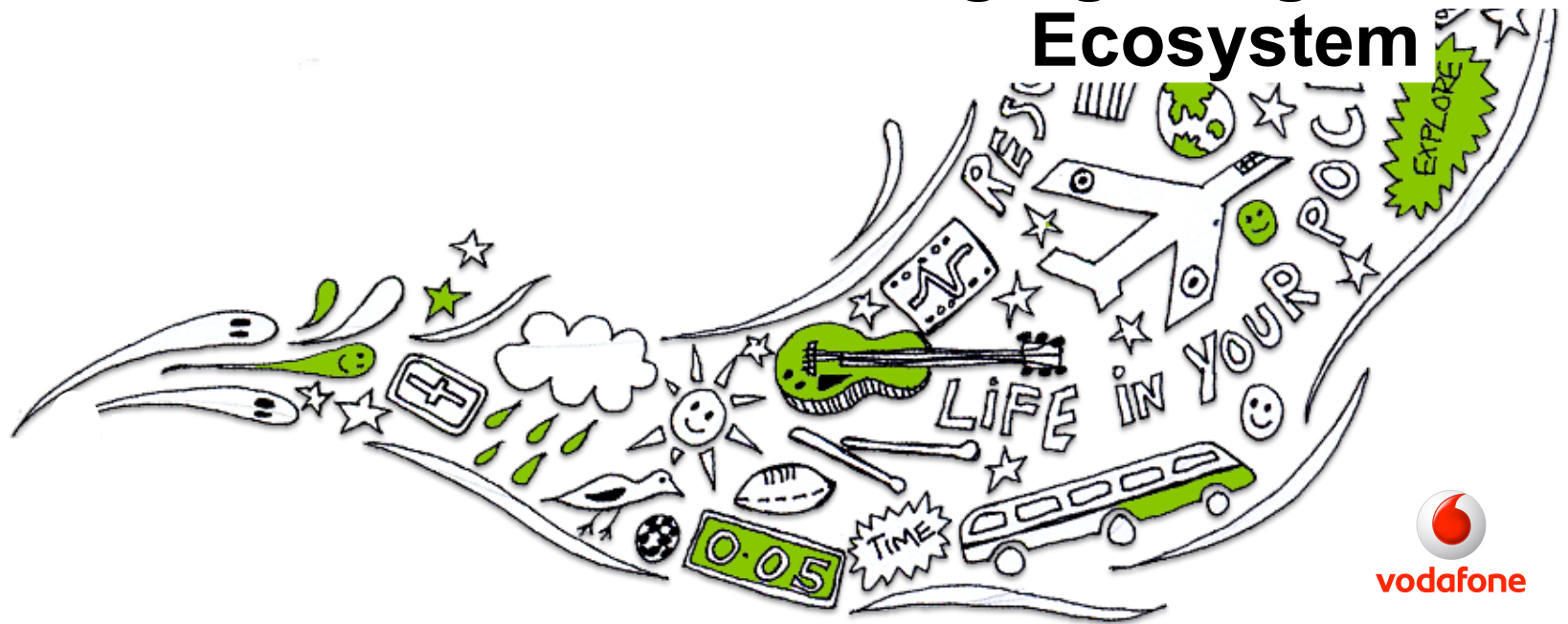


Daniel Appelquist

22 April 2009

The Emerging Widgets Ecosystem



Contents

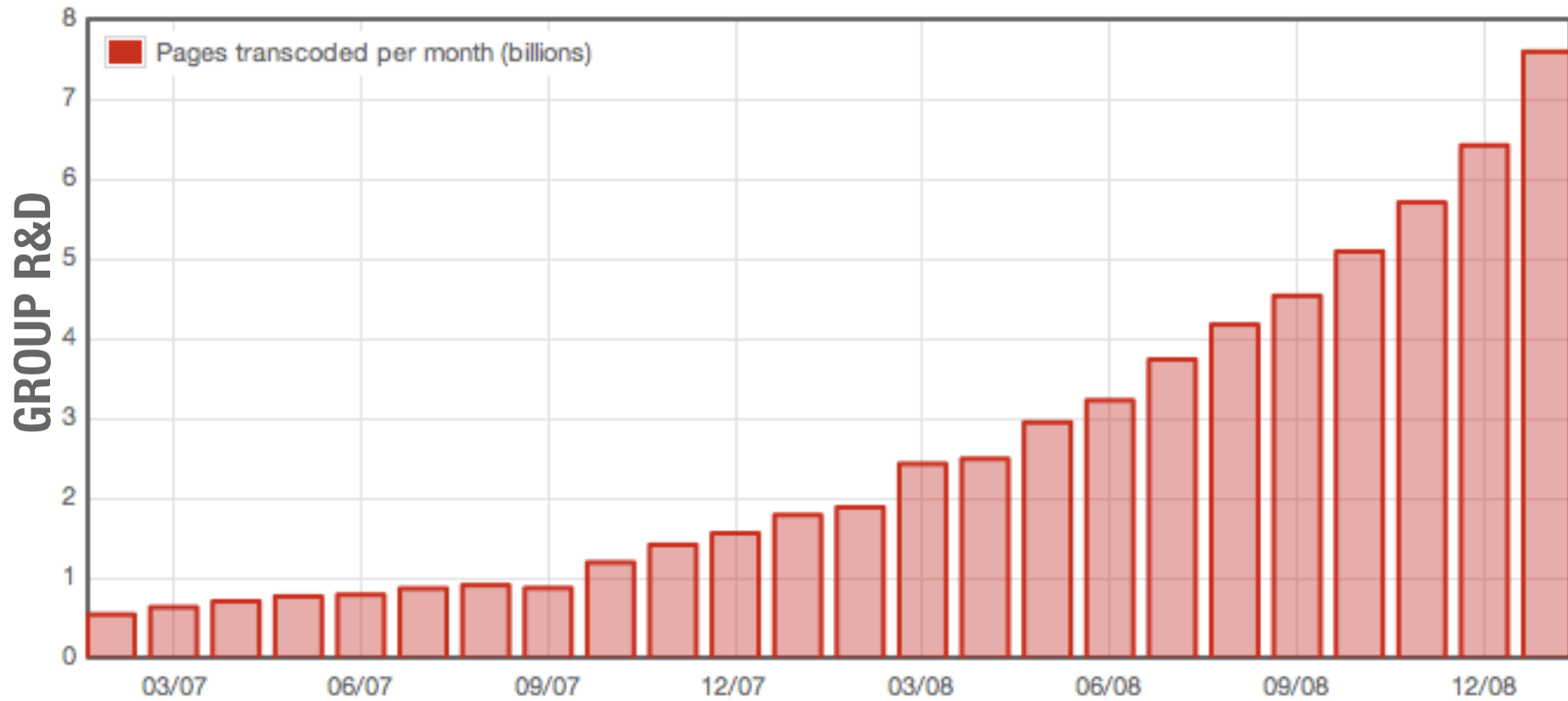
1. Intro
2. The mobile Web, past present and future
3. What's in a Widget?
4. Vodafone's Widgets Beta (and how to win £20,000)
5. Widgets and the Social Web
6. ...the future?

The mobile Web isn't what It used to be...

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Opera's Mobile Web Usage Data (Jan 2009)



Top 11 Mobile 2.0 Trends

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- Smart mobile browsers
- Mobile Web Standards
- Mobile Ajax & Widgets
- Mobile Search
- Mobile Ads
- Mobile Mashups & Open APIs
- Mobile RFID & 2D Barcodes
- Location and Geotagging
- Mobile Social Networks
- Mobile User Generated Content
- Smart Web Devices

In collaboration with:
전종홍 (Jonathan Jeon)
ETRI&W3C, South Korea

Mobile Web Applications

- The Web has grown from a page-based metaphor into a full-blown application platform
- Most things you used to need a special application for you can now do on the Web
- The Mobile Web is going the same way
- Advanced browser features enable interactivity and application-like behavior
- Mobile Web pages become compelling user experiences
- Guidelines for Mobile Web Applications developers in progress in W3C:
<http://tinyurl.com/cv9exv>

