



4/11/2013

Presented By Mesquite Information Technologies, LLC

[www.mesquiteit.com](http://www.mesquiteit.com)

Phone: 702-430-1679

Skype: claudenikula

E-Mail [cnikula@mesquiteit.com](mailto:cnikula@mesquiteit.com)

Presenter: Claude Nikula



Why should I be considering mobile device development?



By Mesquite Information Technologies



**iPhone 5**

## Agenda:

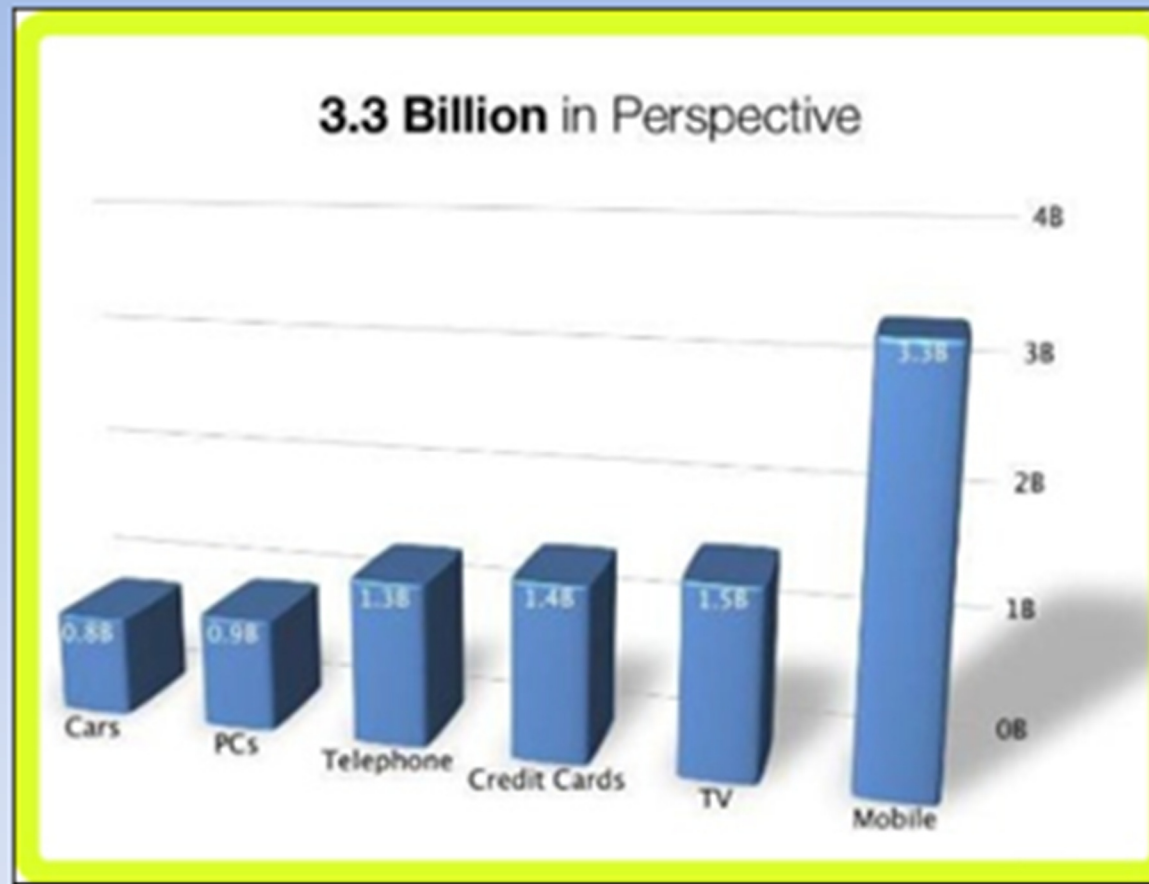
- why should I be considering mobile device development
- what mobile device should I be focusing on
- what development tools and OS should I be considering
- a high overview on setting up for android development
- a closer look at Cordova (phoneGap)
- and maybe some code examples

