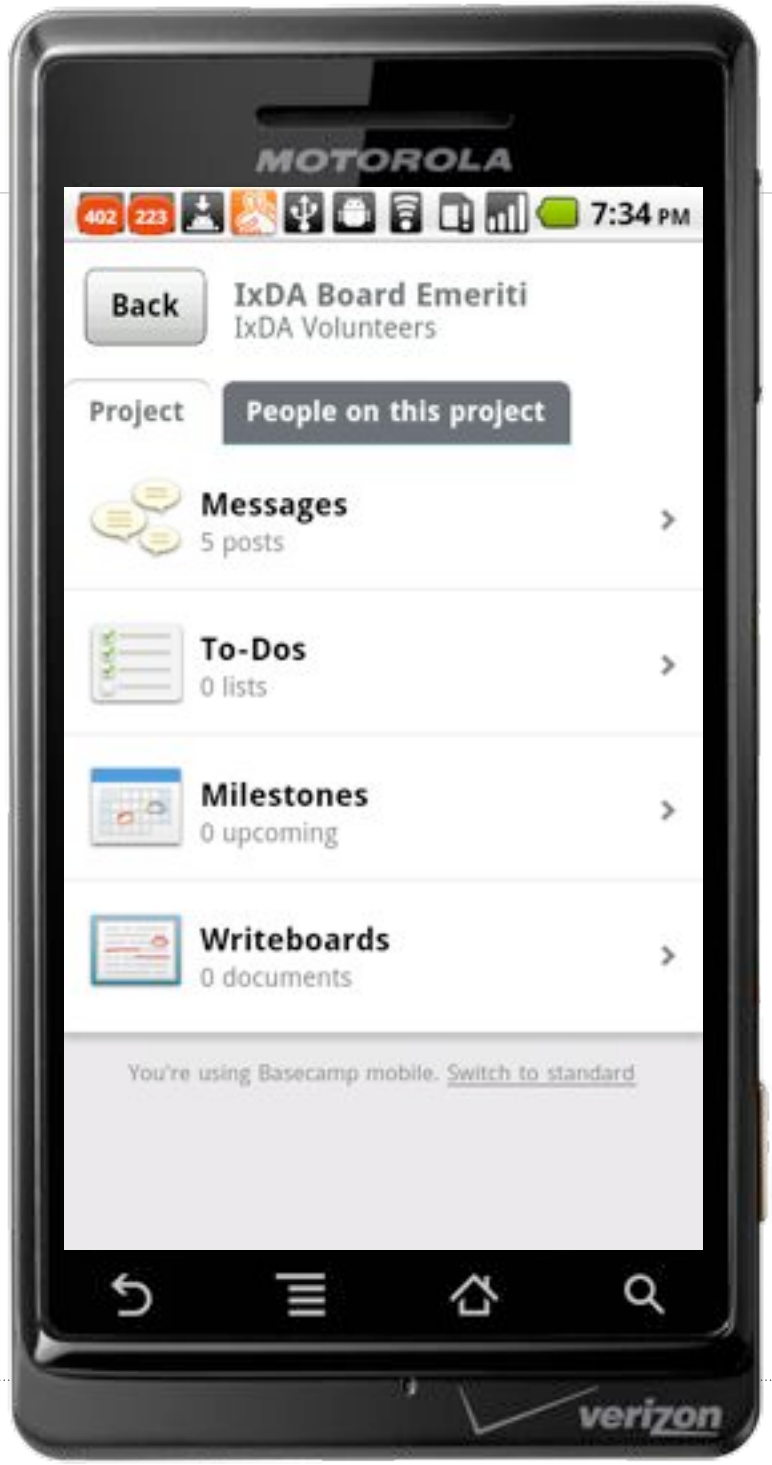
Back Button



Back Button

Getting Back

Back Button



Back Button

Android Design

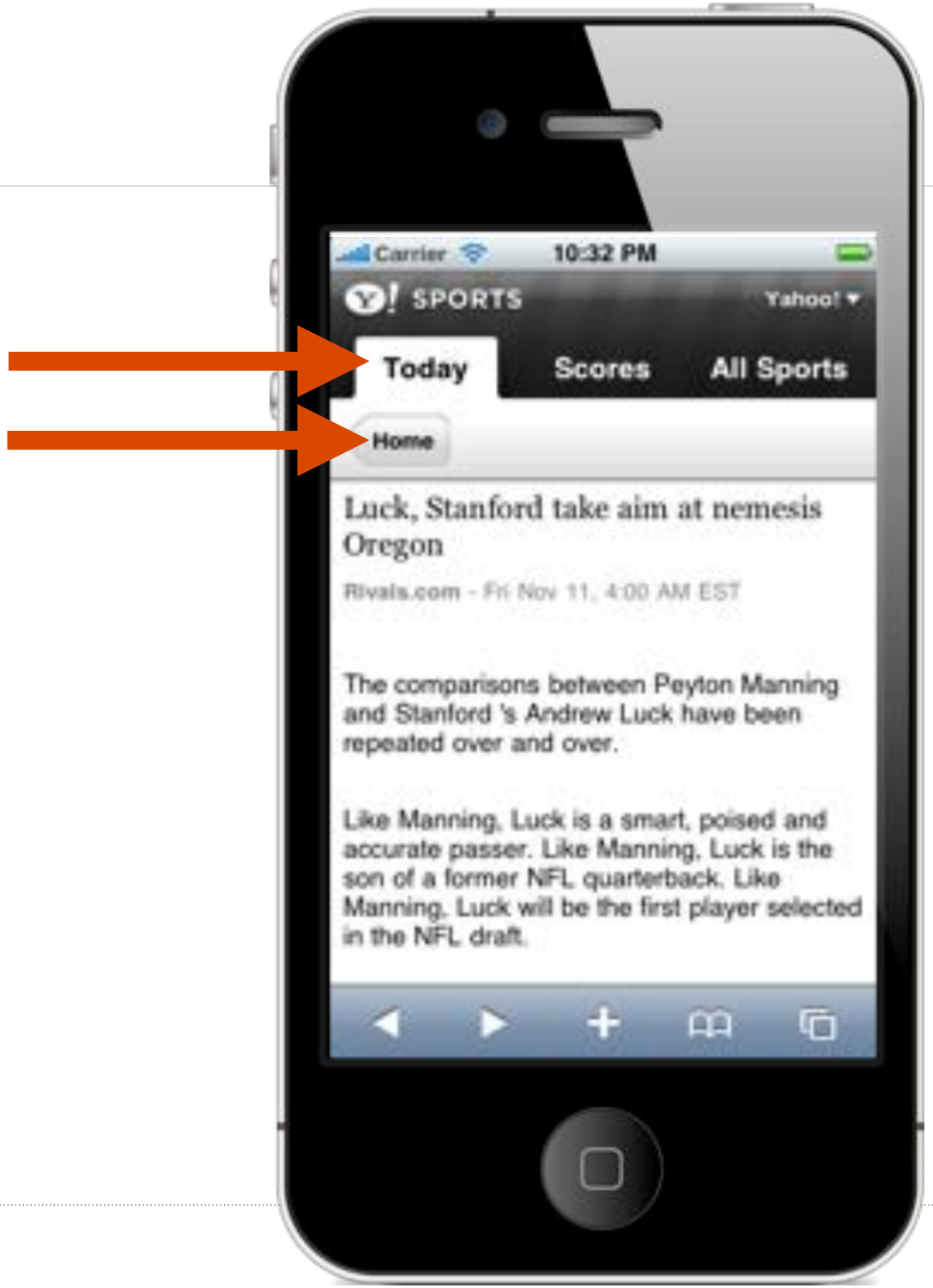
Don't use labeled back buttons on action bars

1. Other platforms use an explicit back button with label
2. Android uses the main action bar for hierarchical navigation & the navigation bar for temporal navigation

Source: http://developer.android.com/design/patterns/pure-android.html

Getting Back

Getting Back



Getting Back

Source: http://bit.ly/raZcON

NAVIGATION ELEMENTS

- Avoid excessive navigation menus
- Top navigation links for quick access
- Bottom menu for pivoting & exploring
- In context actions & navigation
- Avoid back buttons & fixed bottom positioning

ORGANIZATION

1. Mobile Behaviors
2. Content First
3. Navigation Elements
4. Clarity & Focus

Partial attention requires focused design

Maintain Clarity

Single Navigation Action

Minimize Errors

Content

"47% of mobile users tap on ads by mistake."

