CA Dept of Technology Mobile App Review

Scott Gregory - State Chief Enterprise Technology Officer

Overview

1. Review of items outlined for the mobile application deployment

2. Report on areas of potential concern

3. In production example of a similar application - how we did it

Review of Mobile Application Proposal

Technical Specifications:

- Open Source - good choice, but proceed with caution and know what you are getting into
- GPS enabled devices to provide information from the field - must understand issues related to position accuracy and data acquisition
- Provide information within 30 days of receipt of photos - what are the implications
- Web based application deployment plans - items to consider

Open Source Software

Denoting software for which the original source code is made freely available and may be redistributed and modified.

Awareness and community is important

Marketing is important. Never underestimate the power of a solid marketing plan and branding strategy to gain support and buy-in

Strategically invest in open source communities and ecosystems. Some communities are more in keeping with your technology goals than others.

Get strong legal counsel. Without the right legal counsel, an open source program can end up placing undue risk on a business or government. Must strike a balance

Align with product strategy. An open source program should support organization business and technology strategy.

Formulate—and communicate—your end-user and developer community support strategies and guidelines. Understand what a well-run community looks like.

GPS Enabled Devices

GPS is great under certain environmental conditions

Locational integrity for data and accurate reporting of assets

PDOP (Potential Dissolution of Precision)- Why is it important?

Directionality in photo acquisition from the field - Azimuth and Heading

Multiple orientation options are a must - map, imagery and access to supporting information

Information Transparency

Organizations have to establish how, when and why they share information. What's the end goal?

Information sharing with stakeholders

Strong Policy - policy must be established to determine the rules of engagement when sharing data. Data ownership, data efficacy and standards are important

Established Metadata Standard - developing or using an industry recognized metadata standard ensure interoperability with allied systems and appropriate documentation of data

Privacy - CA Consumer Protection Act (Jan 2020). Organizations need to be aware of the implications for consumers, contributors and owners of data

Web based over Native App

Web based applications reach a broader audience than a strictly native app approach, but come with items of consideration

Web based applications

Web based applications, in most cases, require a internet connection

Web based app require some considerations:

Connected vs disconnected editing

Web Accessibility (WCAG 2.0 - 2.1)

Utility is typically dependent on connection speed

They are responsive in design typically - working with multiple form factors

Push notifications - possible with a modern practices (HTML 5 , push APIs, etc…)

Report Water Waste

California's response to water waste enforcement with a web app

California drought 2014-2017

Goal - report water wasters across the state

Challenge - build an application for mobile users to report issues, send photos and document violations

The Data - we have processed 20,000+ infractions

Enforcement - local water districts get involved

Thanks!

Contact:

Scott Gregory
CA Chief Enterprise Technology Officer
CA Dept of Technology
scott.gregory@state.ca.gov