The future of the mobile web

Peter-Paul Koch
http://quirksmode.org
http://twitter.com/ppk
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Native vs. web

YAWWWWN
Native vs. web

• It depends!
• Room for both
• We just have to figure out when native is better than web, and vice versa.
Native apps

- Symbian: 38%
- Android: 22%
- iOS: 16%
- BlackBerry: 16%
- Windows: 4%
- bada: 3%

Native apps
Native apps

- Android: 16%
- iOS: 22%

Rest? What rest?
HTML5 apps
HTML5 apps

• One core app written in HTML, CSS, and JavaScript.
• Deployed to several mobile platforms.
• Ideally, CSS and JavaScript are stored on the device.
• If it can't be deployed it's still a website.
HTML5 app deployment

• http://apparat.io/ (Uxebu)
• https://build.phonegap.com/ (Nitobi)
Device APIs

- Native apps offer device APIs.
- They allow you to access the camera, accelerometer, SMS, file system, etc.
- They tie in your site or app with the mobile context.
- Web apps will have to offer them, too.
- Brian Leroux will discuss them later today.
2014

$25
2014

Apps!
keep track of prices,
keep track of multiple ships,
give warning against corrupt police officers
I’ve done it. In April 2009.
And it worked.
Almost.
There was a compatibility issue.
But still the concept was viable.
HTML5 app

[Diagram showing data flow between devices]
Data will likely be JSON
- Light-weight
- Already works everywhere

But how do we get the JSON onto the phone?
Wifi?
Not available
Data plan?
Too expensive
SMS?
Sounds about right
JSON over SMS

- SMS is the only way of pushing data
- Premium SMS allows the service to make money easily
- Nearly every phone supports SMS
- It’s human-readable (more or less)
To: 06184322728

date: 150225,
towns: {
  town1: {
    prices: {
      catfish: 0.88,
      dogfish: 1.34,
      shellfish: 0.79
    },
  },
  town2: {
    prices: {
      catfish: 0.97,
      dogfish: 1.13,
      shellfish: 0.48
    },
  },
}
JSON over SMS

- But: cost.
- Maybe prices will go down
- Or maybe something else will take the place of SMS.
- IM? (Nokia, BlackBerry)
- As long as it’s push. And you can charge for it.
JSON over SMS

- And: illiteracy
- Images instead of text?
- Or a voice-over app?
Money

- But if the user can share apps freely
- and pays for the data
- monetization is going to change considerably
- We don’t need app stores any more
End of app stores

• “Why is everyone so exercised? As with all walled gardens, the web will interpret the App Store as damage and route around it.”

- Eric Meyer
What do we need app stores for?

- Distribution
- Discoverability
- Ease of payments and making money

But ...

- Cost of ownership
- Works for Apple. But will it work for anyone else?
Distribution
Discoverability
Payments
Payments

Exhibit 9a: Early M-PESA ad emphasizing sending money from urban to rural areas linking into family and social ties.
Cost of ownership

An app store needs:

- payment system
- sysadmins
- content checkers
- documentation and best practices writers
- hosting

Costs a lot of money. Too much money, especially if nobody uses the app store.
Works for Apple

- Apple has leverage with enthusiastic developers and affluent consumers
- Google has leverage with developers
- Nokia, Samsung, and RIM have leverage with consumers (though they’re less willing to spend money)
- But none of them has both
End of app stores

Will any app stores survive?

- Apple’s. iOS apps will continue to exist.
- Maybe a few other platform-specific ones, too.
- Specialised app stores (structural engineering, music creation, historical maps, etc.)
Future of the Mobile Web

• Many native apps will be replaced by web apps, which can run anywhere

• Device APIs (but security!)

• Apps will be shared via Bluetooth

• Web data will also be offered via SMS

• Pay for content, not app

• App stores on the defensive
Thank you

I will post these slides online.

Questions?

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