

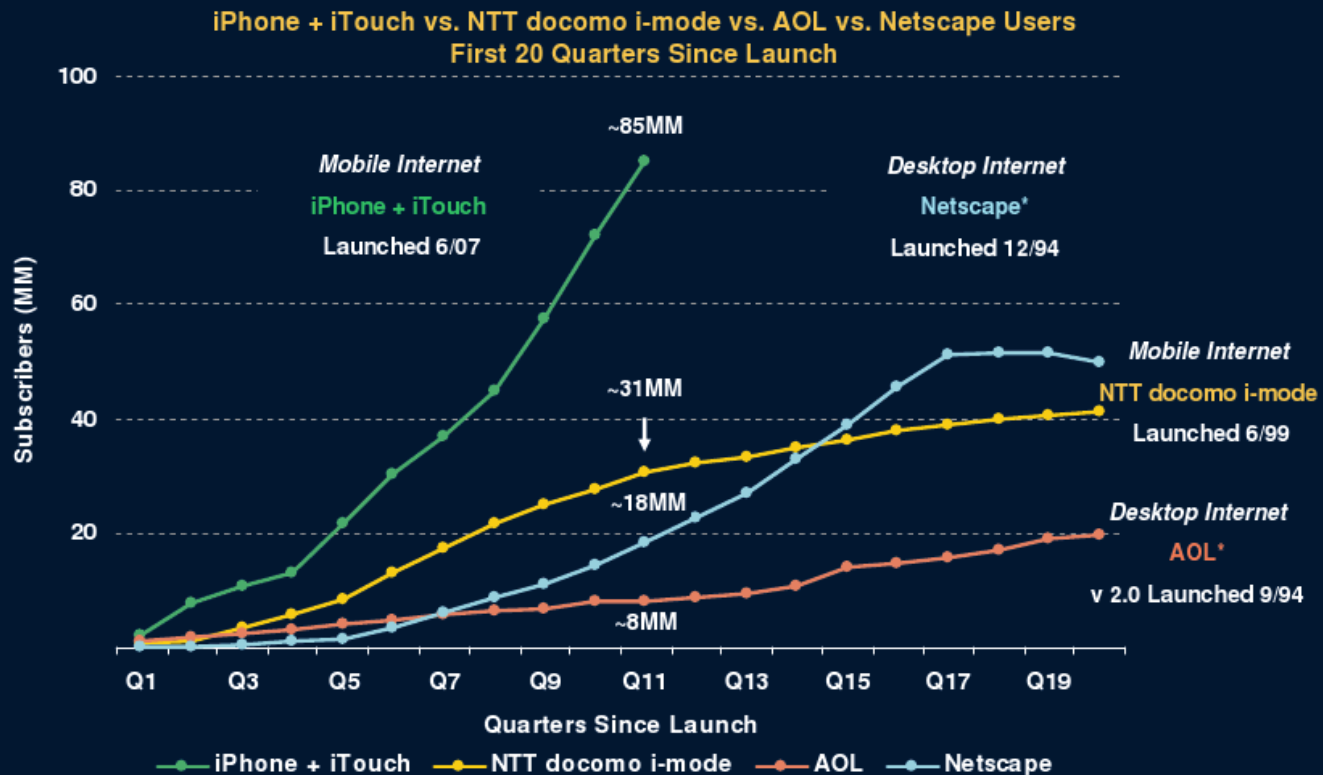
The background features a black field with several colored rectangular elements. On the left, there is a vertical purple bar. Below it, a blue bar extends horizontally. A horizontal bar with segments of purple, yellow, and red spans across the middle. On the right, a red bar extends vertically, and below it, a yellow bar extends vertically. The text is centered in the black area.

Web Pages and Smart Phones

(With thanks to Marty Stepp and
John Zahorjan)

Who Cares?

