

The mobile platform world

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<http://quirksmode.org>

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Breaking Development, 16 April 2012

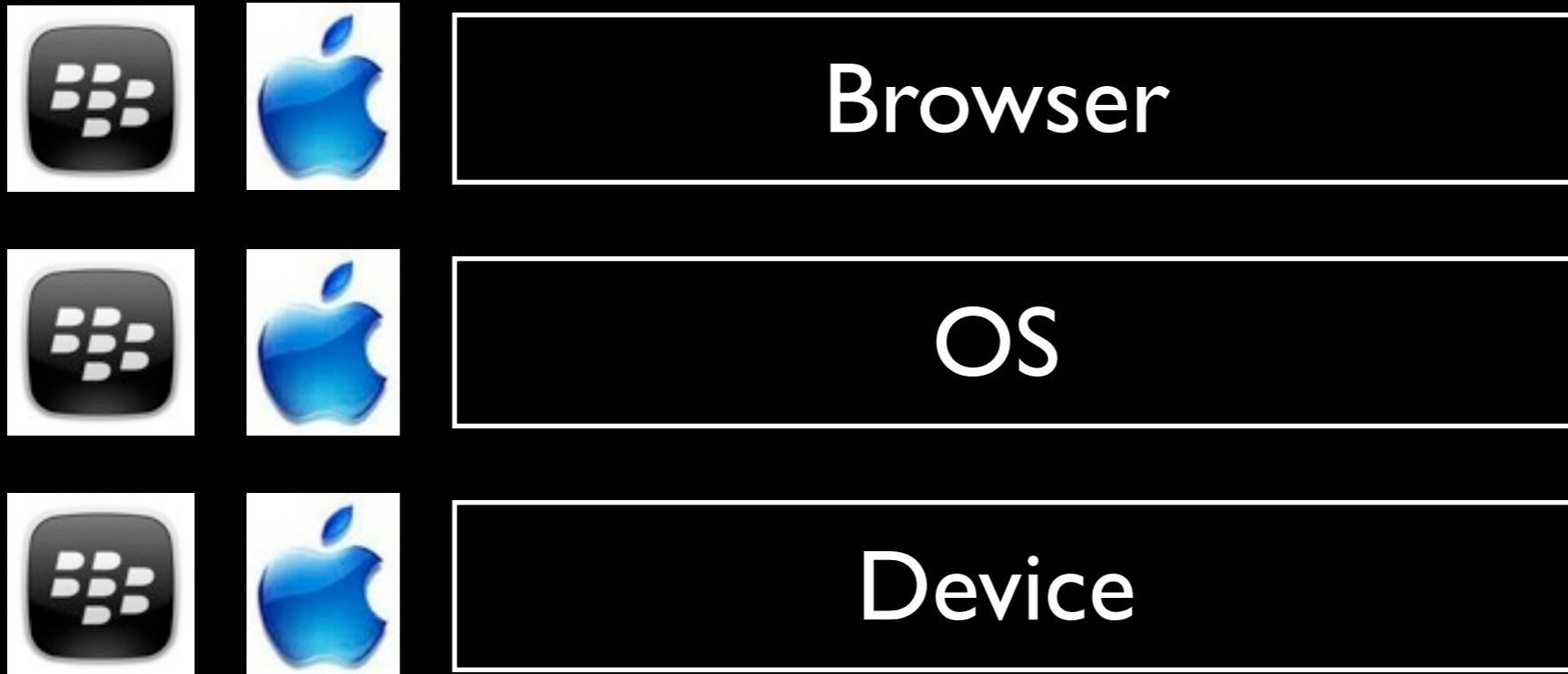
The Stack