Widgets

- Take Mobile Web Applications to the next level
- Build mobile applications using Web technologies familiar to millions of developers
- Package these Web applications up in a standard cross-platform way (W3C)
- Enable these applications with (secure) access to device capabilities through APIs
- Deploy into a Web Run-Time environment (analogous to a Web browser, but windowless and integrated into the device UI)
- Create a clear proposition for the developer and a route to market
- Cross-platform mini-applications, built on open Web standards that are easy to write and deploy and leverage a well-understood security model



Mobile Widgets are most evolved content format

(Richness, Reach and Rapid/Simple Route to Market)

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| Key characteristics | WAP | JAVA/NATIVE APPS | BROWSER-BASED WIDGETS | ON-DEVICE WIDGETS |
|---|-----|------------------|-----------------------|-------------------|
| Can operate on/near idle screen | ○ | ◐ | ○ | ◑ |
| Functions even when device is offline | ○ | ● | ○ | ● |
| Interacts with device features (camera, contacts, calendar) | ○ | ● | ○ | ● |
| Can dynamically update itself via content pull/push | ○ | ● | ○ | ● |
| Easy for developers to leverage existing website code | ◐ | ○ | ● | ● |
| Ease and speed of porting across mobiles | ◑ | ◐ | ◑ | ◑ |
| Current availability on devices | ● | ● | ◑ | ◐ |

key white = 0%/not at all
black = 100%/totally



Widgets Extend the Web

- Widgets use existing Web technologies
 - HTML, JavaScript, CSS
- Packaging and configuration standards being developed in W3C
 - In development in Web Applications working group
- Complimentary to off-line capabilities of HTML5
- Widgets may be updated automatically
- Access to device capabilities will be standardized as well
 - W3C Geolocation API working group – referenced by OMTP BONDI
 - OMTP BONDI interfaces

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Widgets are at the epicenter of the Mobile <-> Web Convergence



The Twiggy Story

Twiggy – the Mobile Twitter Search Widget

- Built by Carsonified for Vodafone to help promote mobile widgets
- Built in 2 days
- Employed normal Web developer techniques
 - jQuery
- Resulting application was wigitizable and also worked as a WebApp
- Social search use case – ideally suited for mobile widget
- Case in point that it's easy for Web developers to build Widgets

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Vodafone Developer Engagement

Betavine Widget Zone

betavine

An open community for mobile application developers

A Vodafone Group R&D Lab 

Google Custom Search Search

[Sign In](#) | [Join](#) | [About](#)

[Home](#) [Applications](#) [Resources](#) [Forums](#) [Events](#) [Members](#)

WIDGET ZONE
Research. Develop. Distribute.

Q: What is a widget?
A: Widgets are simple applications that give users easy access to the web

Get started
What can I do on the Betavine WidgetZone?

Develop
Get resources on:
■ Opera Widgets SDK
■ Best practices & templates
■ User experience guidelines
■ Content standards & submission process

Upload!
Want to distribute your widget to over a million customers in 5 countries?
Get details on our acceptance criteria and launch updates

Vodafone Widgets (Beta)

Coming soon
upload!

[More widget resources](#)

[Recent Posts](#)

Inter

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- Leverages existing 'neutral' R&D developer channel & support infrastructure

- December '08 - launch, initially supporting Opera SDK
- February '09
 - Betavine developer competition £20k cash
- Ability to upload to 5 of the biggest Vodafone markets (ES, IT, UK, DE, ZA)
- Availability of our WDK (our extensions to the Opera SDK)
- Availability of a developer version of the Apps Manager, so developers can test on a real handset even without a Vodafone-specific SIM

