Opera for Mobile

Mobile Monday Tokyo

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OPERA software

Opera´s Vision

"To provide the Best Internet Experience on any Device"
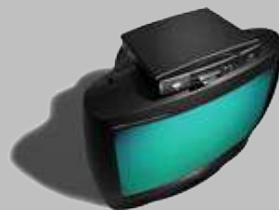
The Opera Markets

Mobile Internet
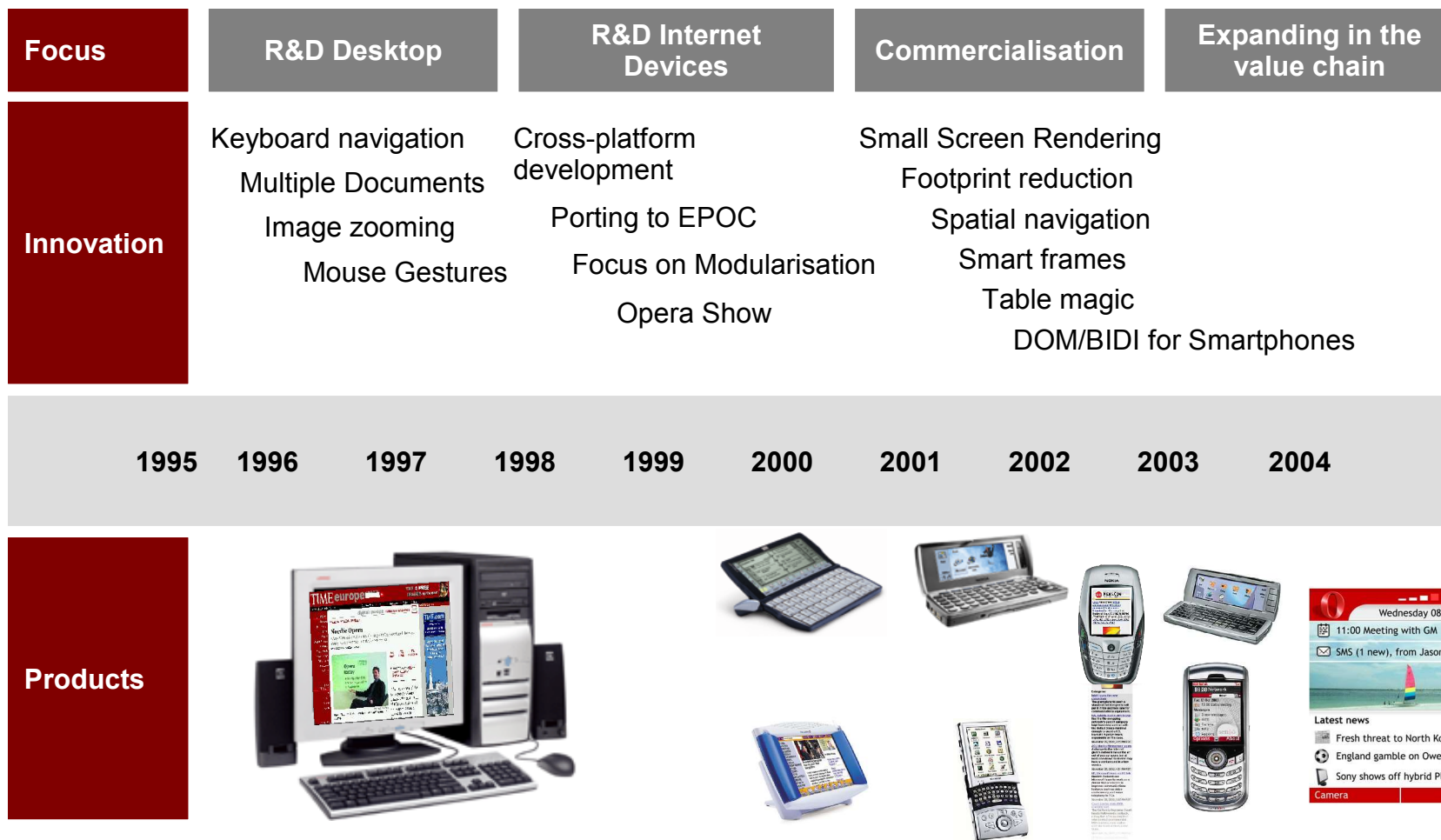
Current main focus

Home Media

Market opportunities

Desktop

Foundation and technological platform

Opera – The History

Focus	R&D Desktop		R&D Internet Devices		Commercialisation		Expanding in the value chain
Innovation	Keyboard navigation Multiple Documents Image zooming Mouse Gestures		Cross-platform development Porting to EPOC Focus on Modularisation Opera Show		Small Screen Rendering Footprint reduction Spatial navigation Smart frames Table magic DOM/BIDI for Smartphones		

