

# Building Web UI for *Mobile*Media

art of communicating within an environment of mobility.

Design = Communication | Mobile = Mobility

mobile design is the art of communicating within an  
environment of mobility.

# The Legacy | the Revolution Continues

**7.0** billion total number of **people** in the world today...

# The Legacy | the Revolution Continues

**1.8**  
billion

total number of **internet connections**  
in the world today...

Source: <http://www.internetworldstats.com>

# The Legacy | the Revolution Continues

**3.4** billion

total number of people with **mobile devices** today...

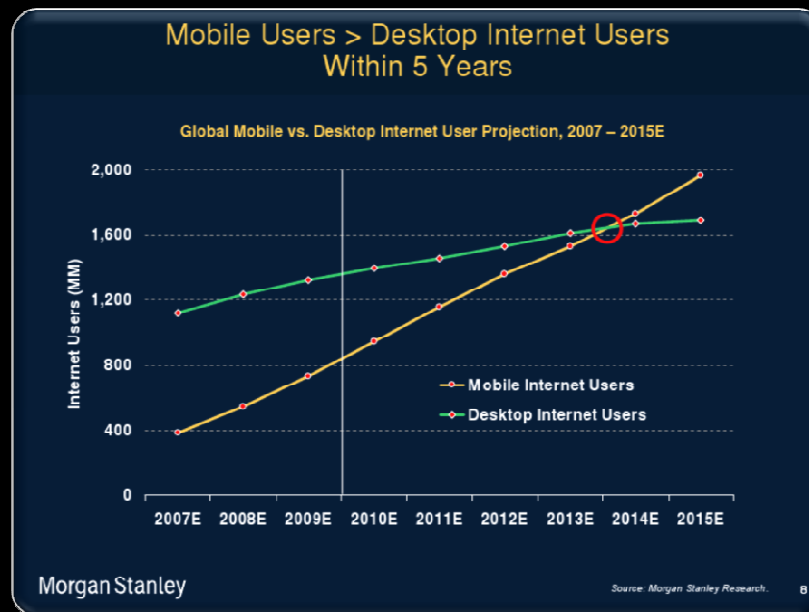
Source: <http://www.internetworldstats.com>

# The Legacy | the Revolution Continues

“Mobile Internet Will Soon **Overtake** Fixed Internet”

Mary Meeker of Morgan Stanley

# The Legacy | the Revolution Continues



Source: Morgan Stanley research

# Optimism | the Future

More mobiles than PCs.



# Optimism | the Future

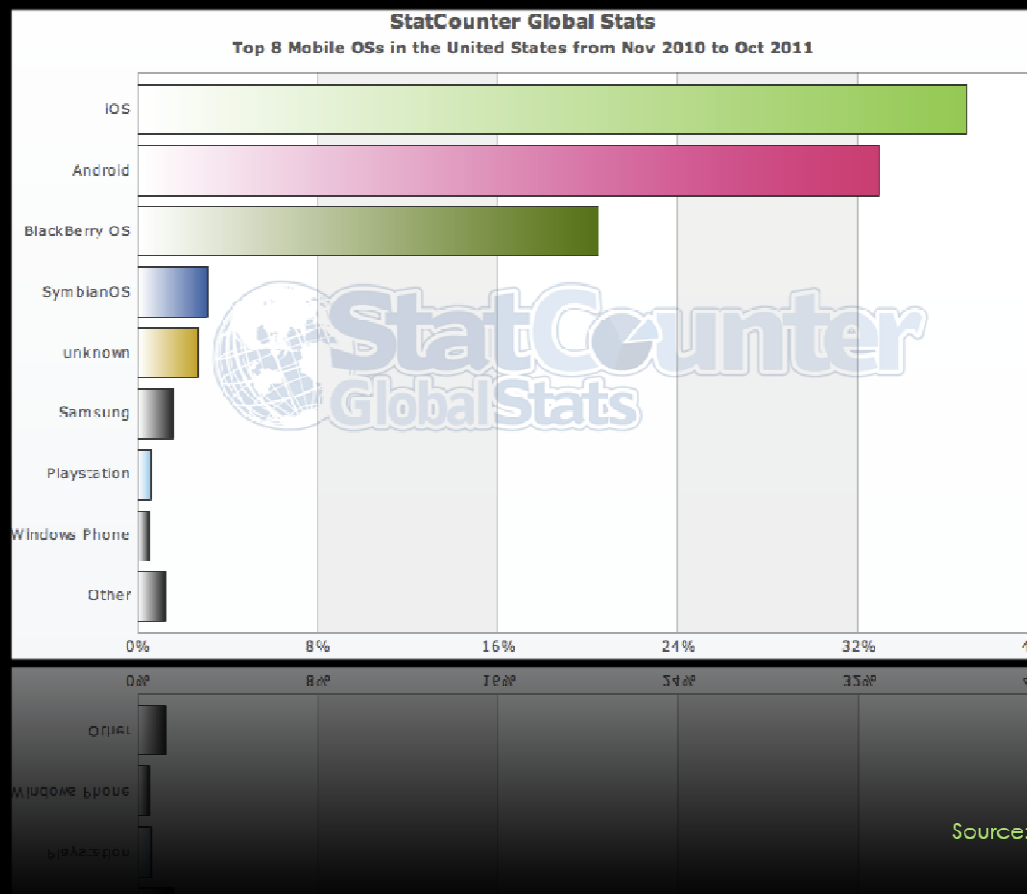
Web usage is continually increasing.