Mobile Widget Programme



£20,000 PRIZE

Entries still being accepted until the end of April

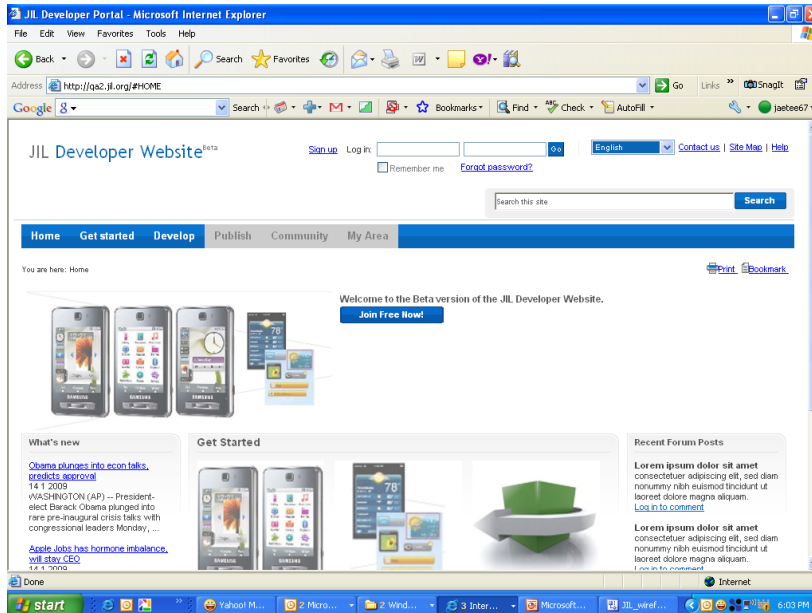
See <http://betavine.net>

Vodafone is Part of the JIL

Joint Innovation Lab (JIL) – alliance of Vodafone Group, SoftBank Mobile, China Mobile & Verizon Wireless

- 1st April, Verizon Wireless Joined JIL
- H2 '09, JIL to launch developer website incl. SDK

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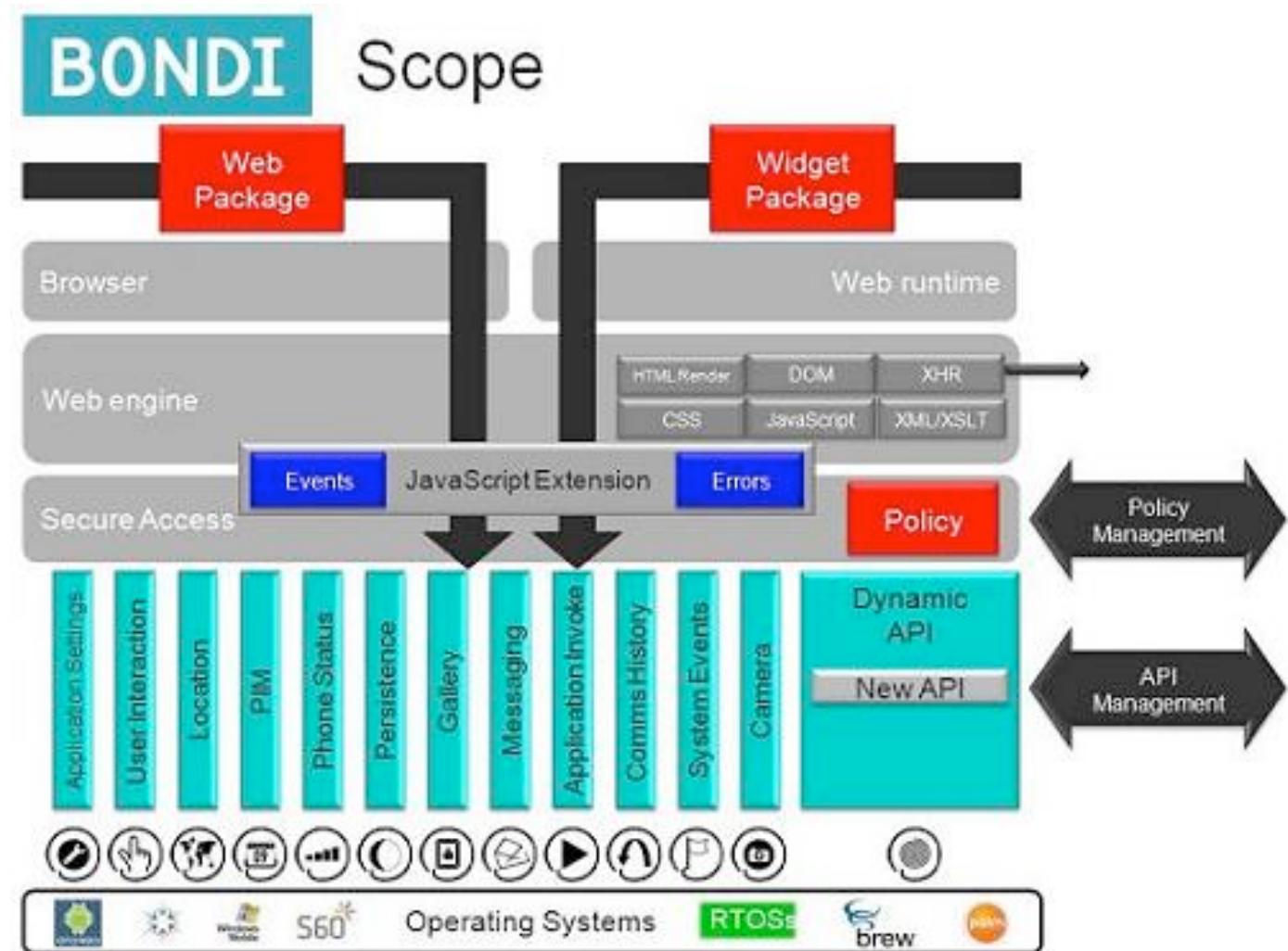