1995   1996   1997   1998   1999   2000   2001   2002   2003   2004

Products

Opera in Japan Market

- ❑ Sharp Zaurus one of Opera's first devices
- ❑ Willcom (DDI Pocket) Kyocera 3001V is the first Opera phone for Japan market
- ❑ Motorola M1000 is the Opera phone for Docomo
- ❑ KDDI has chosen Opera as it's PC Site Viewer and has released 3 WIN handsets so far with Opera on BREW
  - ▪ Casio W21CA, W21CA2
  - ▪ Toshiba W31T

- ❏ Major Acquisitions - None
- ❏ New Product Lines - None
- ❏ Hardware Product Lines - None
- ❏ Operating System Products – None

Opera continues to grow our business by offering the best browser:
    - Best feature set
    - Best standards support
    - Best performance
    - Best code size
    - Best portability and flexibility
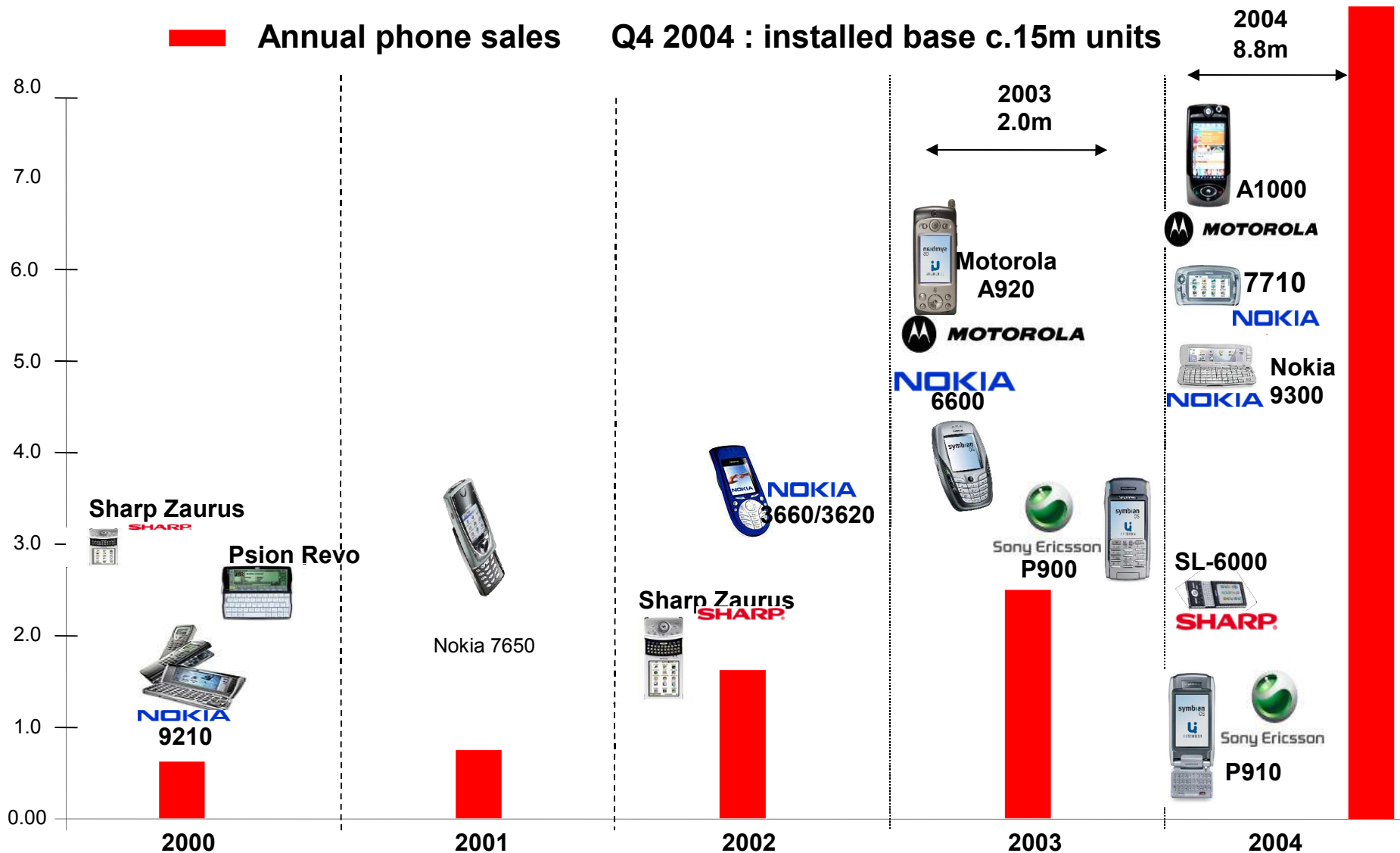   - Best security record