Mobile Internet Ramping Faster than Desktop Internet Did – Apple Leading Charge



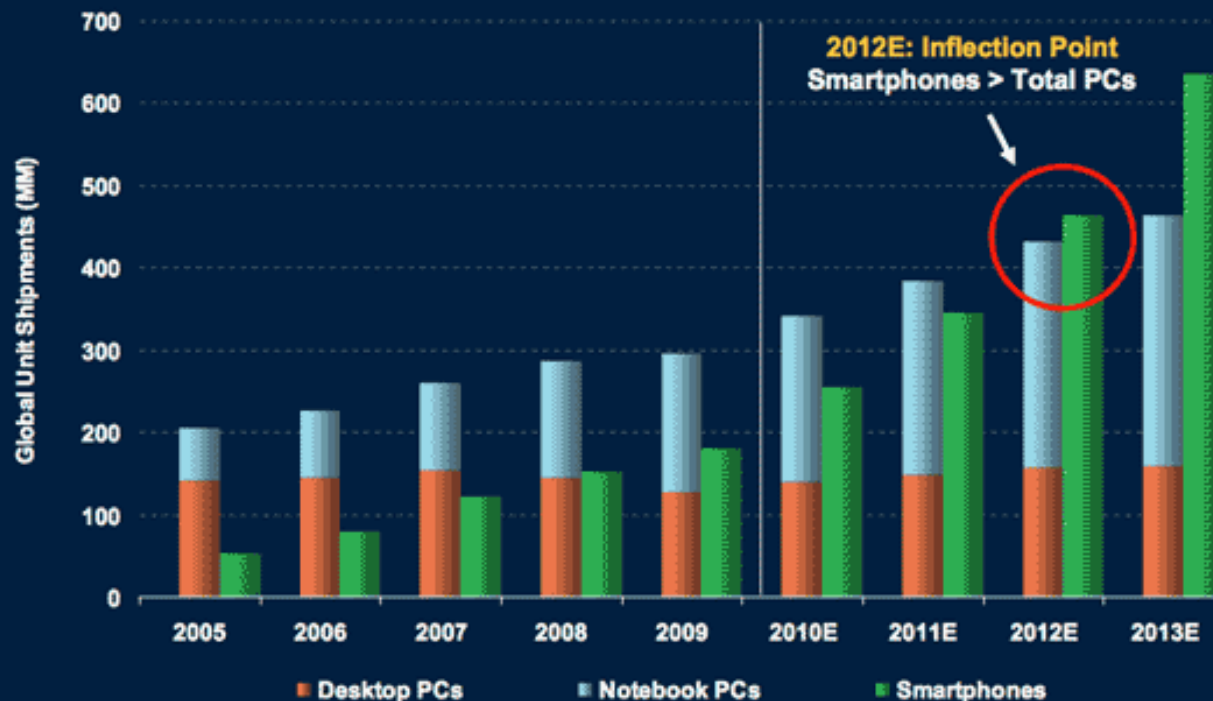
Morgan Stanley

Note: *AOL subscribers data not available before CQ3:94; Netscape users limited to US only. Morgan Stanley Research estimates ~50MM netbooks have shipped in first 10 quarters since launch (10/07). Source: Company Reports, Morgan Stanley Research. 7

Who Cares?

Smartphone > PC Shipments Within 2 Years –
Implies Very Rapid / Land Grab Evolution of Internet Access