# Optimism | the Future

You can utilize existing skills.

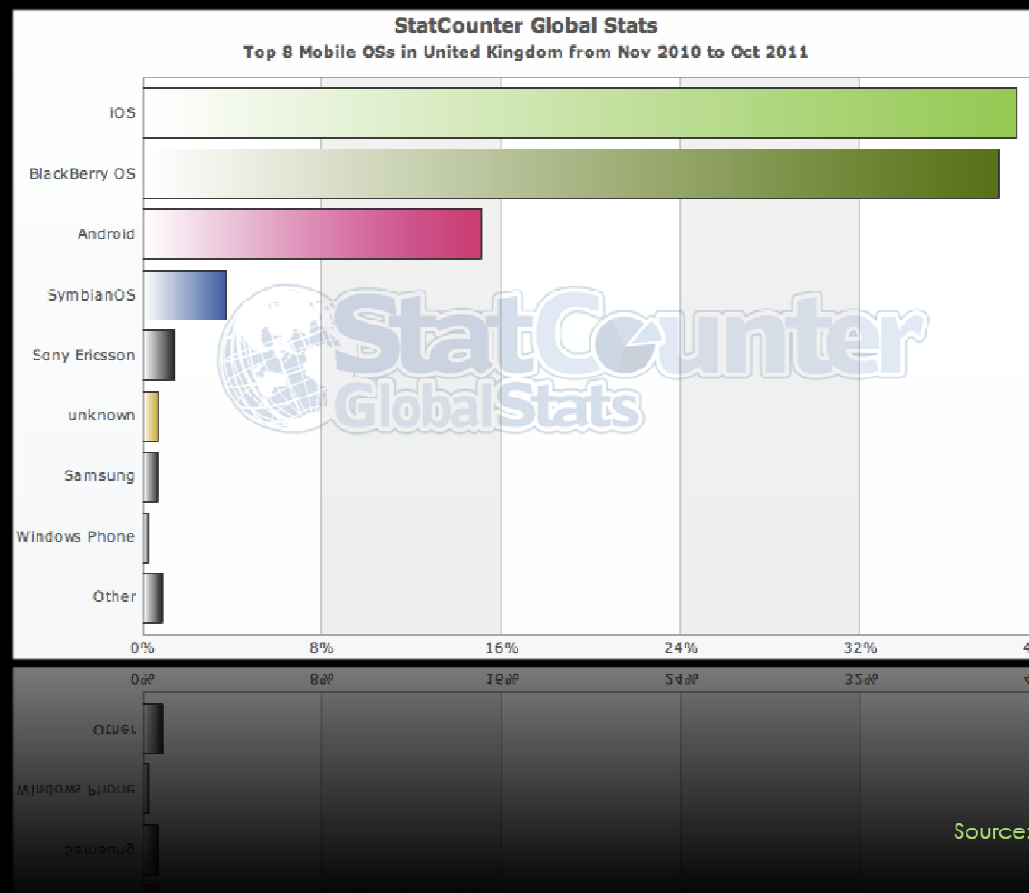
# Expectations | the Target

## 1. Reaching audience



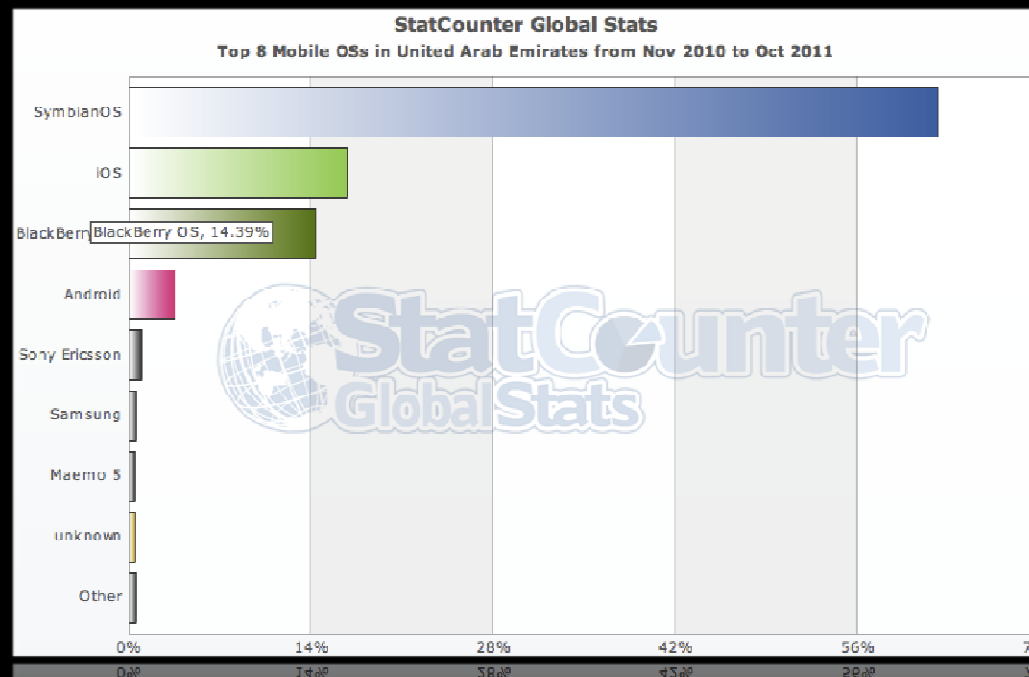
# Expectations | the Target

## 