- Opera press releases

- # T-Mobile teams with Opera on SDA II Smartphone: Opera's first commercial deployment to Windows Mobile OS

- Oslo, Norway - September 2, 2005

- Opera Software, global leader in Web browser technologies, and T-Mobile agreed on equipping the new T-Mobile SDA II Windows Mobile Smartphone with the Opera browser as part of T-Mobile's "Web'n'Walk" offering. The SDA II is the first commercial deployment of the Opera browser for the **Windows Mobile 2003 Smartphone platform,** following its public release on June 30, 2005.

Opera's key strengths – Been around since day one

- Opera has more than 150 engineers
  - Some with more than more than 10 years of browser experience
- Opera have spent more than 600 000 development hours to get were we are today
- Opera have spent millions of hours testing the browser to get were we are today
- 10 years of focused desktop browser experience
- 6 years of focused embedded experience
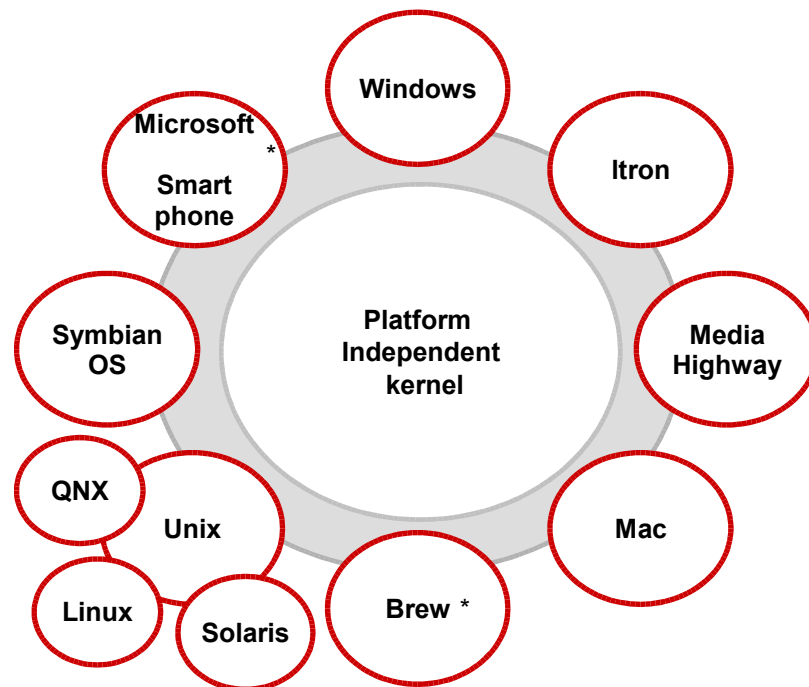
Desktop – since 1994

Embedded – since 1998

Opera's key strengths – leading technology, cross platform

Opera is the smallest full-featured browser

❏ Download 3.4MB (11MB with Java)

❏ Minimal browser is less than 1.3MB uncompressed

❏ Lower HW requirements

❏ Lower power consumption

Opera is the fastest full-featured browser

❏ Limited bandwidth

❏ Better Internet experience

Windows

Microsoft *

Smart phone

Itron

Symbian OS

Platform Independent kernel

Media Highway

QNX

Unix

Mac

Linux

Solaris

Brew *

❏ Significantly faster than the competitors in a number of tests

Opera is the most standard compliant browser on mobile devices

❏ Standards supported includes;