Browser

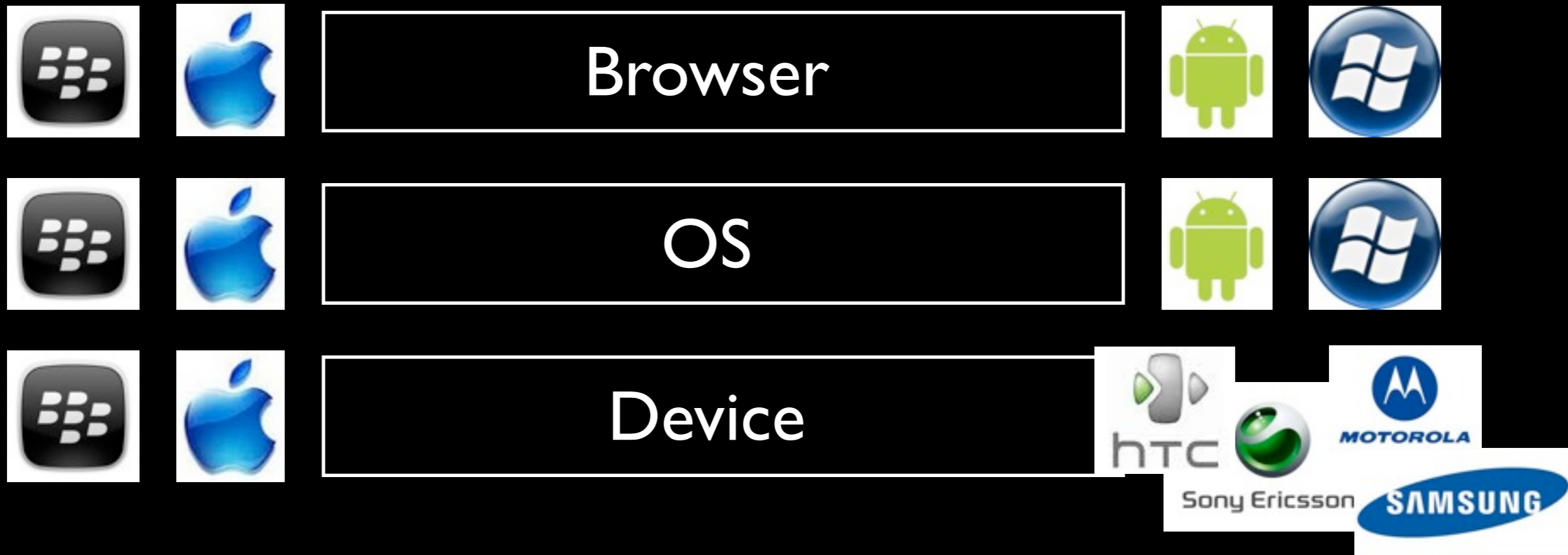
OS

Device

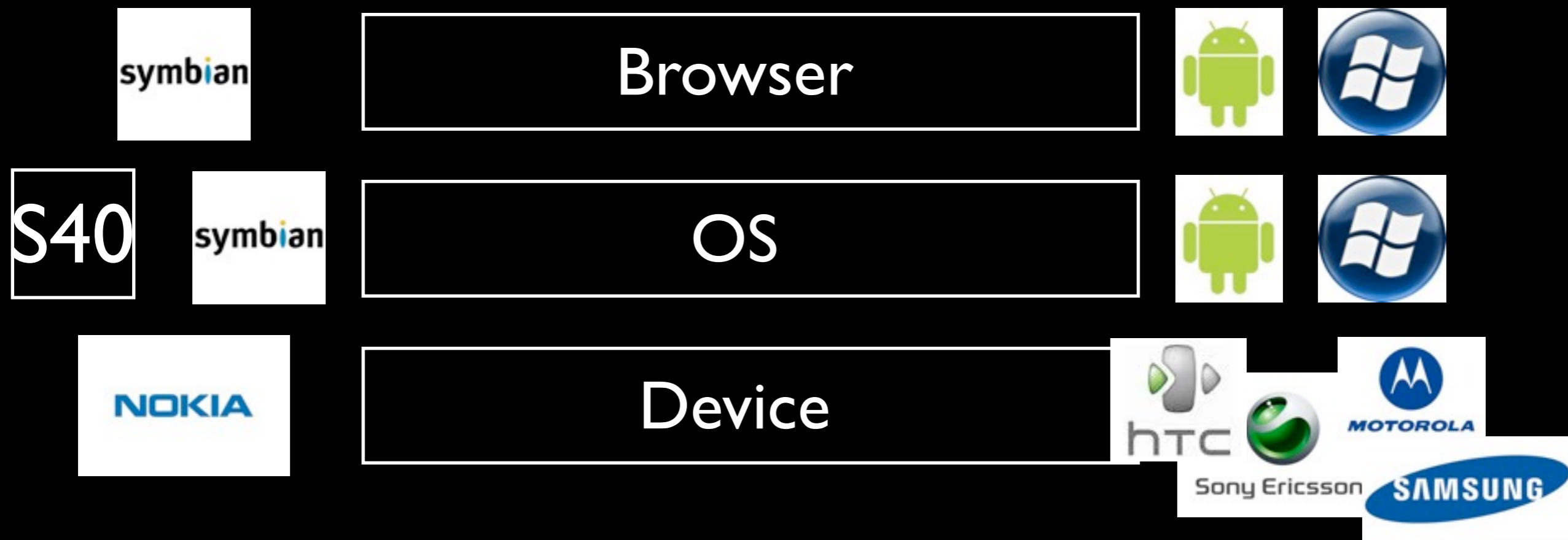
The Stack



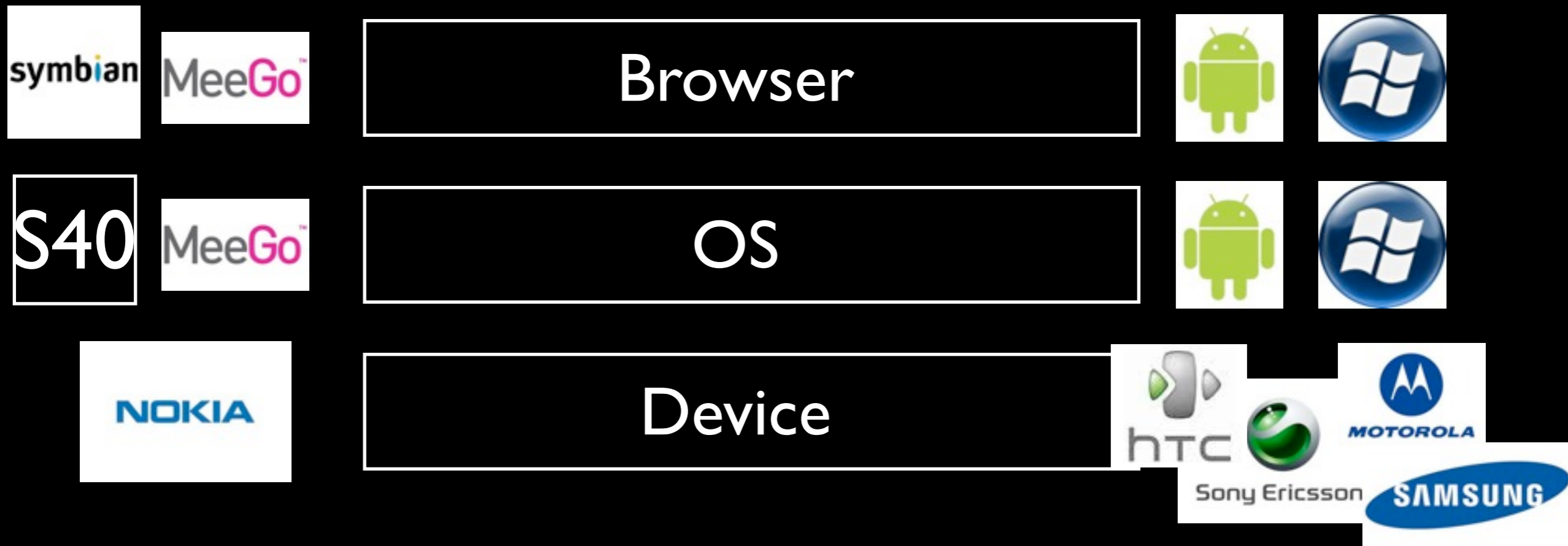
The Stack



The Stack



The Stack



The Stack



Browser



OS



Device



The Stack