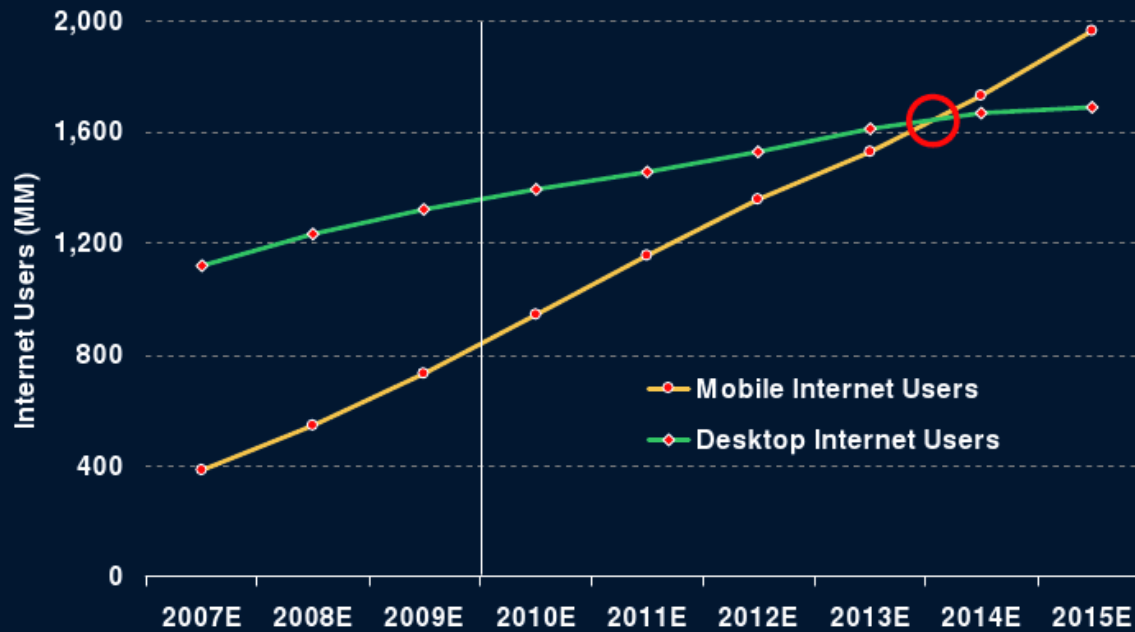
Global Unit Shipments of Desktop PCs + Notebook PCs vs. Smartphones, 2005 – 2013E



Who Cares?

Mobile Users > Desktop Internet Users
Within 5 Years

Global Mobile vs. Desktop Internet User Projection, 2007 – 2015E



Android Emulator!

As it turns out:

- Phones are small
- Eyes are bad
- Fingers are fat

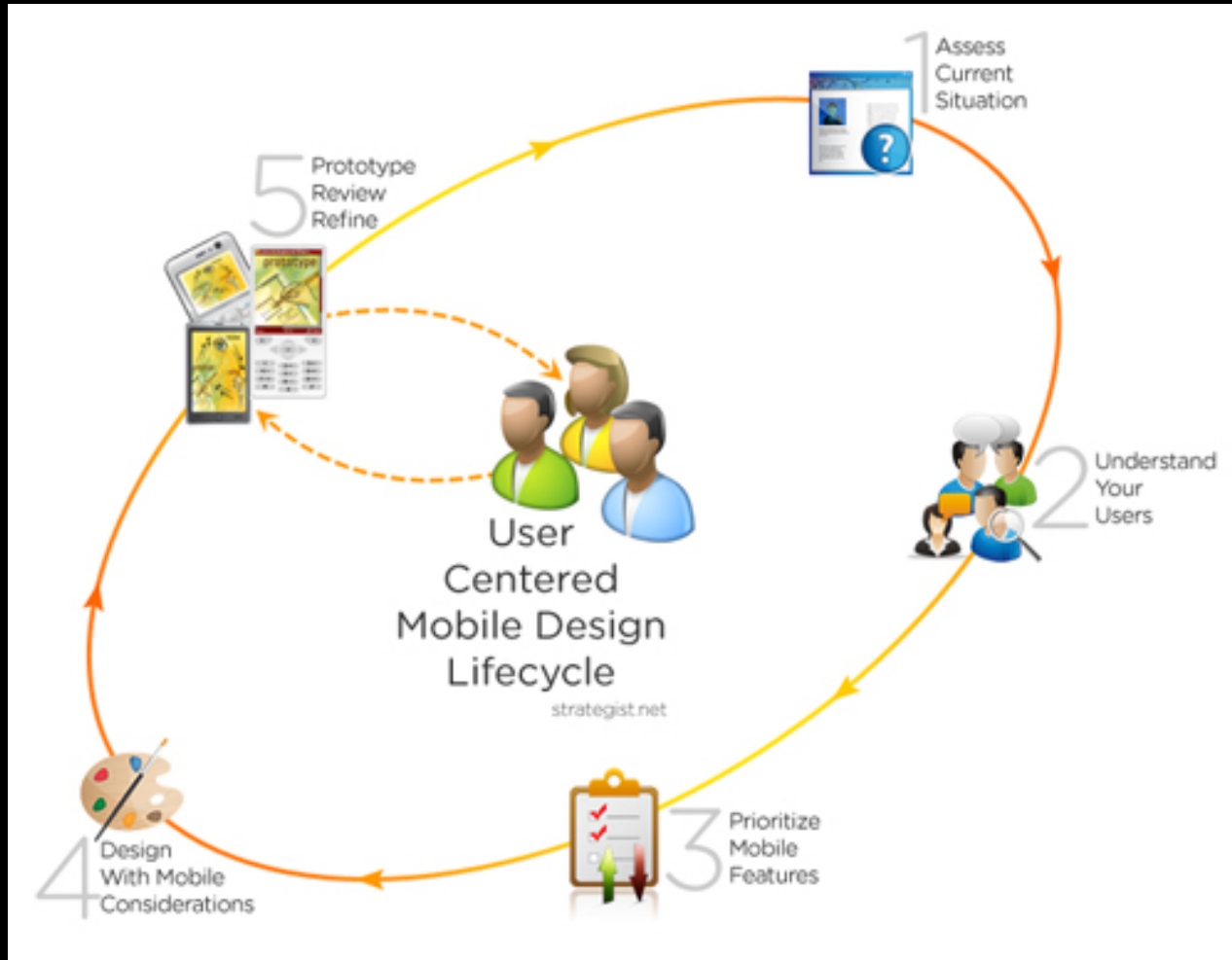


Design All The Things!

Why does Amazon change the look of their page for mobile users?

Do they change the feel at all?

Design All The Things!



Design All The Things!

Important questions to consider

1. Why do people go to your website?
2. Why on their phone?
3. What physical situation are they in?
4. How big is their phone?

Size Matters



Fix The Existing Code!

Thankfully the internet came before smart phones

Small fixes = big difference

I'm So Meta Even This Acronym

Meta tag - info about the page

```
<meta name="HandheldFriendly"  
content="true" />
```

```
<meta name="viewport"  
content="width=device-width,  
height=device-height, user-scalable=no"  
/>
```



Gettin' Fancy

What if a major overhaul is needed?

=> Really optimize for mobile phones

Create your own version of the page for mobile phones

Gettin' Fancy

With Javascript or PHP, you can detect specific browsers (e.g. mobile Chrome)

But with CSS it's really easy

Gettin' Fancy

@media tag in CSS (not an html tag!)

- Sections off CSS code to only apply to one type of media
- Types
 - all
 - screen (like your desktop or your phone)
 - print (printer)
 - projection
 - etc. (http://www.w3schools.com/css/css_mediatypes.asp)

Gettin' Fancy

What we care about

```
@media only screen and (max-device-width: ???px) {  
  body {  
    font-family: "Comic Sans";  
  }  
}
```

```
body {  
  font-family: "Papyrus";  
}
```

Further Reading (Lots of Good Stuff)

<http://learnthemobileweb.com/2009/07/mobile-meta-tags/>

<http://www.alistapart.com/articles/putyourcontentinmypocket/>

<http://www.smashingmagazine.com/2011/05/02/a-user-centered-approach-to-mobile-design/>

<http://mobiforge.com/designing/story/effective-design-multiple-screen-sizes>

<http://www.smashingmagazine.com/2009/09/27/showcase-of-designs-optimized-for-iphone/>

<http://webdesign.about.com/od/mobile/a/write-web-pages-for-the-iphone.htm>

<http://woork.blogspot.com/2008/07/tips-to-design-your-site-for-mobile.html>

<http://coding.smashingmagazine.com/2011/06/30/designing-for-android/>

Good ol' Googling will turn up a lot more too!