▪ HTML 4.0, CSS 1&2, XML, HTTP 1.1, SSL 2/3, TLS 1, Java Script 1.3, WML

Opera's key strength – leading rendering technologies

Desktop (764px)   **MSR (70% Zoom, 320px)**   **SSR 3.0 (176px)**   **SSR 2.0 (176px)**

Author design: 764px

70% Zoom → 530px

MSR → 320px

The mobile Internet delay

Why hasn't mobile Internet been a success?	Opera's solution

- WAP supposed to be more significant
  - Limited content on wap
  - Needs dedicated pages
- HTML browsers have not been small enough
- HTML pages were too big to download over 9600 baud
- Few browsers have been able to work with non-standard Street HTML
- No one managed to fit a full HTML page onto a small screen

- HTML browser needed to access Internet
- Opera has always had a small browser and now able to take this down to less than 1.3MB
- Opera is the fastest full-featured browser
- Opera has 10 years experience on the web and supports StreetHTML, XHTML, and cHTML
- Opera developed the SSR technology which makes the Web available on small screens
- Opera's architecture enables easy UI customization on any device

The secret behind Opera's "Small-Screen Rendering"

- ☐ Force width equal to screen dimensions

- ☐ Shrink images to screen width

- ☐ Ignore large images

- ☐ Ignore 468*60 banners & other large ad formats

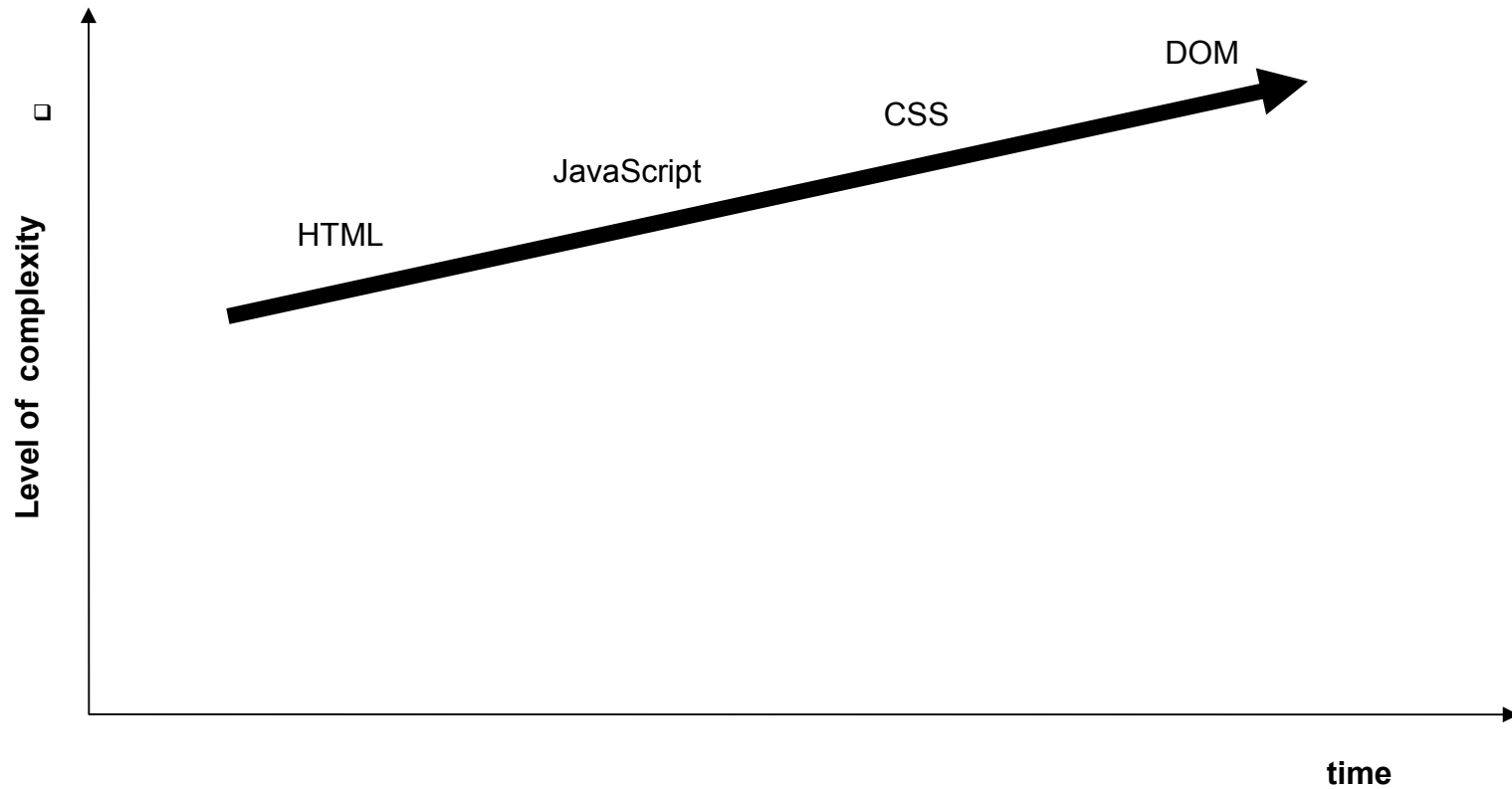- ☐ Ignore small images

- ☐ Center images

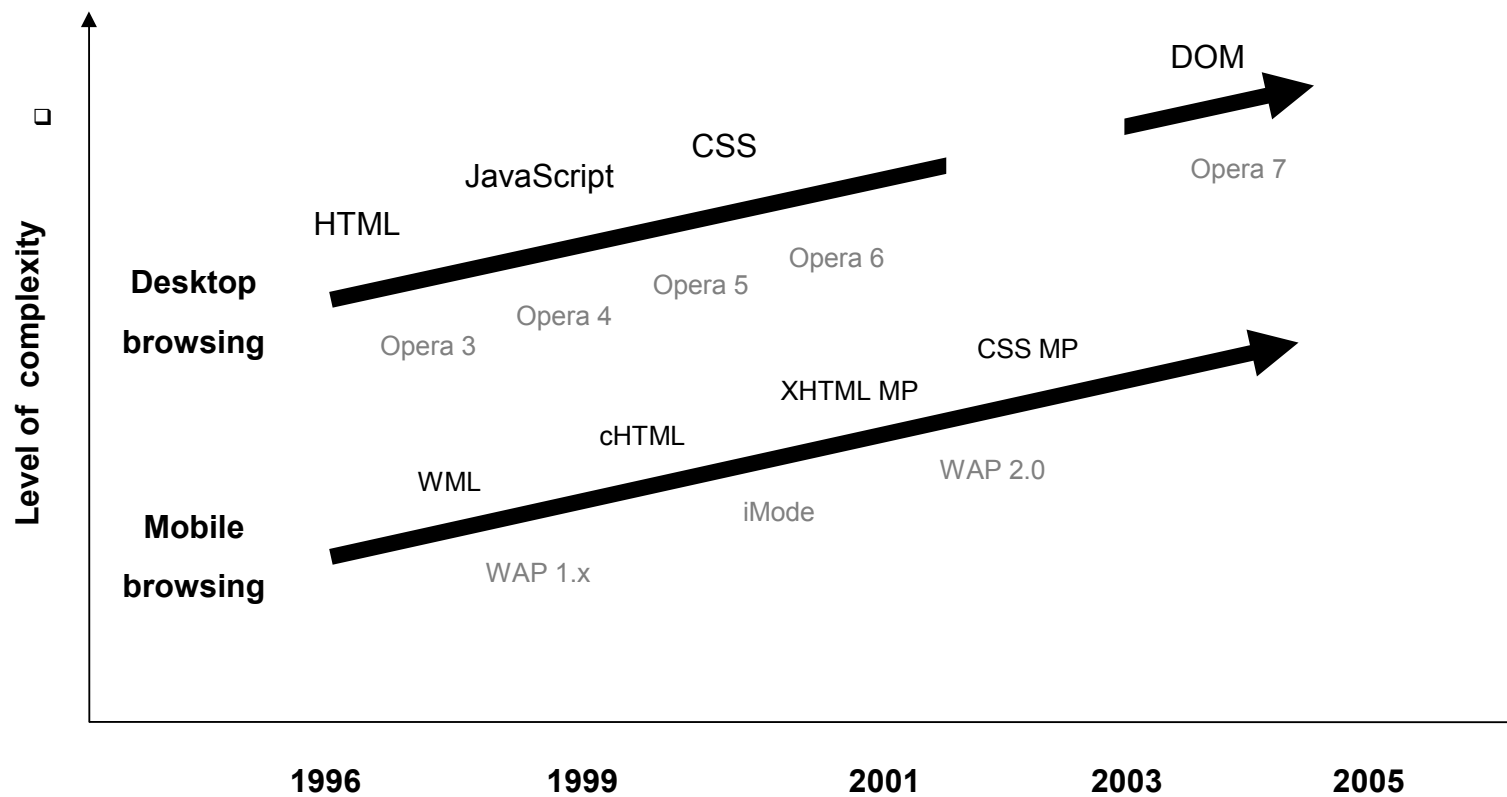# New operators continuously added to list of customers

