



# MoMo Washington – April 29<sup>th</sup> HTML5 vs. Native Apps

## Some Mobile Software Development Approaches...



Jasmine Sante  
Consultant at Sante Strategies



Carla Brown  
Senior Manager, Online Production at National Wildlife Federation



Julie Glickson Bethke  
Design Director, Social Applications at Microstrategy

Common Conceptions (but not necessarily accurate)

|   | Relative Development Cost | Relative Tool Cost | iOS                                     | Android         | WP8                               | BB10                             | Tizen        |
|---|---------------------------|--------------------|---|-----------------|-----------------------------------|----------------------------------|--------------|
| <b>“Indigenous” APIs</b><br>“Best Performance”, “Best Control over UI/UX”, “Expensive to develop and port”, “Easier to use native APIs”.                  | \$\$\$                    | \$0                | Objective C, C++                        | Java, C++ (NDK) | C++<br>JavaScript<br>C#<br>VB.net | C++<br>HTML5<br>Java<br>and more | C++<br>HTML5 |
| <b>Middleware SDKs and Tools</b><br>“Increases portability”, “Requires specialized skillsets”, “Dependent on third-party tools”, “Tools can be expensive” | \$\$\$                    | \$0                | Cocos2D (Obj.C, Java)                   |                 |                                   |                                  |              |
|   | \$\$\$                    | \$0                | Cocos2DX (C++)                          |                 |                                   |                                  |              |
|   | \$\$\$                    | \$\$               | Marmalade (C++)                         |                 |                                   |                                  |              |
|   | \$\$\$                    | \$\$               | Unity (C#, JavaScript)                  |                 |                                   |                                  |              |
|   | \$\$\$                    | \$\$               | Corona Lua)                             |                 |                                   |                                  |              |
| <b>HTML5 Solutions</b><br>“Increases portability”, “Familiar to many programmers”, “Slow”, “Not suitable for advanced UI/UX or games”                     | \$                        | \$0                | Browser Content                         |                 |                                   |                                  |              |
|   | \$\$                      | \$0                | WebView Content from within Native Apps |                 |                                   |                                  |              |
|   | \$\$                      | \$0                | PhoneGap                                |                 |                                   |                                  |              |
|   | \$\$                      | \$0                | Sencha Touch                            |                 |                                   |                                  |              |



# MoMo Washington – April 29<sup>th</sup>

## HTML5 vs. Native Apps



**Nancy Proctor**  
Head of Mobile Strategy  
& Initiatives at  
Smithsonian Institution



**Tom Anderson**  
Senior BlackBerry  
Developer Evangelist at  
BlackBerry



**Richard Smith**  
Co-Founder & CTO at  
Open Path Products

Recommended Minimum Explicit Device Support

| Android Devices         |                |            |  |
|-------------------------|----------------|------------|--|
| Device Series           | OS Version     | Resolution | Notes  |
| Samsung Galaxy S IV     | 4              | 720x1280   | Get ready for the next Galaxy  |
| Samsung Galaxy S III    | 4              | 720x1280   | The immensely popular S3 series. AT&T sells model SGH-i747.  |
| Samsung Galaxy S II     | 4              | 480x800    | Follow-up to the popular Galaxy S and upgradable to Android 4.0 . The AT&T model is SGH-i777.          |
| Samsung Galaxy S        | 2.3            | 480x800    | Still a common device, this phone nicely represents this form factor. AT&T sells the SGH-i897.         |
| Samsung Galaxy Note     | 4              | 800x1280   | Unique tablet/phone "Phablet" device with an advanced stylus. The AT&T model is SGH-i717.              |
| Samsung Galaxy Note II  | 4.1            | 1280x768   | The follow-up to Samsung's popular Note phablet. The AT&T model is SGH-i317.                           |
| LG Optimus G            | 4              | 1280x768   | A recent phone with high resolution and high pixel density. The AT&T model is E970.                    |
| HTC EVO 4G              | 2.3            | 480x800    | An older, still popular device representative of this form factor. Sprint sells the PC36100.           |
| HTC One X+              | 4.1            | 720x1280   | The latest in the popular HTC One lineup. The AT&T model is PM63100.                                   |
| Motorola Droid Razr M   | 4              | 540x960    | A popular phone with a small form factor and high resolution. The Verizon model is XT907.              |
| Samsung Galaxy Tab 10.1 | 4              | 1280x800   | A popular tablet representative of many 10" tablets The AT&T model is SCH-i905.                        |
| Amazon Kindle Fire      | 2.3*           | 600x1024   | This best-selling tablet runs a custom version of Android 2.3 and accesses to the Amazon store.        |
| Windows Phone Devices   |                |            |  |
| HTC Surround            | 7.5            | 480x800    | Representative of classic Windows Phone devices.   |
| Samsung i917            | 7.5            | 480x800    | Representative of mid-range Windows Phone handsets.  |
| Nokia Lumia 900         | 7.5            | 480x800    | Best selling device representative of high end Windows Phone devices.                                  |
| Nokia Lumia 820         | 8              | 480x800    | Nokia's smaller sized Windows Phone 8 device.  |
| Nokia Lumia 920         | 8              | 768x1280   | Nokia's flagship Windows Phone 8 device with a very large screen size.                                 |
| HTC 8X                  | 8              | 720x1280   | HTC's Windows Phone 8 device with a distinct screen size.  |
| iOS Devices             |                |            |  |
| iPhone 4s               | 6              | 640x960    | This popular device shares resolutions with its predecessor, the iPhone 4.                             |
| iPhone 5                | 6              | 640x1136   | This device features a new widescreen resolution and improved performance.                             |
| iPad 2                  | 6              | 1024x768   | This device shares resolutions with the original iPad, but is upgradable to the latest version of iOS. |
| iPad 4                  | 6              | 2048x1536  | This device has a larger resolution than its predecessors as well as improved performance.             |
| iPad Mini               | 6              | 1024x768   | Featuring the same screen resolution with smaller form factor.   |
| BlackBerry Devices      |                |            |  |
| Blackberry Z10          | BlackBerry® 10 | 1280 x 768 | The new BlackBerry Z10. Built to keep you moving.  |

\* Denotes a customized OS version.

All trademarks and registered trademarks are the property of their respective owners.

Questions or feedback? Contact [rich.smith@openpathproducts.com](mailto:rich.smith@openpathproducts.com)