

The mobile browser world

Peter-Paul Koch

<http://quirksmode.org>

<http://twitter.com/ppk>

Paris-Web, 14 October 2011

The Stack

Browser

OS

Device

The Stack



Browser



OS



Device

The Stack



Browser



OS



Device



The Stack



Browser



OS



Device



Sony Ericsson



The Stack



Browser



Mel
temi



OS



Device



The Stack

Browser



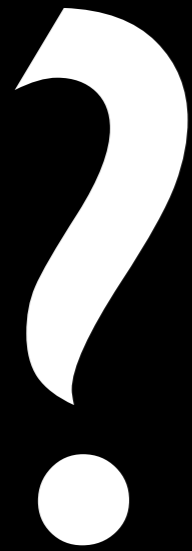
OS



Device



The Stack



Browser



OS



Device



Tizen

The Stack



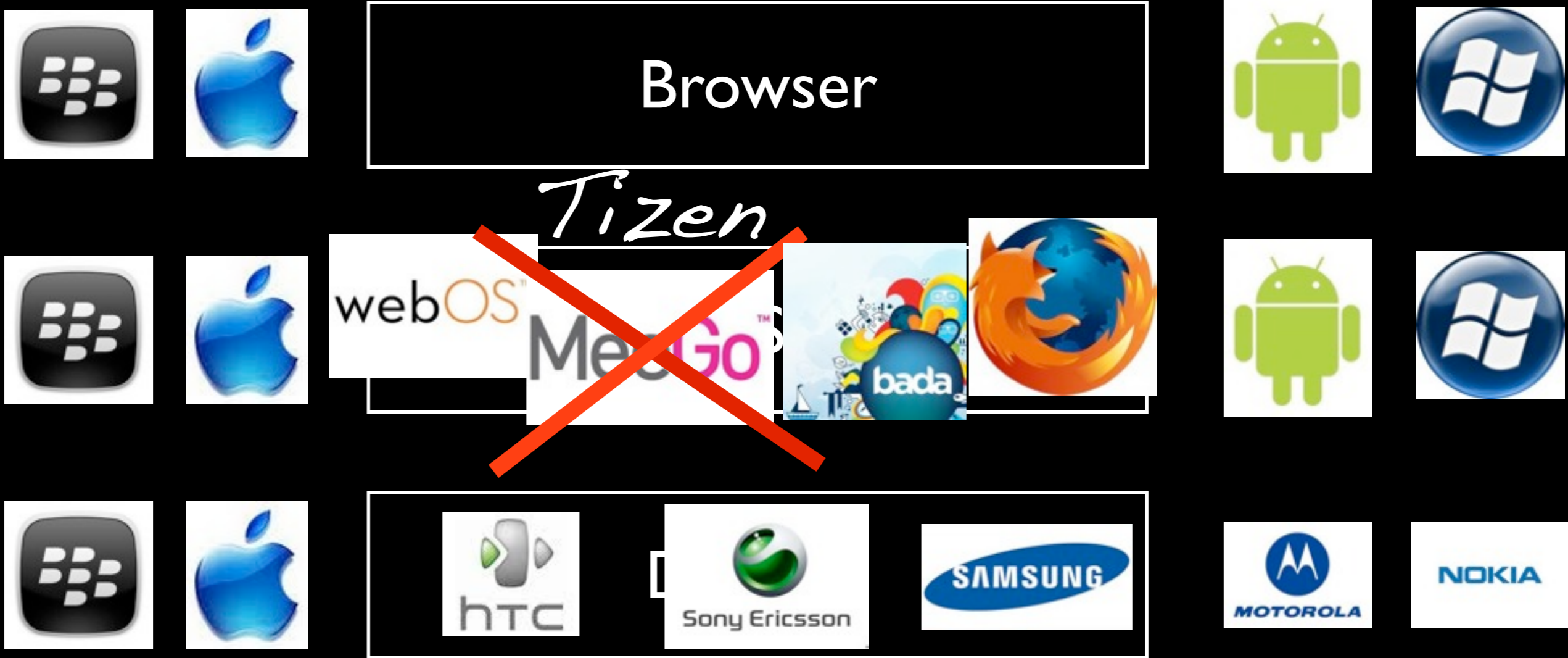
Browser

OS

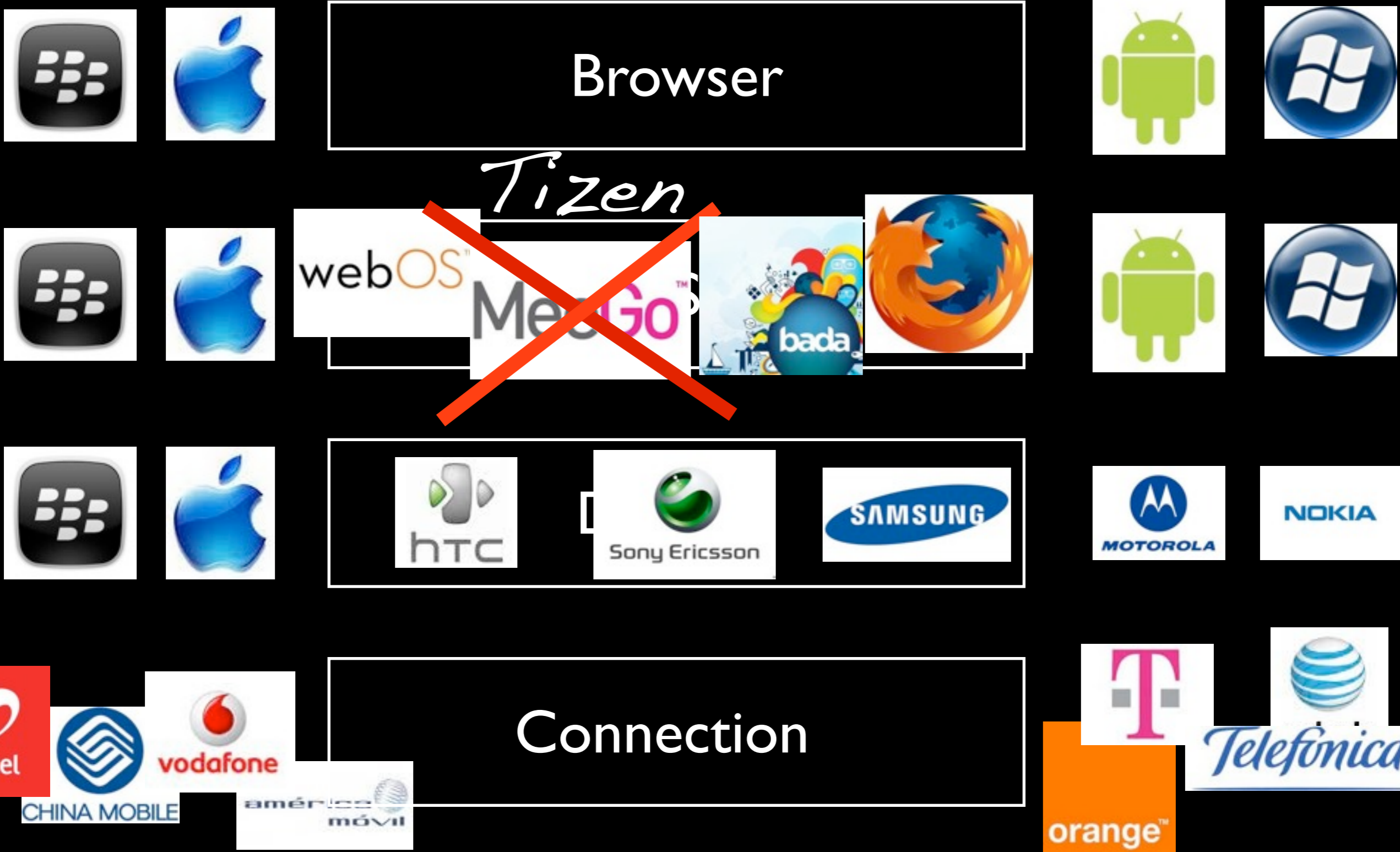
Device



The Stack



The Stack



The Stack

Browser

OS

Device

Income



The Stack

Browser

OS

Subsidy

Income



The Stack

Other browsers



OS



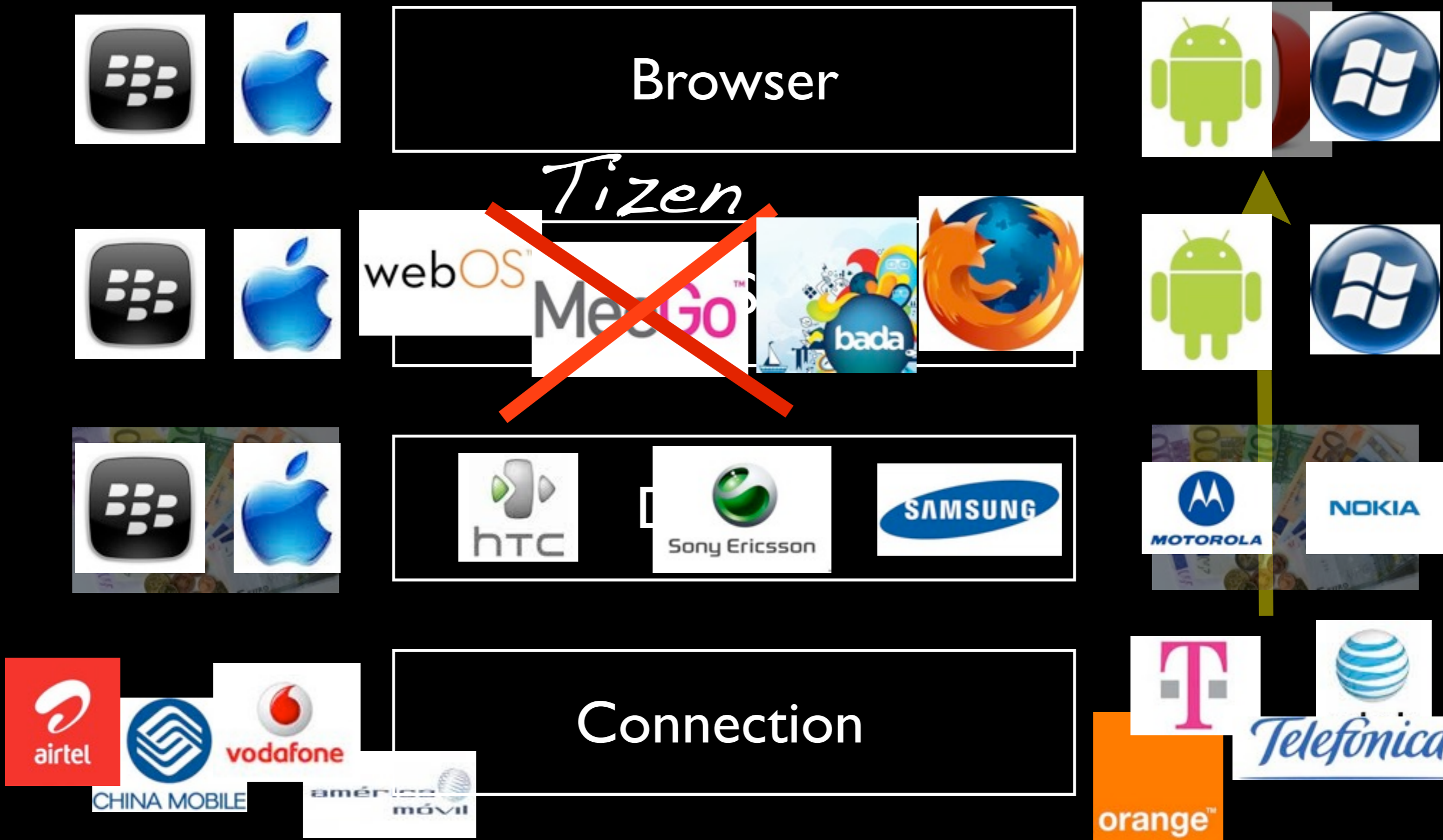
Subsidy



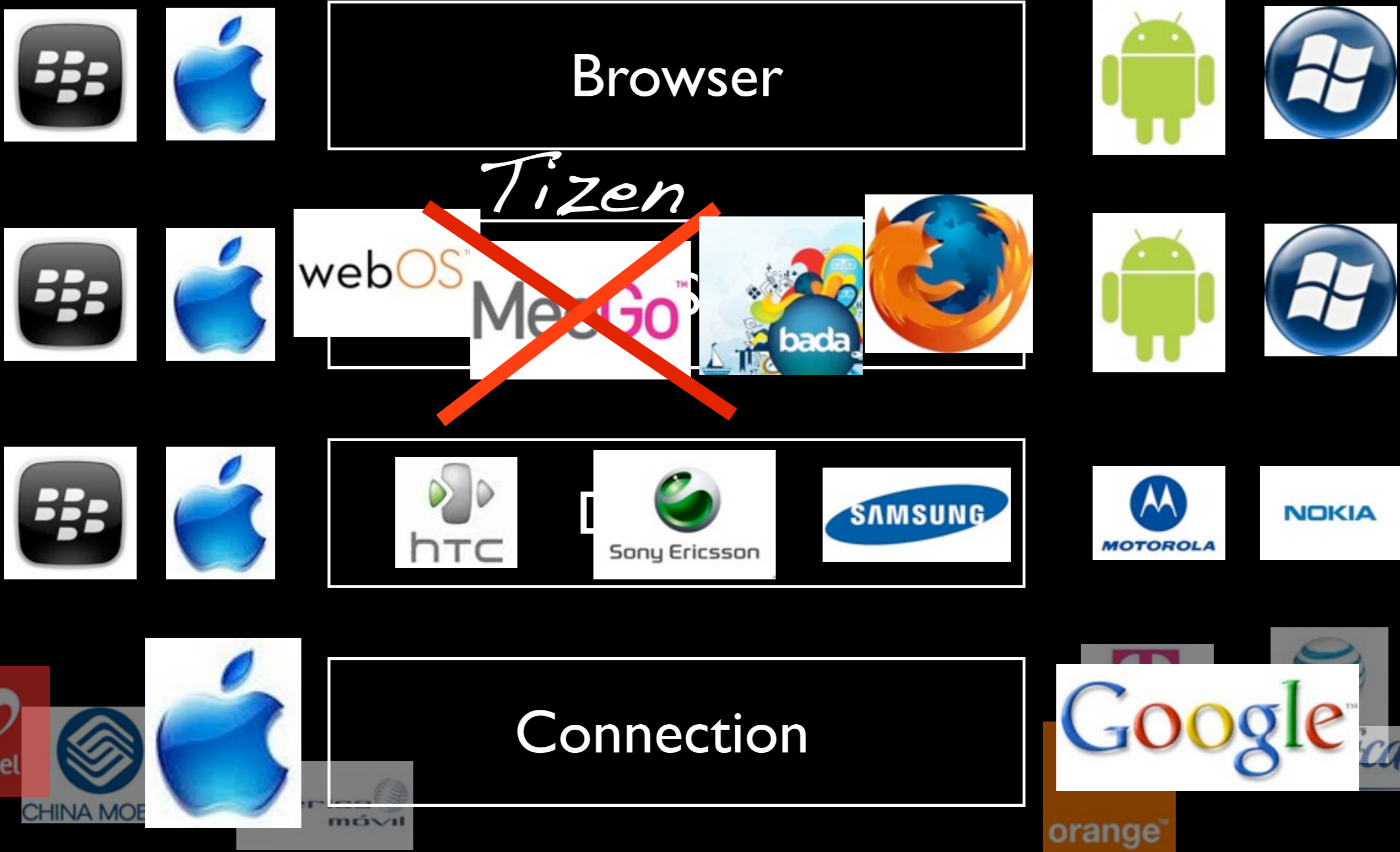
Income



The Stack



The Stack



The Stack

It's

complicated

Mobile browsers

- Safari
- Android WebKit
- Dolfin
- BlackBerry WebKit
- Opera Mobile
- Opera Mini