Commercial status

- Orange, France Telecom R&D and Opera Software co-defining and co-developing next generation browser based, dynamic user experience
- KDDI has chosen Opera as a browser vendor for their 3G network
- Optimus shipping customized version of Opera on Series 60
- Telenor and Opera closely collaborate on next generation mobile services
- Several other Tier 1 and many Tier 2 operators actively investigating deployment
- Engaged with several phone vendors to deliver Platform on multiple Operating Systems
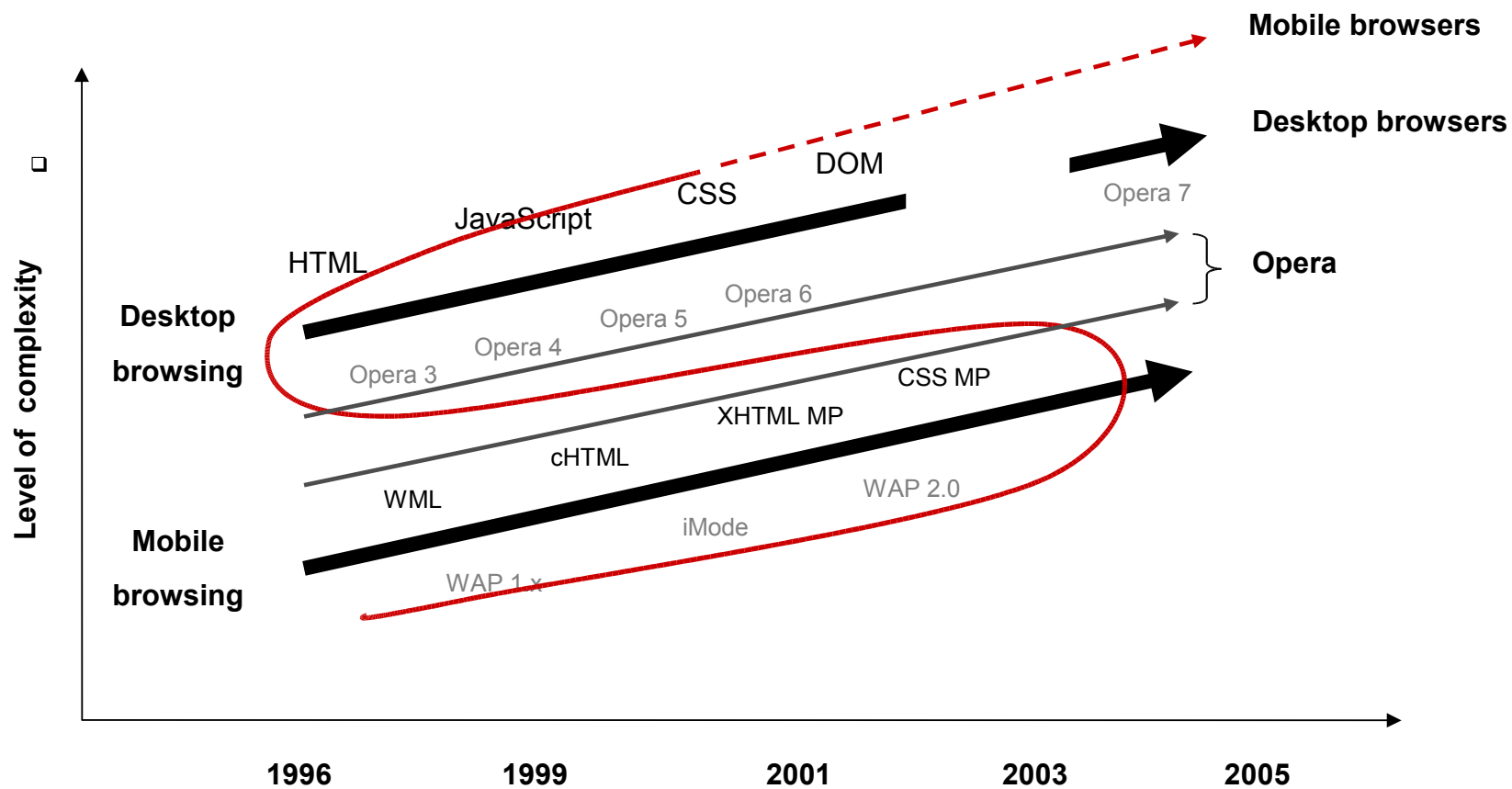
Are they catching up?