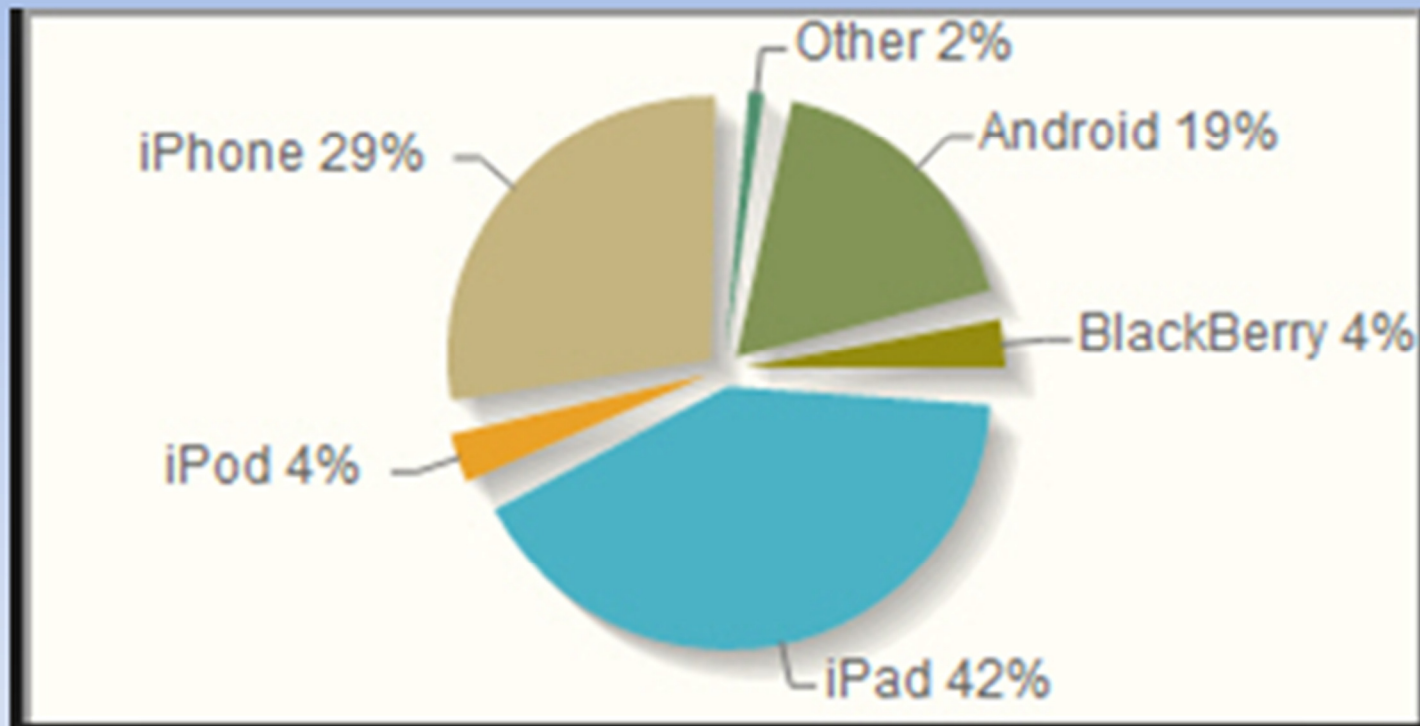
# Why should I be considering mobile device development

2012

- 87% of American adults on a cell phone, and 45% of those are smart phones.
- Only 12% of adults age 65 and over have a smartphone.
- 82% take pictures on their cell phones, up from 76% in 2010.
- 29% check their bank account online, up from 18% in 2011.
- **Mobile Usage Growth**
- 25% of internet users are mobile only - meaning, they do not access the internet for browsing from any other device.
- 53% of adults own a smartphone.