1. Reaching audience



# Expectations | the Target

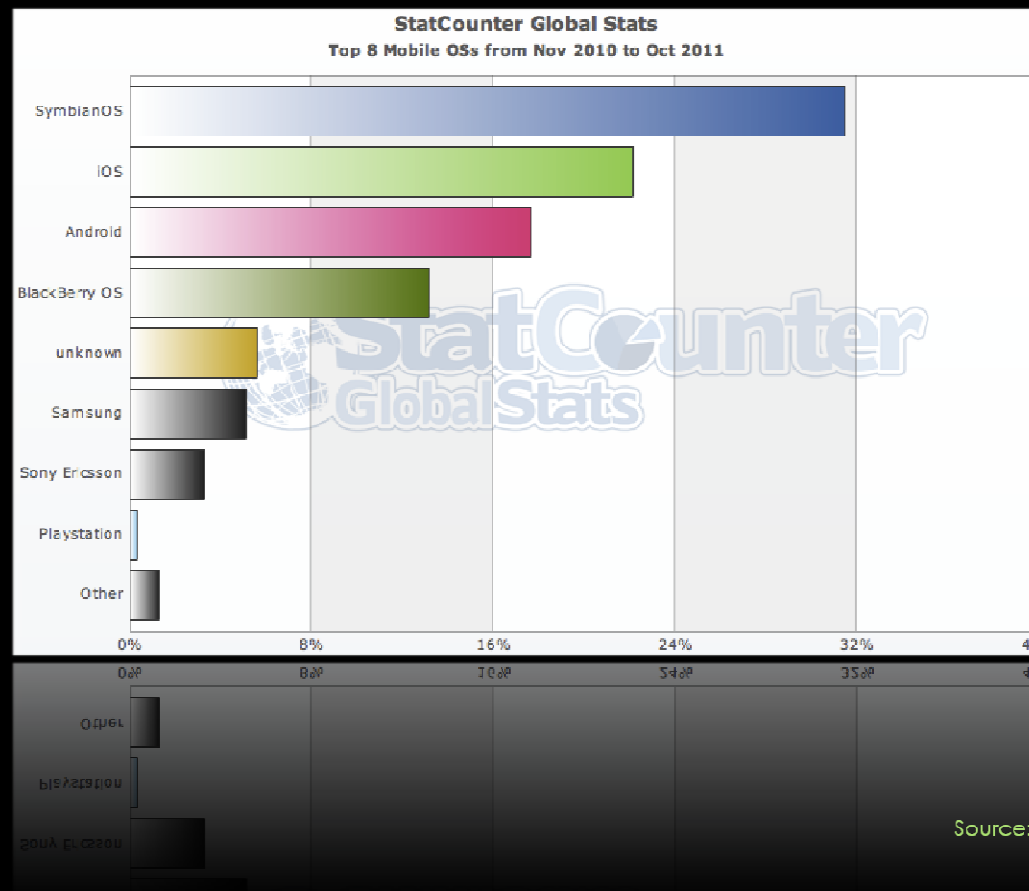
## 1. Reaching audience



Source: <http://gs.statcounter.com>

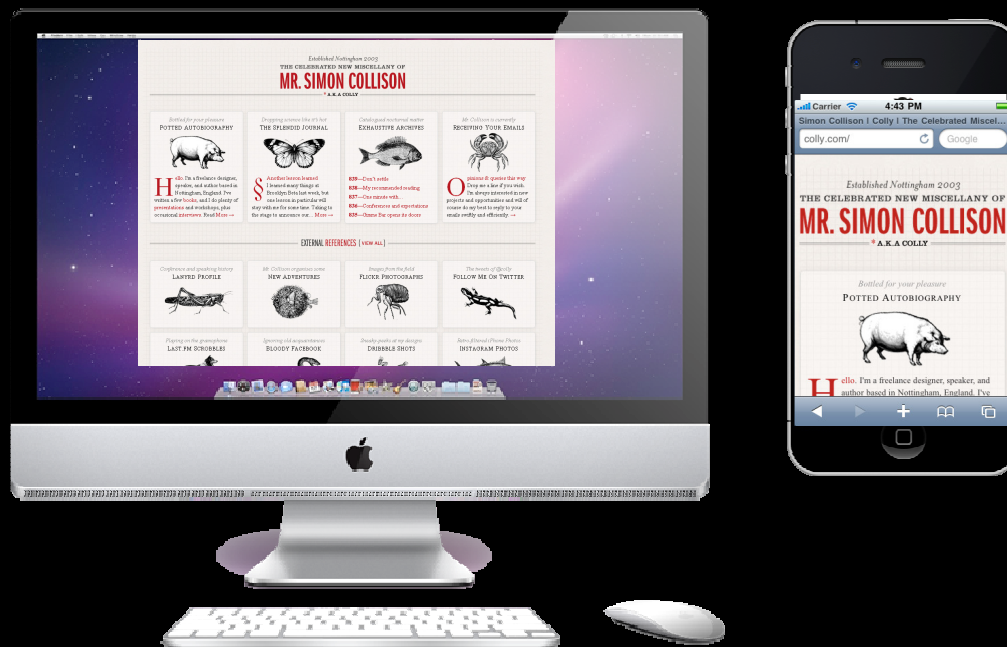
# Expectations | the Target

## 1. Reaching