Web standard	What	Usecase
XHTML	Extensible Hypertext Markup Language, or XHTML, is a markup language that has the same expressive possibilities as HTML, but a stricter syntax.	Easy authoring of mobile content
CSS (Cascading Style Sheet)	A mechanism of adding style like colors font and spacing to documents. Separates content from layout to enable more efficient and richer management of graphical presentation. Key in providing customization and different 'looks and feels'..	Same service, many customer segments
DOM (Document Object Model)	Offers a model to access and update Web page content. It is platform-and language-neutral technology, tied to Web documents such as HTML, SVG, MathML, etc. Allows for dynamic manipulation of page fragments without full refresh, enabling interactivity and consuming less power.	Enable Web pages to become dynamic applications
Javascript (aka EcmaScript)	Scripting language for the Web. Together with HTML, DOM and CSS turns a 'dead' page into living breathing experience which will not just make Web content more interesting but also enables integration to native phone functionality that dramatically improves the end user experience.	Menus, Email, "Glue" between applications.
SVG (Scaleable Vector Graphics)	A W3C standard that has recently generated much interest in mobile circles. SVG is a vector-based graphics format for both still and animated images. Particularly at home in bandwidth constrained environments like phones due to its efficient structure and ability to scale without distortions.	Maps, stock charts, etc.