- Offers a single JIL SDK and distribution point for developers to submit widgets across multiple handset OS and markets.
- Potential audience of up to 1 billion combined customers
- Ability to reach out to the long tail of **local** developers to build **locally** relevant App catalogs

Mobile Widget Programme

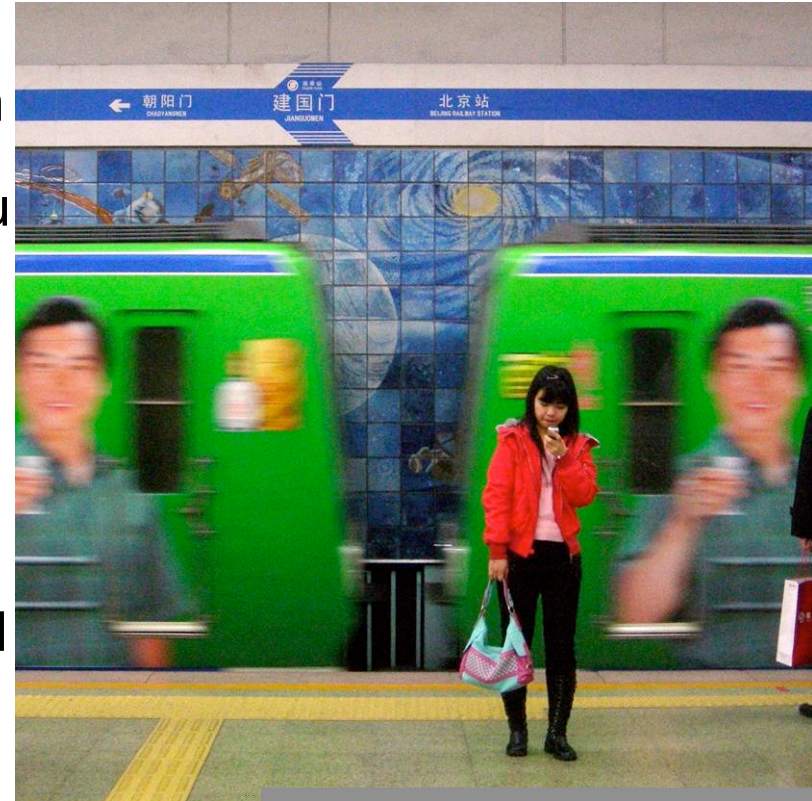
Widgets: The Next Chapter

- BONDI – Secure access to device capabilities
 - Location
 - Camera
 - Address book
 - Calendar
 - Media
 - File system
 - Sensors



Mobile Widgets Are Made for the Social Web

- Social applications for people on the go
- New mechanisms for communication
- Bringing your social network with you
- Proximity-based applications
- Location-aware social apps
- Mobile location-based gaming
- Ubiquitous access to information and communication



Resources

Betavine: <http://betavine.net> (and visit our stand)

£20,000 give-away

Widget blog: <http://betavine.net/widgetblog>

W3C Widget Day @ WWW2009: Tomorrow!

OMTP BONDI: <http://www.omtp.org/bondi>

Vodafone Widget Camp – Amsterdam, 2nd May:
<http://mobilewidgetcamp.nl>