Tizen



Browser



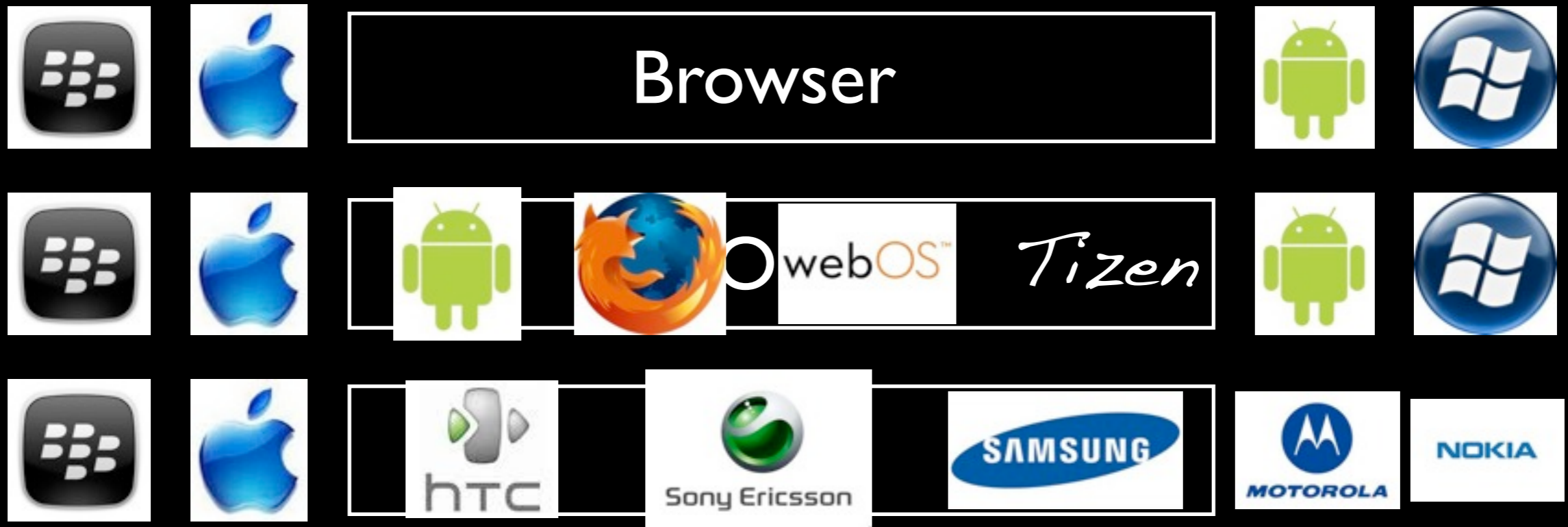
OS



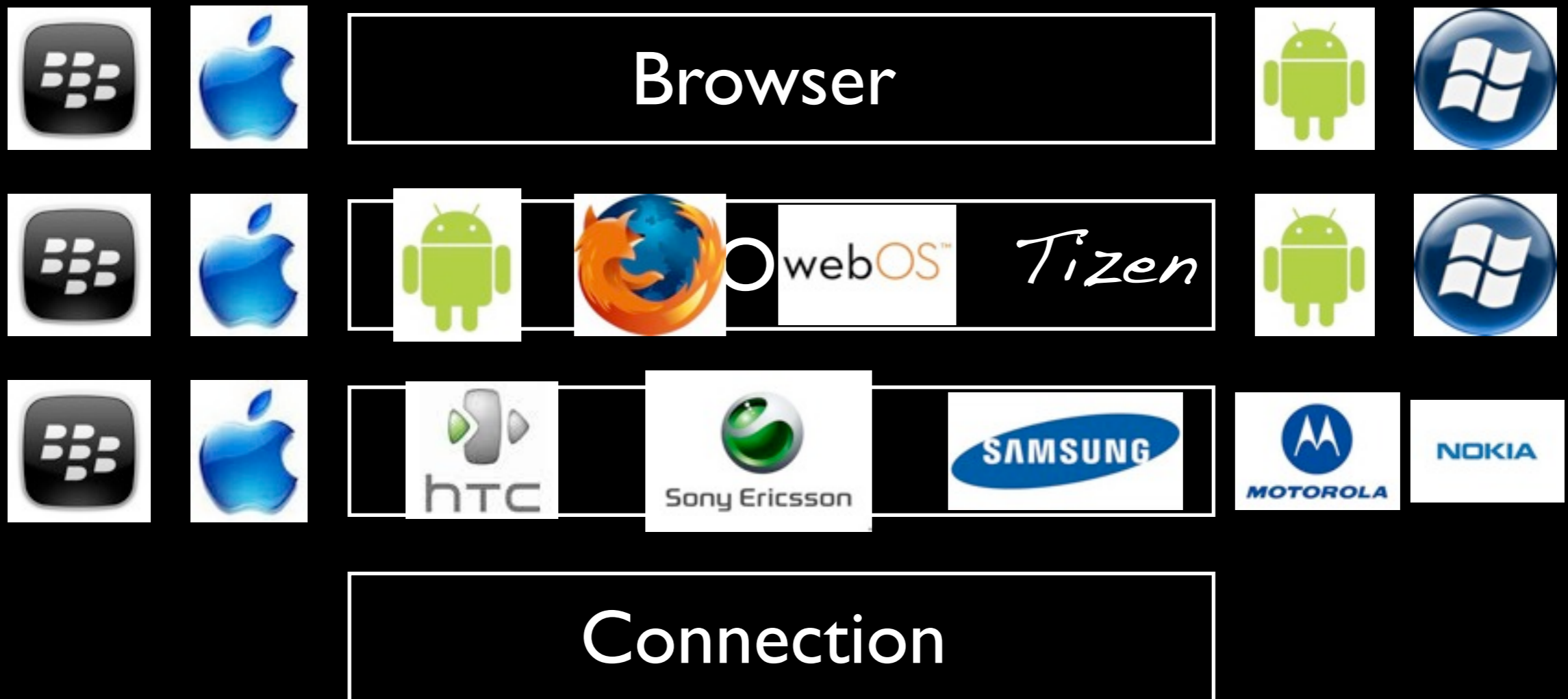
Device



The Stack



The Stack



The Stack



The Stack

Browser

OS

Device

Connection



CHINA MOBILE



The Stack

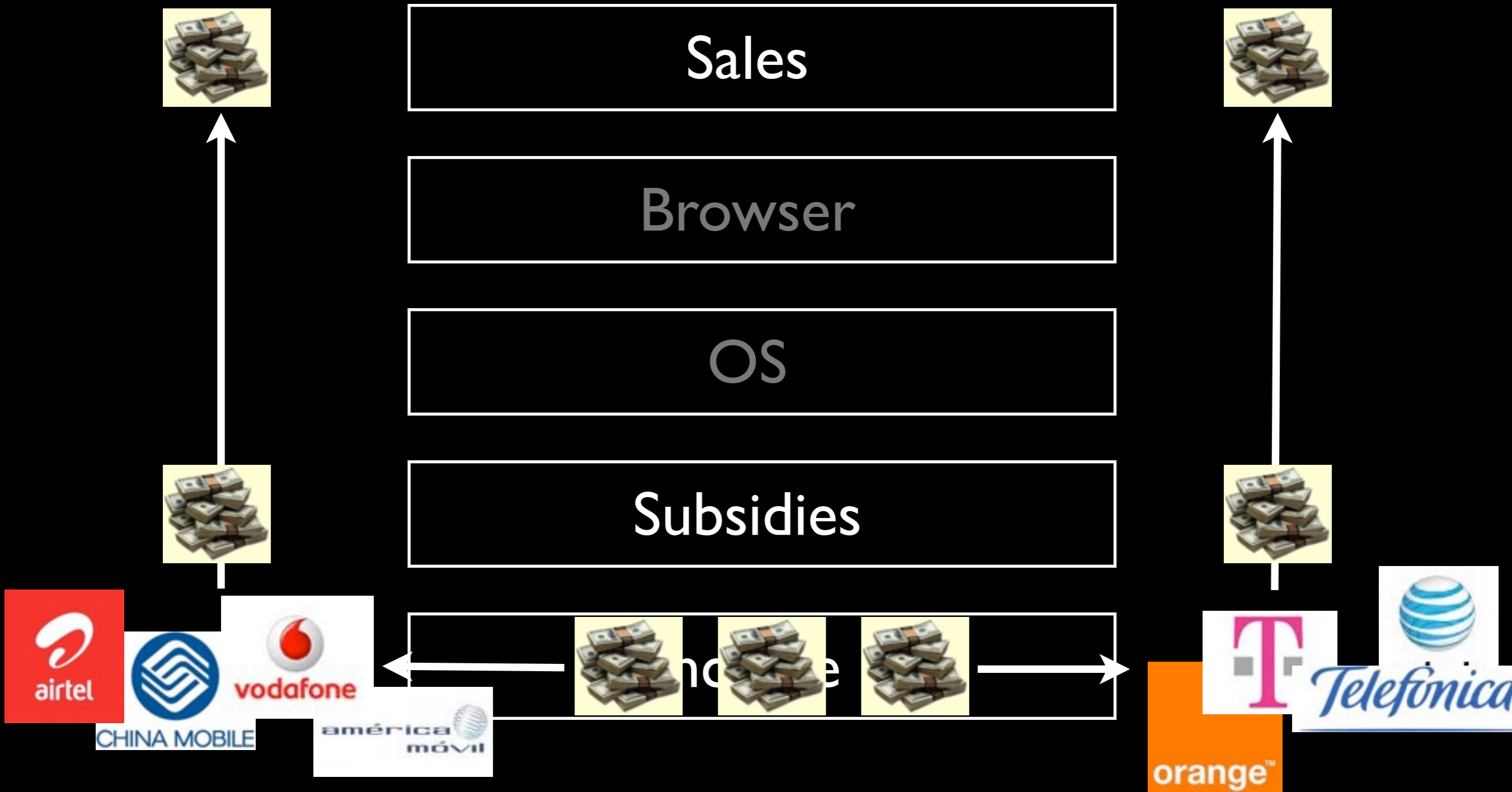