audience



# Expectations | our long-term strategy

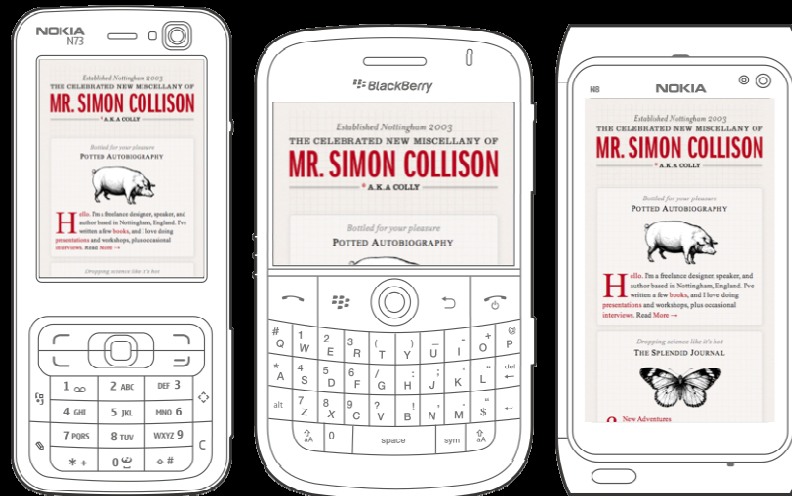
## 2. Seamless and Positive Experiences



Source: <http://www.colly.com/>

# Expectations | our long-term strategy

## 2. Seamless and