Dynamic browsers are the basis of the future

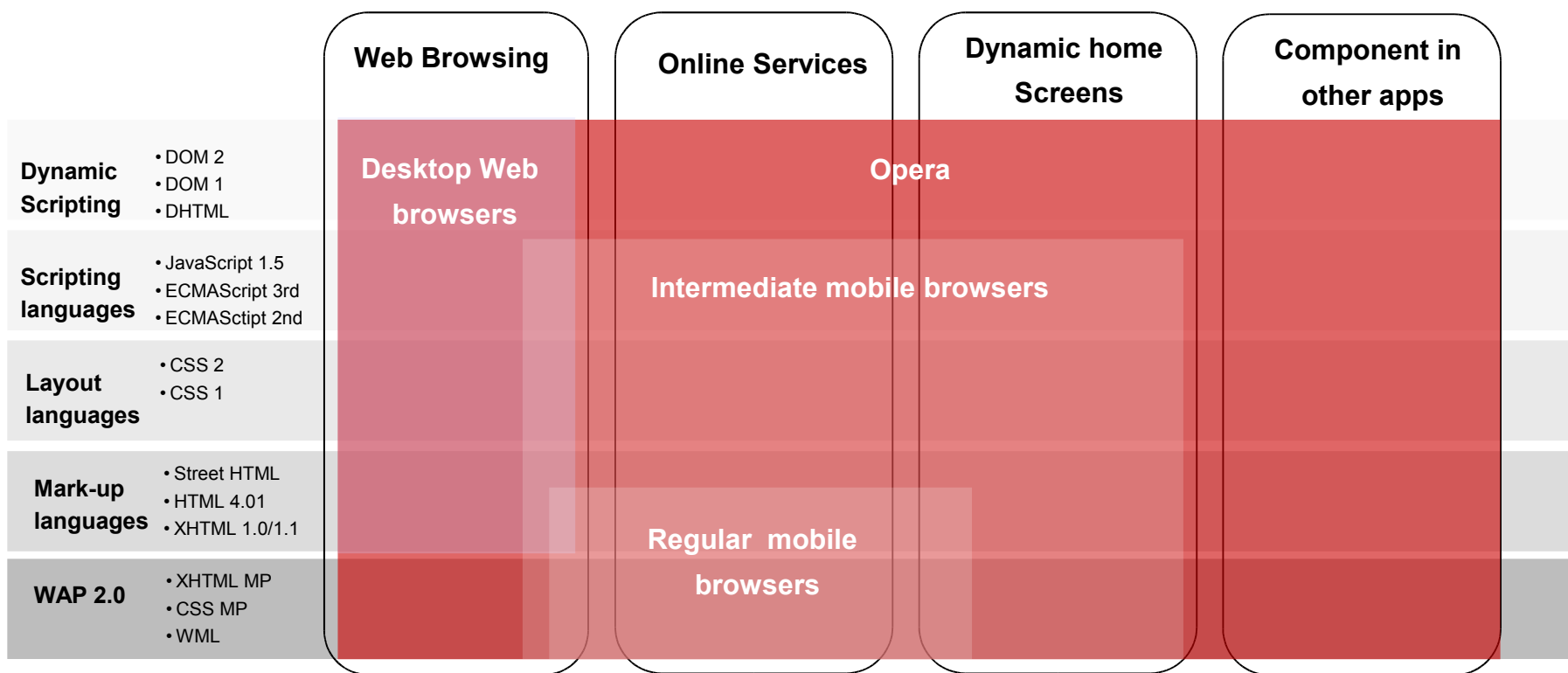|		Web Browsing	Online Services	Dynamic home Screens	Component in other apps
DOM	• DOM 2 • DOM 1 • DHTML				
Scripting languages	• JavaScript 1.5 • ECMAScript 3rd • ECMASctipt 2nd				
Layout languages	• CSS 1 • CSS 2				
Images	• GIF • JPEG • PNG				
Markup	• XHTML • HTML • WML				

Opera is best positioned for future development

- Desktop Web browsers**: Mozilla, Internet Explorer, Netscape**
- Full Internet and mobile browsers**: Opera**
- Intermediate mobile browsers: **Netfront, Pocket IE**
- Regular mobile browsers: **Openwave, Nokia Browser, Teleca**

		Web Browsing	Online Services	Dynamic home Screens	Component in other apps
Dynamic Scripting	• DOM 2 • DOM 1 • DHTML	**Desktop Web browsers**	**Opera**		
Scripting languages	• JavaScript 1.5 • ECMAScript 3rd • ECMASctipt 2nd		**Intermediate mobile browsers**		
Layout languages	• CSS 2 • CSS 1				
Mark-up languages	• Street HTML • HTML 4.01 • XHTML 1.0/1.1		**Regular mobile browsers**		
WAP 2.0	• XHTML MP • CSS MP • WML				

"[Opera's] new software will help transform the wireless Web from a misnomer into a reality."

- The Economist

"But now for the real news, and why I called [P800] "revolutionary", you can thank Opera."

- Andrew Orlowski, The Register

"Opera is an amazing piece of software. I think it's the application that adds more functionality to your Series 60 device than any other. [...] If I could add only one application to my phone this would be it."

- AllAboutSymbian, Review of Opera 6.20 for S60

"but le piece de resistance is the inclusion of the Opera browser for Series 60 [...]. The Opera browser is best described as being utterly brilliant."

- InfoSync, Review of Nokia 7610

"The Opera browser, that is not needed to be introduced to the reader, is also included into the kit. This is a de-facto standard for the mobile devices today."

- www.mobile-review.com, Review of Sony Ericsson P910

"Part of the reason I hated my first 7610 [prototype] was because it wouldn't run Opera. It's *that* important of an app..."

- Russell Beattie, Review of Nokia 7610

"It is really impressive. I've been playing with it for a while now, and the browsing experience is unsurpassed on smartphones. This is a killer app if ever there was one."

-Rafe Blanchard, All About Symbian

"If you do much web browsing do yourself a favour and go download and install Opera, it spanks Nokia's browser all over the place."

- MobileTracker, Review of N-Gage QD