How Interpublic Group of Companies Leverage HTML5/ Jquery and BSP to Deliver Web-Based Mobility Applications

Orhan Ozalp/ James Appleyard/ Subrahmanya Gantedi
<table>
<thead>
<tr>
<th>4,000 CLIENTS</th>
<th>100+ COUNTRIES</th>
<th>40,000 EMPLOYEES</th>
<th>$7 BILLION REVENUE</th>
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</thead>
<tbody>
<tr>
<td><strong>McCann Worldgroup</strong></td>
<td>One of the largest providers of integrated, global marketing programs</td>
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<td><strong>DraftFCB</strong></td>
<td>Modern global agency model combines accountability with creativity under single P&amp;L</td>
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<td><strong>Lowe Partners</strong></td>
<td>High-value ideas in high-growth markets</td>
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<td><strong>Mediacom</strong></td>
<td>Two global media networks and a spectrum of specialist media companies</td>
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<tr>
<td><strong>JACK MORTON WEBER SHANDWICK</strong></td>
<td>Best-in-class marketing services providers</td>
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<tr>
<td><strong>Innovateum</strong></td>
<td>Exceptional group of independent agencies</td>
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Real Experience. Real Advantage.
Learning Points

- Why did IPG take on this proof of concept?
  - Mobile infrastructure – investment
  - Constantly evolving smart phone marketplace
- Building HTML5 application using SAP development tools
  - Usability
  - Performance
  - Development effort
- How does HTML5 perform across devices
- Key Challenges
  - Mobile device management
  - Provisioning and Authentication
**Business Requirements - Proof of Concept**

**Maximize**
- Usability/Ease of use
- Leverage existing artifacts
- Device Agnostic solution
- Existing Infrastructure
- In-house Skill sets

**Minimize**
- Infrastructure Impact
- Costs/Investment
- Development time
- Support effort

*Offline storage not a requirement*
Pain Points

- Many solutions in marketplace
  - All meet our requirements (apparently)
  - All will need some level of investment
- Skill-set requirement
- Device Management
  - Another groups responsibility?
- Authentication
- Provisioning
- Performance
- Session Handling/Management (SAP)
Implementation – Native v Browser

Native
- Native Features
- Offline

Browser-Based
- Distribution
- Development & Support
- Cross Platform
Implementation Approach - Overview

Devices
- iOS
- Android
- Blackberry
- Tablets

Toolset
- SAP Development Tools
  - BSP
- jQuery (JavaScript libraries)
- HTML5

Application
- Reuse existing API functions
- Function v Data
- Critical Data
  - e.g. Client/Division/Product

Provisioning
- Browser based
- SSO
- Portal
- Container

Usability
Implementation Approach - Design

- Analyze what’s currently available – app store etc
- Storyboard design
- Design application for SMALL screen
- Limit hits/access points to SAP
- Optimized search functions
- Provide key functions – yet keep it simple
- User Interface development toolset
  - BSP
  - Jquery (open source) javascript libraries – HTML5
Implementation Approach - Architecture

HTML5

- Device Agnostic (very minor browser specific tweaks)

Jquery (Javascript Library)

- Wrap BSP
- Convert to HTML5

BSP (SAP)

- Call Timesheet custom API

User Interface Layer (SAP NW ABAP Stack)

API

SAP ECC

Business Logic
Implementation Approach

Demo....
Provisioning and Authentication

- **Portal/Login Form**

  ![Diagram]

  - Mobile Access
  - Portal (iView/webpart)
  - AD
  - Kerberos
  - SPNEGO
  - IPlace (SAP Portal)
  - SAP Logon Ticket
  - Desktop Applications
    - ABAP WebDynpro
  - Mobile Application
    - BSP (HTML5)
  - *Access applications via SAP Portal to achieve SSO only*

- **Extranet Provisioning Layer**
  - IPlace Provisioning Layer (SAP NW Java)

- **User Interface Layer**
  - (SAP NW ABAP Stack)
Best Practices

- Marketplace is Rapidly changing
  - Look to leverage current investments
  - Take your time
    - Evaluate your current setup
    - Put foundations in place – API etc

- Build in-house knowledge
  - SDN/Reading
  - Prototype
Key Learnings

- Key challenges
  - Provisioning
  - Authentication
- Dealing with the key challenges became time consuming
- Developing HTML5 application was rapid
  - Using in-house resource
  - Leveraging current artifacts and technology
- Don’t buy into “This is the perfect solution”
  - What looks perfect today may quickly be succeeded
- Recognize complexity of environments/landscape
- Hybrid approach may be best fit…. 
Key Learnings

Devices
- Limited testing on iOS and Android has proven to be very encouraging
- May need to identify supported OS levels (dependent on further testing)
- To activate device features such as camera, additional toolset required – (e.g. phone gap or Sybase container)

Development
- Able to reuse existing custom API and business logic
- Can be achieved with in-house development skills

JQuery
- Open source libraries - need to implement upgrade strategy

Provisioning
- Still under discussion
- Hosting via SAP Portal would add another layer of browser support issues
- Routing user based on device type still under discussion
Thank You

Questions?
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Thank you for participating.

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