Positive Experiences

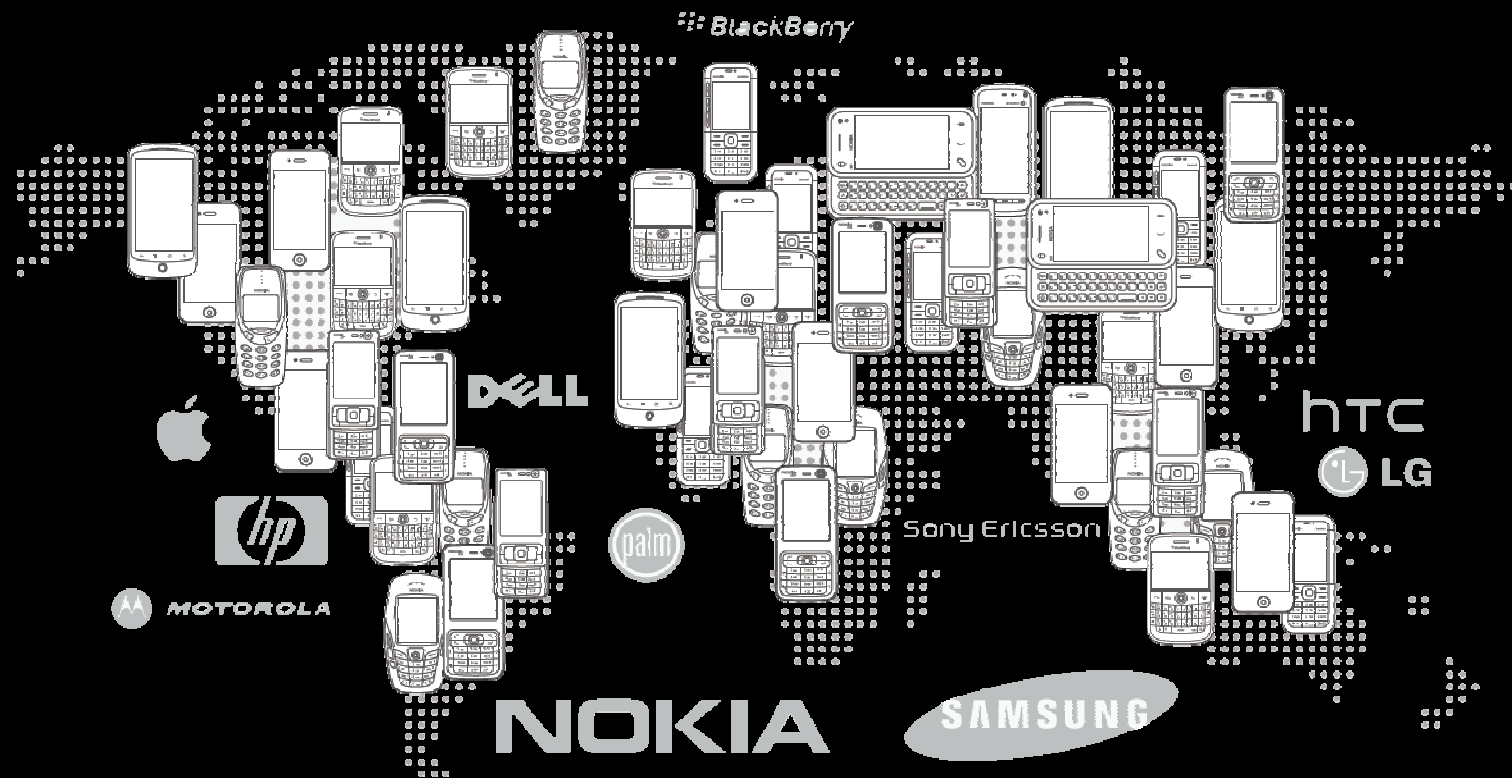


Source: <http://www.colly.com/>



# Expectations | *our long-term strategy*

## 2. Seamless and Positive Experiences



# Approach | the Start

Miniaturize or Mobilize?