# Windows

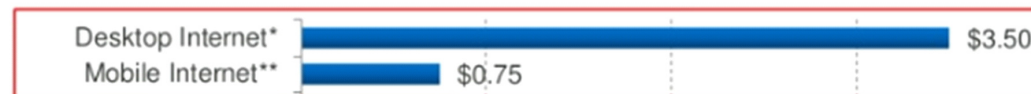
Note the Windows and also the Un-Known



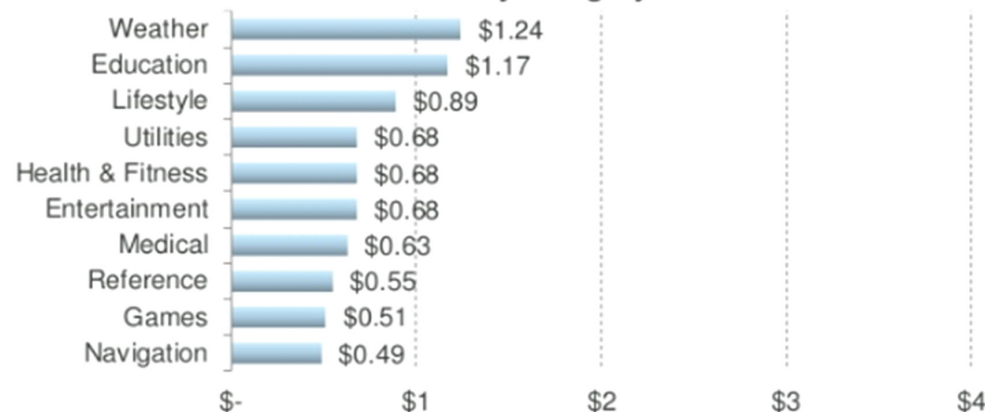
- Linux
- Windows Mobile
- Android
- iPhone
- Java ME
- S60
- SMS
- Not known yet (feasibility)

## Bad News = eCPMs 5x Lower on Mobile than Desktop

Effective CPM, Desktop Internet\* vs. Mobile Internet\*\*



Mobile eCPM by Category



**KPCB**

Note: \* Desktop Internet is a weighted average CPM calculation based on comScore Display ad share data and Vivaki CPM by category data as of Q3:11. \*\* Mobile Internet is a simple average eCPM calculation based on Mobclix Exchange USA data as of 3/12.

19



19 / 112



### KPCB Internet Trends 2012

by [Kleiner Perkins Caufield & Byers](#) on May 30, 2012

KPCB's Mary Meeker & Liang Wu: 1) review Internet stats and notes that Internet growth remains robust and rapid mobile adoption is still in early stages; 2) run through a number of examples of ...

264K  
views

## Type Of Application User Are Running



Question: what has not been mentioned so far in this discussion?

Answer:

# Enterprise Application's.

The lack of enterprise application's should make this a wide open opportunity, and if you don't en-brace it. You will be falling even further behind



So lets not miss the last Train!



## What Mobile Device Should I Be Focusing On?

The answer to this question is, it depends on your skill set and resources.

With the past slides that I presented to you all, the mobile device is vastly a open arena. There has not been a clear decisive winner in the mobile world. If you have web development experience, HTML, PHP, C#, ASP.Net VB.NET, CSS, JavaScript ... You are ready to start developing cross-platform mobile web applications. Mobile Web application can look and feel like a mobile app. The advantage you will have using HTML and JavaScript you can go cross-platform very quickly.

If you are new to web development as most VFP developers are. You are in a prime position to embrace the mobile web application development because you have not invested significant amount of time and effort in one specific language for Web and mobile development, for instance Android is Java development and iOS is heavily invested in object C.

One other very important consideration is, your development toolbox and hardware. Between developing and testing you could invest quite a bit of money in purchasing various phones for testing. It is not uncommon to own 10 to 15 different devices, but for a single developer as myself this is just not feasible.

**Okay, enough with this. What should I consider using right today?**

As far as languages are concerned I would highly recommend HTML5, CSS3 and JavaScript. And when it comes to the backend, my favorite language is PHP but it can be any server-side language you wish to choose from for example, VFP, C#, ASP.Net or any other language.



## **To get started in mobile development as a new developer**

You should focus on one or two devices. Yes I know , I said, you should consider all platform, and this is still true. However though you need to get started as quickly as possible and with the least amount of confusion so by keeping your scope narrow, will allow you to better focus. Once you mastered one or two of those phones then you can expand out or when you complete one project you can expand the project to other devices.

Consider starting with one of these phones.