Browser

OS

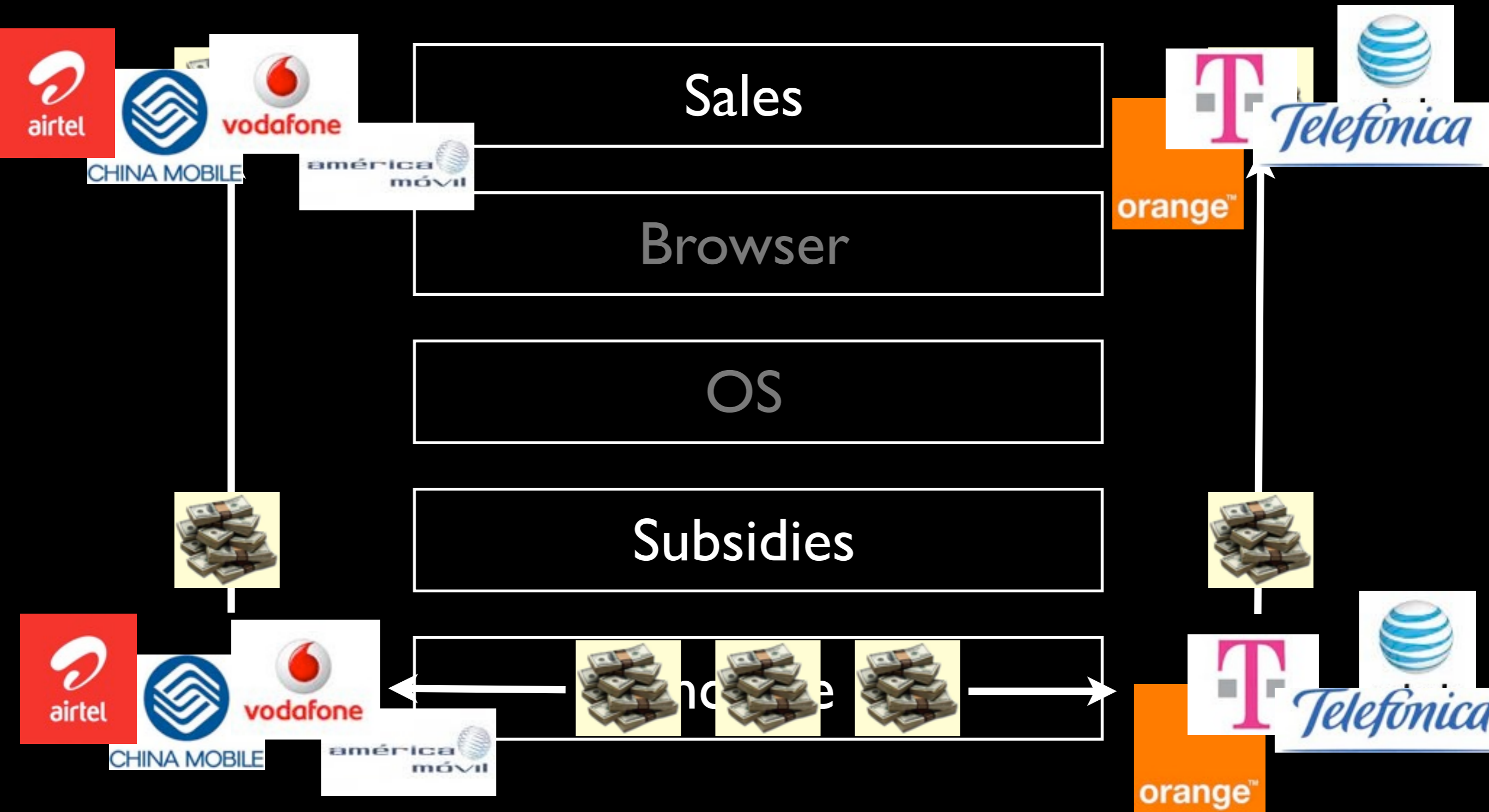
Device



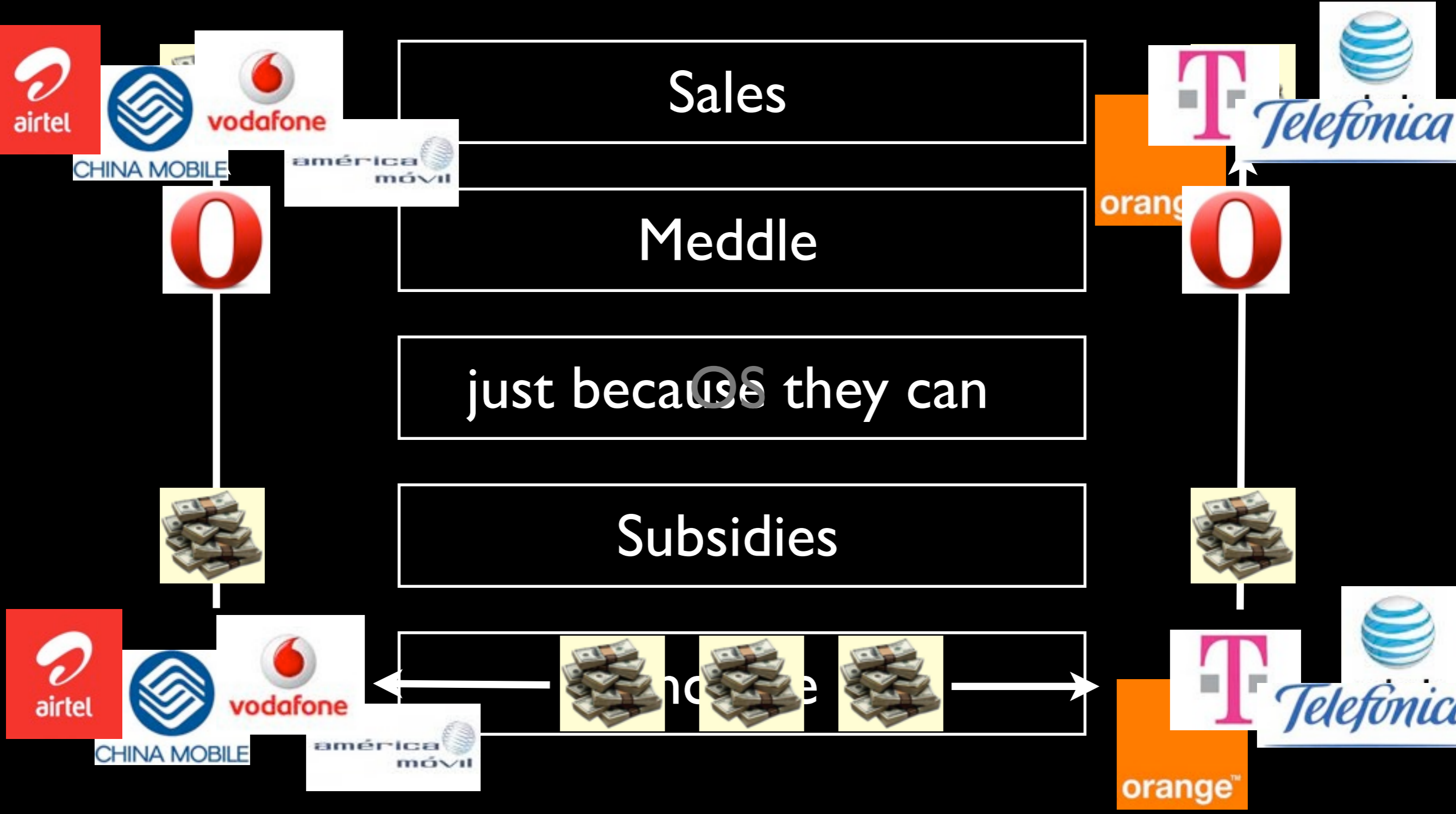
The Stack



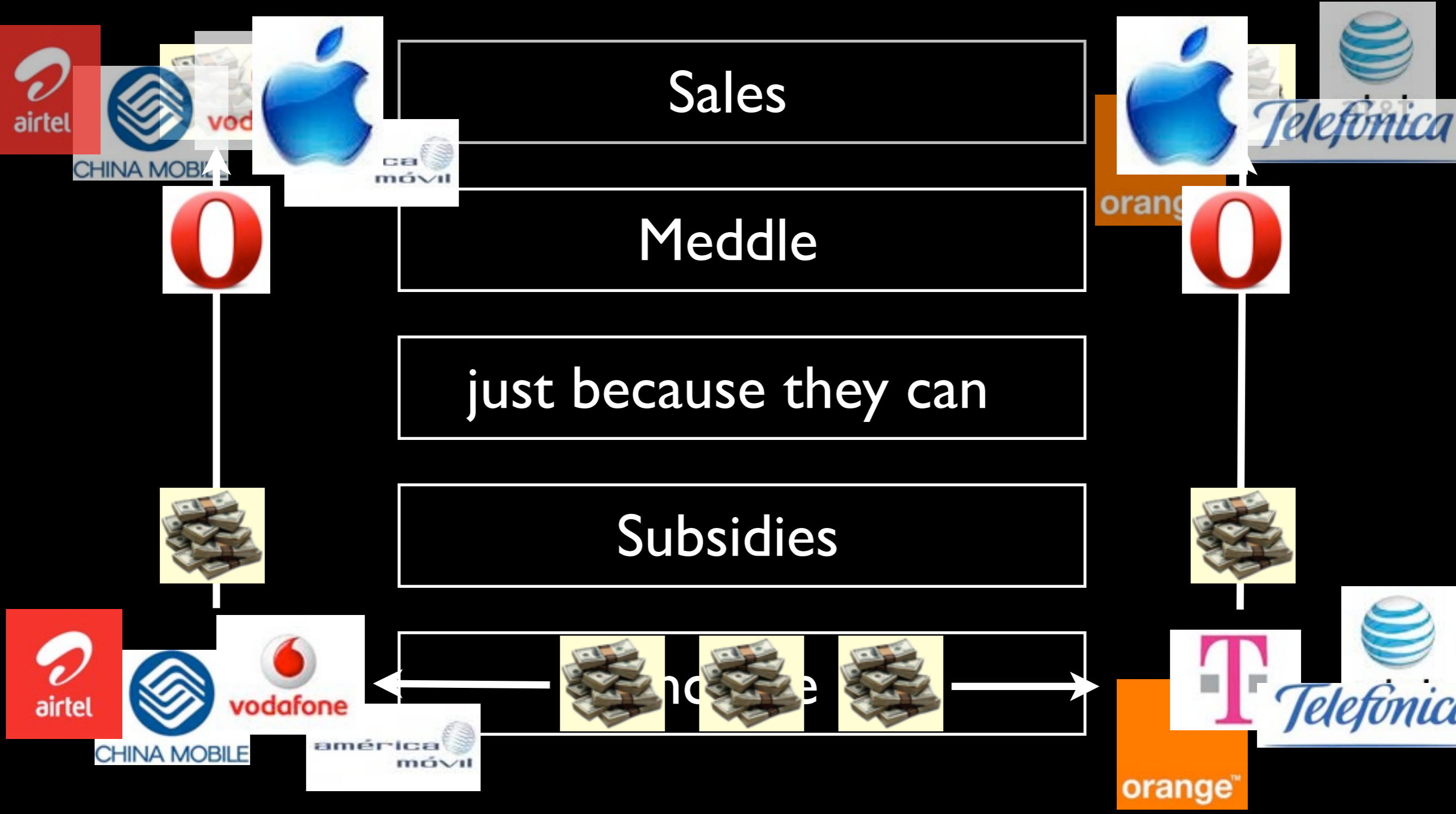
The Stack



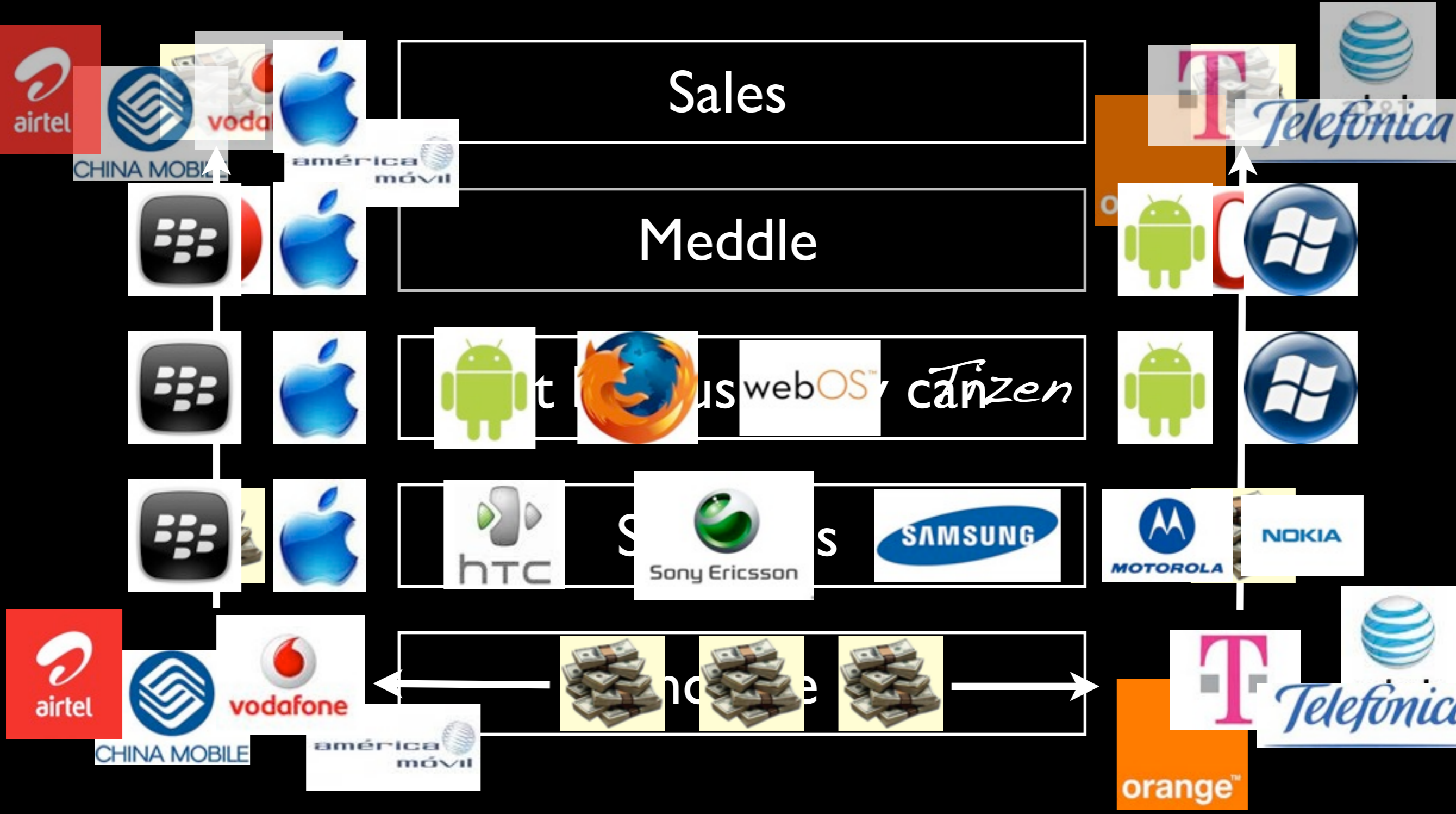
The Stack



The Stack



The Stack



The Stack

It's

complicated

Mobile browsers

- Safari
- Android WebKit
- Samsung 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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Which browsers?

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

What we need to know

- Screen size
- Connection speed (Not connection type! Wifi can be slow, 3G can be fast.)
- Information about memory and processor

Unfortunately the browsers only give the screen size;

and that only in JavaScript

while your server needs to know, too.

Setting up a device lab

- Save about \$100 per month. That allows you to buy two devices per year
- Buy a non-iPhone, non-Android
- Buy a non-touchscreen
- Buy an Android from a different vendor
- Install Opera Mini
- Swap devices with other companies or freelancers in your area
- Coordinate with them when buying new devices

Thank you

I'll put these slides online

Questions?

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