# Approach | the Start

## Miniaturize

Repurpose existing contents – [www.colly.com](http://www.colly.com)

# Approach | the Start

## Miniaturize

1. Simplify
2. Prioritize the contents
3. Minimize User Input
4. Best usability approach

# Approach | the Start

## Mobilize

Content-, Context-, Component-specific – [www.yahoo.com](http://www.yahoo.com), [www.oracle.com](http://www.oracle.com)

# Approach | the Start

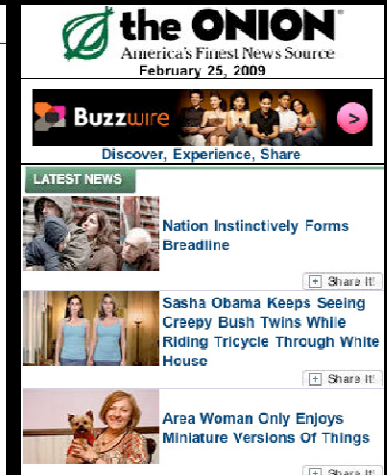
Mobilize

context is King

# Approach | the Start

## Mobilize

### 1. Simplify

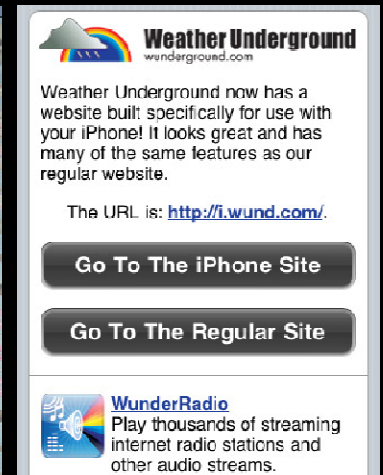
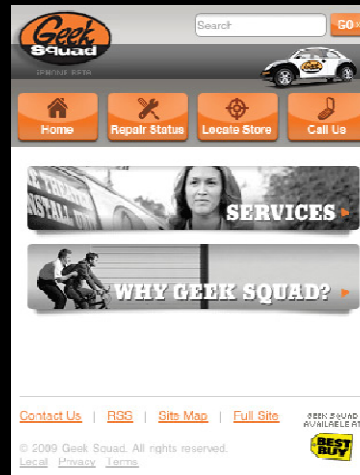


Source:A List Apart Mobile | Amazon.com | The Onion

# Approach | the Start

## Mobilize

1. Simplify
2. Option to view full site



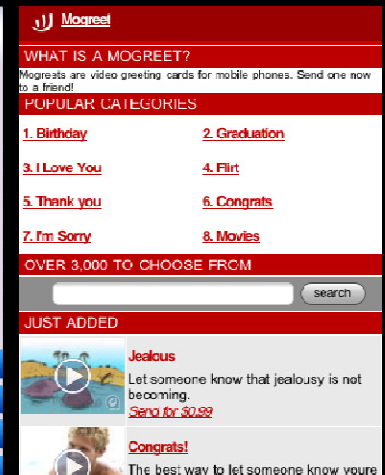
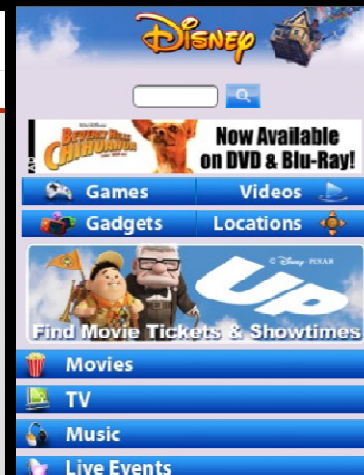
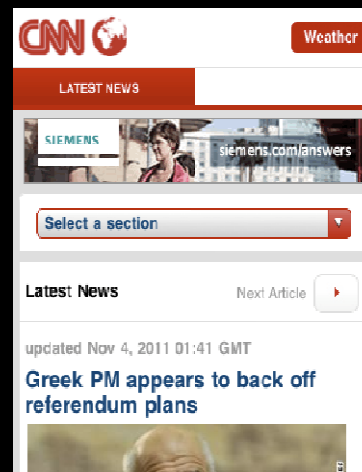
Source: Geek Squad | Julian Andrade | Weather Underground