- Nokia WebKit
- Ovi
- Palm WebKit
- IE
- MeeGo WebKit
- Firefox
- Obigo WebKit
- BlackBerry old
- NetFront
- UC Browser
- Bolt
- Silk

You may groan now

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WebKit-based

There is no single WebKit

Not all WebKits have hardware-accelerated animations. That requires good access to a high-power GPU, and not all devices provide that.

Similarly, interfaces for the network stack, mouse, keyboard, and threading system, must be written separately for each browser.

And not everyone uses the same WebKit version.

See <http://quirksmode.org/webkit.html>

Proxy browsers

- A proxy browser leaves the fetching and rendering of resources to a server.
- The client receives a compressed bitmap.
- Advantage: cheap device and low data costs
- Disadvantage: no client-side interaction.
Every JavaScript call requires a server request.

Proxy browsers

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Global stats Q3

Opera	22%	Many; mostly Symbian and older OSs
Safari	20%	iOS
Android	19%	Android
Nokia	17%	Symbian, S40
BlackBerry	12%	BlackBerry
NetFront	4%	Older Sony Ericssons and Samsungs
Other	6%	

Source: StatCounter.com
Smartphones only; no tablets

Global stats

- Global stats are ... global. They do not necessarily mean anything for your sites.
- Always check your country's stats.
- Always check your client's stats.
- Social media referrals cause a disproportionate number of iPhone and Android visits.

French stats Q3

Safari	58%	iOS
Android	28%	Android
Nokia	4%	Symbian, S40
Opera	3%	Many; mostly Symbian and older OSs
Dolfin	3%	bada
BlackBerry	2%	BlackBerry
Other	2%	

Source: StatCounter.com
Smartphones only; no tablets

Which browsers?

- Safari
- Android
- Opera Mini
- Nokia
- Dolfin (because it's easy)
- BlackBerry 6 (because it's easy)
- Opera Mobile (because it's easy)

Do we still
have time?

Fundamentals

- Mobile First
- Responsive design
- Progressive enhancement

Mobile First

- Design your sites for mobile first.
- You'll be forced to decide what is so important that it **MUST** be shown in the mobile device's tiny display.
- The things you leave out of the mobile version don't really need to be in the desktop version, either.

Responsive design

- Make your design respond to the screen size it's on.
- Technical foundation: media queries
- Andreas Bovens already discussed them.

Responsive design

```
<meta name="viewport"  
  content="width=device-width">
```

```
@media all and (min-width: 600px) {  
  // styles for desktop  
}
```

Progressive enhancement

- Build a solid HTML layer that any browser can understand.
- Add as much stuff on top as you like.
- Make sure browsers only execute what they understand.
- Animations and transitions: add them; just don't expect all browsers to execute them.
- BlackBerry 5 and lower: switch off your scripts.

Thank you

I'll put these slides online

Questions?

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