1. Android phone
2. iPhone
3. Windows 7 or 8 Phone

These all have different requirements which could be one of your consideration on which phone you start with first.

## What Development Tools and OS Should I Be Considering

Well that is a loaded question.

Once again this all depends on the operating system you are accustomed to and also who is your target audience. I myself are most comfortable in the Windows world, however though that does not mean I will not target Clines with MAC, IOS or Linux. I can develop on Windows and still move my code into other operating systems. One technology allows me to do this, to use a language that is cross-platform. That's why I am recommending to take a look at **HTML5 and CSS3 and JavaScript**. The remainder of our discussion will evolve around this concept.

Since I am primarily a Windows developer and most of you in this room, I would assume are also sense our flagship and passion revolves around Visual FoxPro (VFP)

## Okay Let's Get Into Software Development Tools

- One of the most powerful and free development tool out there that suited us just right for this, is called Eclipse. *Eclipse* has many different flavors and can be and should be installed multiple times depending on what flavor you're running. <http://www.eclipse.org/>
- PhoneGap and Cordova Mobile Development SDK for cross platform development fram. <http://www.phonegap.com/>
- SDKs for various platforms - this evening I will be focusing a little more on android this is one of the more difficult ones install
- ADT Plugin - <http://developer.android.com/tools/sdk/eclipse-adt.html>  
Android Development Tools (ADT) is a plugin for the Eclipse IDE that is designed to give you a powerful, integrated environment in which to build Android applications.

## Software Development Tools Continued

### **Browsers:**

1. IE

2. Firefox

3. Chrome

4. Safari



Can anyone tell me what function key can be used in the browser to do ploy debugging tools?

**And the answer is F12**

## More tools to help you make your job easier

- The HTML5 test – *how well does your browser support HTML5?* <http://html5test.com/>
- If you want to see a quick peek what your web site or web application for mobile phone looks like in an iPhone tried this URL, <http://ipadpeek.com/>
- Take a look at 51 Degrees.mobile for some quick emulator tools - <http://51degrees.mobi/Support/MobileEmulators.aspx>
- \*\* One of my favorite emulator sites - Mobile emulator version 1.7 <http://www.mobilephoneemulator.com/>
- I have many more tools I could show you that there just isn't enough time

## Some of my favorite development tools I currently use

- VFP 9
- MYSQL
- MS SQL
- NuSphere PhpED V9
- Rapid CSS 2014, with CSS3 support
- dbForge Studio for MySQL
- MS VS 2012
- Windows 7, Windows 8 need for windows phone 8 Development
- VM Ware,
- Eclipse

Let's open up and take a real quick look at some of those tools

## A High Overview On Setting Up For Android Development

- Download and install [Eclipse Classic](#)
- Download and install [Android SDK](#)
- Download and install [ADT Plugin](#)
- Download the latest copy of [PhoneGap](#) and extract its contents. We will be working with the Android directory

## How to install PhoneGap for Android using Windows and Eclipse

<http://cleancodedevelopment-qualityseal.blogspot.com/2012/11/how-to-install-phonegap-for-android.html>



## A Closer Look At Cordova (phoneGap)

- **Setup New Project**
- In a terminal window, navigate to the bin directory within the android subfolder of the Cordova distribution.

Type in `create <project_folder_path> <package_name> <project_name>` then press "Enter"

**Exsample:**

`<project_folder_path>` is the path to your new Cordova Android project

`<package_name>` is the package name, e.g. `com.YourCompany.YourAppName`

`<project_name>` is the project name, e.g. `YourApp` (Must not contain spaces)



#### Summary of the URL

- <http://www.eclipse.org/>
- <http://www.phonegappros.com/>
- <http://developer.android.com/tools/sdk/eclipse-adt.html>
- <http://html5test.com/>
- <http://ipadpeek.com/>
- <http://51degrees.mobi/Support/MobileEmulators.aspx>
- <http://www.mobilephoneemulator.com/>
- [Eclipse Classic](#)
- [Android SDK](#)
- [ADT Plugin](#)
- [PhoneGap](#)
- <http://cleancodedevelopment-qualityseal.blogspot.com/2012/11/how-to-install-phonegap-for-android.html>
-