# Approach | the Start

## Mobilize

1. Simplify
2. Prioritize the contents
3. One directional scrolling

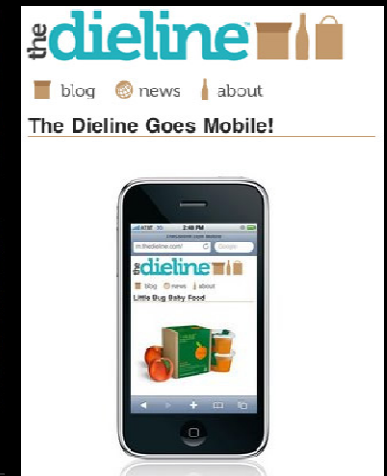
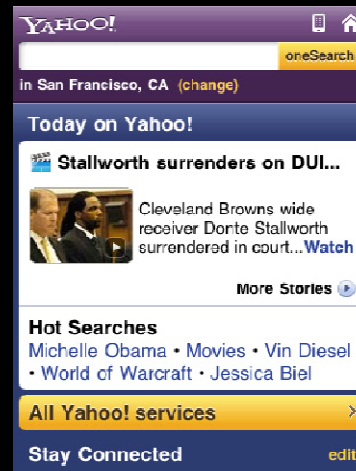


Source: CNN | Disney | Mogreet

# Approach | the Start

## Mobilize

1. Simplify
2. Prioritize the contents
3. One directional scrolling
4. Separate mobile theme

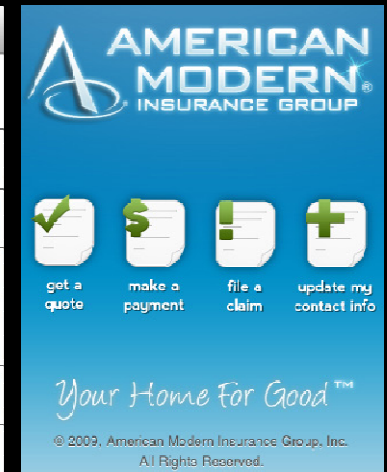
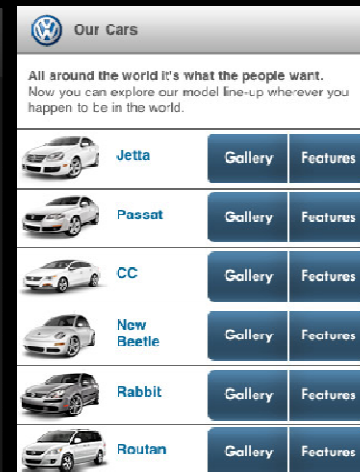


Source: Yahoo | Watchmen | The Dieline

# Approach | the Start

## Mobilize

1. Simplify
2. Prioritize the contents
3. One directional scrolling
4. Separate mobile theme
5. Optimize the navigation

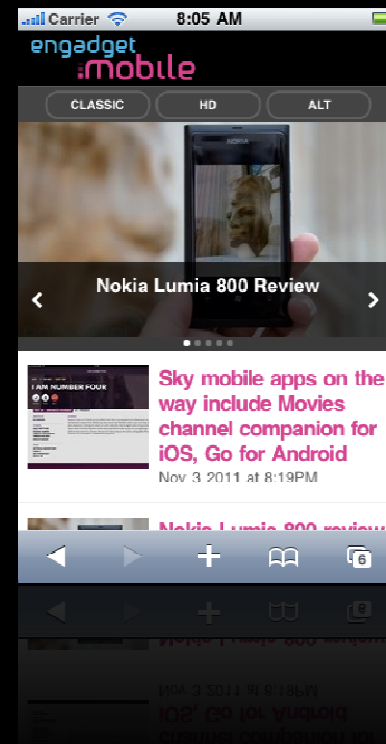


Source: Daily Horoscope | Volkswagen | American Modern Insurance

# Approach | the Start

## Mobilize

1. Simplify
2. Prioritize the contents
3. One directional scrolling
4. Separate mobile theme
5. Optimize the navigation
6. Include as much content as in standard site

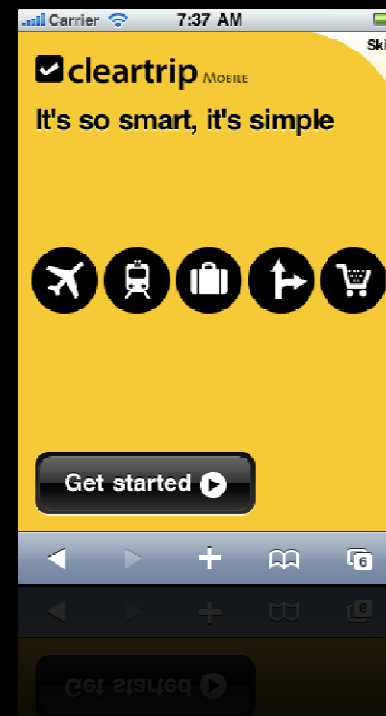


Source:engadget

# Approach | the Start

## Mobilize

1. Simplify
2. Prioritize the contents
3. One directional scrolling
4. Separate mobile theme
5. Optimize the navigation
6. Include as much content as in standard site
7. Best usability approach



Source:cleartrip

# The Mobile Web *Playground* | technology



# The Mobile Web *Playground* | technology

and...