Content

SOURCE: HARRIS INTERACTIVE, DECEMBER 2010

CLARITY & FOCUS

- Minimize amount of navigation required
- Focus on task at hand

Exercise

How do mobile use cases intersect with?

- Your customer's needs
- Your business goals

Sketch out your mobile Web experience start screen. Focus on:

- Lookup/Find, Check In/Status, Explore/Play, Edit/Create
- Content first, navigation second
- Navigation elements
- Clarity & focus

ORGANIZATION

1. Mobile Behaviors
2. Content First
3. Navigation Elements
4. Clarity & Focus

THANKS

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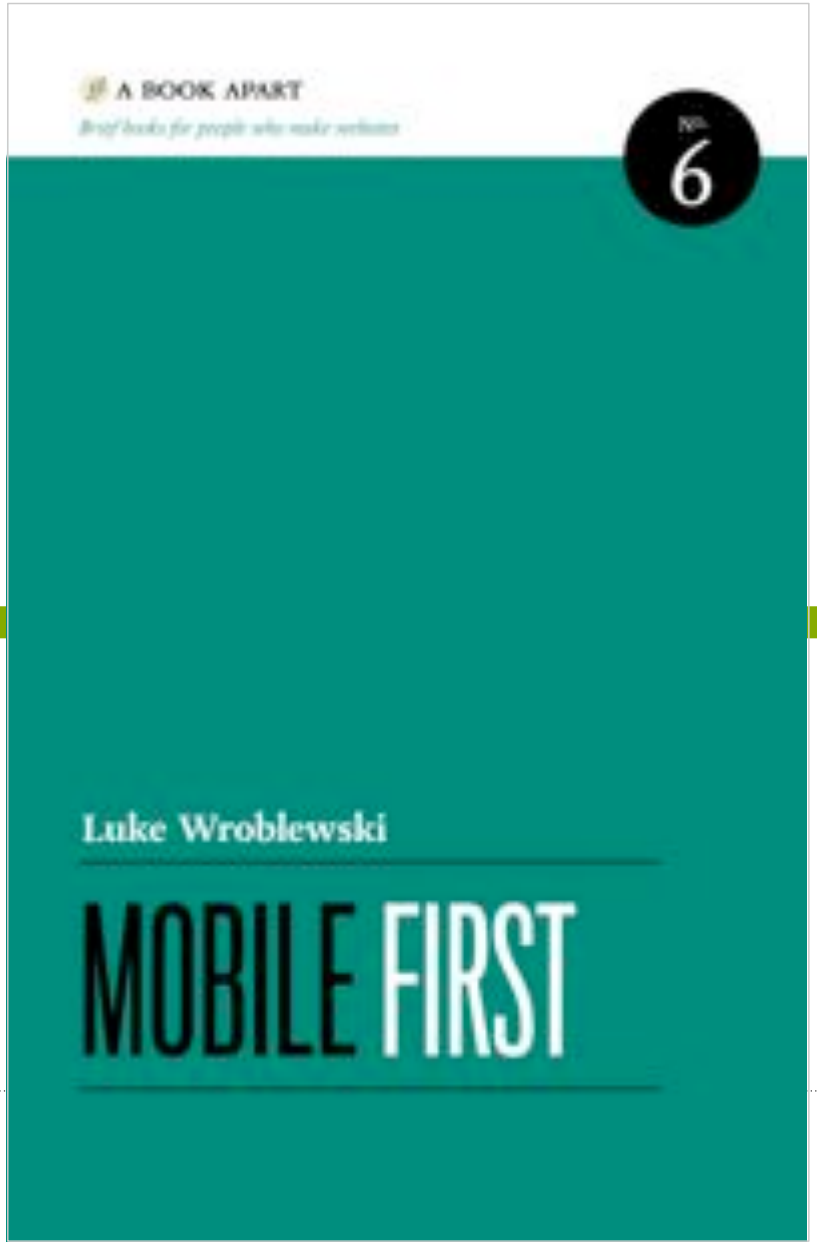
IDEATION + DESIGN



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