# The Mobile Web *Playground* | technology

the best *markup*



# The Mobile Web *Playground* | Implementation

## Methods

1. Server side technique
2. Let javaScript/jquery to handle
3. CSS based **media queries**
4. Combination of **CSS** and **javaScript/jquery**

# The Mobile Web *Playground* | Implementation

## Server Side technique

**user-agent header** - is the name that a browser (mobile or not) sends to the web server when requesting a given page

```
if(strpos($_SERVER['HTTP_USER_AGENT'],'iPhone') ||
    strpos($_SERVER['HTTP_USER_AGENT'],'iPod'))
{
    header('Location: http://yoursite.com/iphone');
    exit();
}
}
```

Source: <http://davidwalsh.name/detect-iphone>

# The Mobile Web *Playground* | Implementation

Let JavaScript/jQuery to handle

```
$(document).ready(function(){  
  
    if( navigator.userAgent.match(/Android/i) || navigator.userAgent.match(  
/webOS/i) || navigator.userAgent.match(/iPhone/i) || navigator.userAgent.match(  
/iPod/i) || navigator.userAgent.match(/BlackBerry/i)){  
  
        }  
  
});  
  
});  
  
}
```

# The Mobile Web *Playground* | Implementation

Let `JavaScript/jQuery` to handle

Advantage of accessing `native` mobile events such as

1. Touch and Gesture events
2. Device and Screen orientation detection
3. Device motion
4. And more...

# The Mobile Web *Playground* | Implementation

## CSS based media queries

```
@charset "UTF-8";
/* CSS Document */
// target small screens (mobile devices or small desktop windows)
@media only screen and (max-width: 480px) {
  /* CSS goes here */
}

/* high resolution screens */
@media (-webkit-min-device-pixel-ratio: 2),(min--moz-device-pixel-ratio: 2),
(min-resolution: 300dpi) {
  header { background-image: url(header-highres.png); }
}

/* low resolution screens */
@media (-webkit-max-device-pixel-ratio: 1.5), (max--moz-device-pixel-ratio: 1.5),
(max-resolution: 299dpi) {
  header { background-image: url(header-lowres.png); }
}
```

Source: [https://developer.mozilla.org/en/css/media\\_queries](https://developer.mozilla.org/en/css/media_queries)

# The Mobile Web *Playground* | Implementation

Combination of CSS and JavaScript/jQuery

result oriented and can **deliver** the best

# Can I test it? | Emulators and Simulators

## Emulator

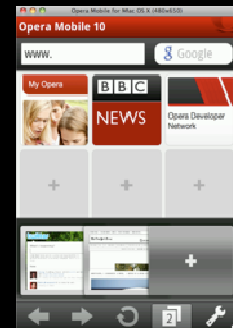
In the mobile development world, a device emulator is a desktop application that emulates mobile device hardware and operating systems, allowing us to test and debug our applications and see how they are working.



# Can I test it? | Emulators and Simulators

## Simulator

A simulator is a less complex application that simulates some of the behavior of a device, but does not emulate hardware and does not work over the real operating system.





# What next | Go future

## World of Mobile apps

1. phoneGap
2. Sencha
3. jQTouch
4. Appcelerator Titanium



PhoneGap



Sencha



The above logos are registered trademarks of their respective companies

# What next | Go future

## World of Mobile apps



The above logos are registered trademarks of their respective companies

# Convergence | Shapeshifting

## Technology convergence

is when a set of devices contain a similar technology, which enables experiences to move across multiple devices. Examples: Wireless Internet or a software platform like Android.

# Convergence | Shapeshifting

## Media convergence

is when content/information is primed through multiple devices or touch points. (Netflix)

# Convergence | Shapeshifting

## Activity convergence

enables user to perform an activity regardless of the device. (Email, browsing the Internet)

Questions?

# Convergence | Shapeshifting



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