

Industry Update - April 2008

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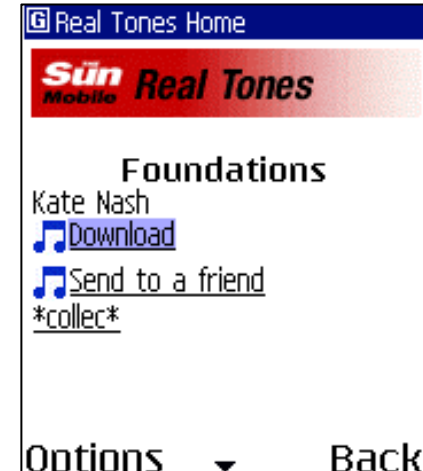
www.bango.com

Industry Update Topics

- Payforit
 - Update and operator status
- Transcoders
 - What's all the fuss about?
- Search Companies
 - Google, Yahoo
- Device technology
 - The iPhone effect
- Smartphone growth
 - How to operate in a Blackberry world
- Data charges
 - Bundles, zero rated trials













The Payforit user experience



- Operator-like shopping experience
- Billing within the WAP session
- UK Payforit compliant
- No hidden costs
- T&Cs clearly displayed
- Build consumer trust

Payforit update



| <u>Operator</u> | <u>Enabled on Bango</u> | <u>Payforit Compliance Deadline</u> | <u>Opt-in box rules</u> | <u>Benefits of using Payforit</u> |
|---|--|---|--|---|
| 3 UK  |  V1.3 | Expect within 3 months | Not normally pre-checked (unless prev. notified)  | All on-portal advertising must lead to PFI billed services |
| O2 UK  |  V1.3 | Mandated 1 st Sept 2007 (All WAP services) | Must not be pre-checked  | No red cards! |
| Orange UK  |  V1.3 | Expect within 3 months (In progress) | Must not be pre-checked  | 1) Must use PFI to access Orange "Direct Bill" 2) MSISDN passing |
| T-Mobile UK  |  V1.3 | Mandated 1 st Sept 2007 | Can be pre-checked  | Must use PFI to access T-Mobile "TPG" billing |
| Virgin Mobile UK  |  V1.3 | Expect within 6 months | Must not be pre-checked  | |
| Vodafone UK  |  V1.3 | Mandated from 18 th April 2008 | Can be pre-checked  | 1) All on-portal advertising must lead to PFI billing. 2) Higher payouts for PFI |

- Bango continually improves Payforit compliant user flow

Safe Payforit subscriptions

- Easy to set up with Bango
- Easy sign up for the customer
 - Clear price display
 - Clear subscription period display
- On-handset subscription management
 - My Subscriptions
 - View payment history
 - Cancel
 - Reinstate
- Payforit compliant



Mobile Transcoders

“How To Make a Transcoder:

- ***Step 1 - Use proxy server to anonymously grab content from the web***
- ***Step 2 - Remove all JavaScript and embedded objects (i.e. advertising)***
- ***Step 3 - Remove all colors, formatting and layout (i.e. branding)***
- ***Step 4 - Cut up into unusably sized pieces (small or large) and deliver to user***
- ***Bonus Point - Don't reduce images or remove them all together***
- ***Bonus Point - Add your own logo and/or copyright notice on page ”***

With thanks to Mowser

“Different people tackle the problem in different ways

- ***Apple: Adapt the phone to the web.***
- ***Opera: Adapt the web to the phone.***

*But then, there's a third option: **Bulldoze everything with a transcoder, including sites which are already mobile, and don't shed a tear for the casualties.**”*

With thanks to taptology

Mobile Transcoders

- What they do
 - Take any website and adapt it for mobile (allegedly)
 - Add **operator** navigation
- Why some operators have adopted them
 - Increase the number of sites available to their subscribers
 - Make the mobile a more useful tool
- The main companies
 - OpenWave – OpenWeb product
 - Novarra – Vision product
- How to ensure you don't get into trouble
 - Get Whitelisted
 - Complain loudly if you have a proper mobile site
- Spanish market is recovering

Search Companies in Mobile

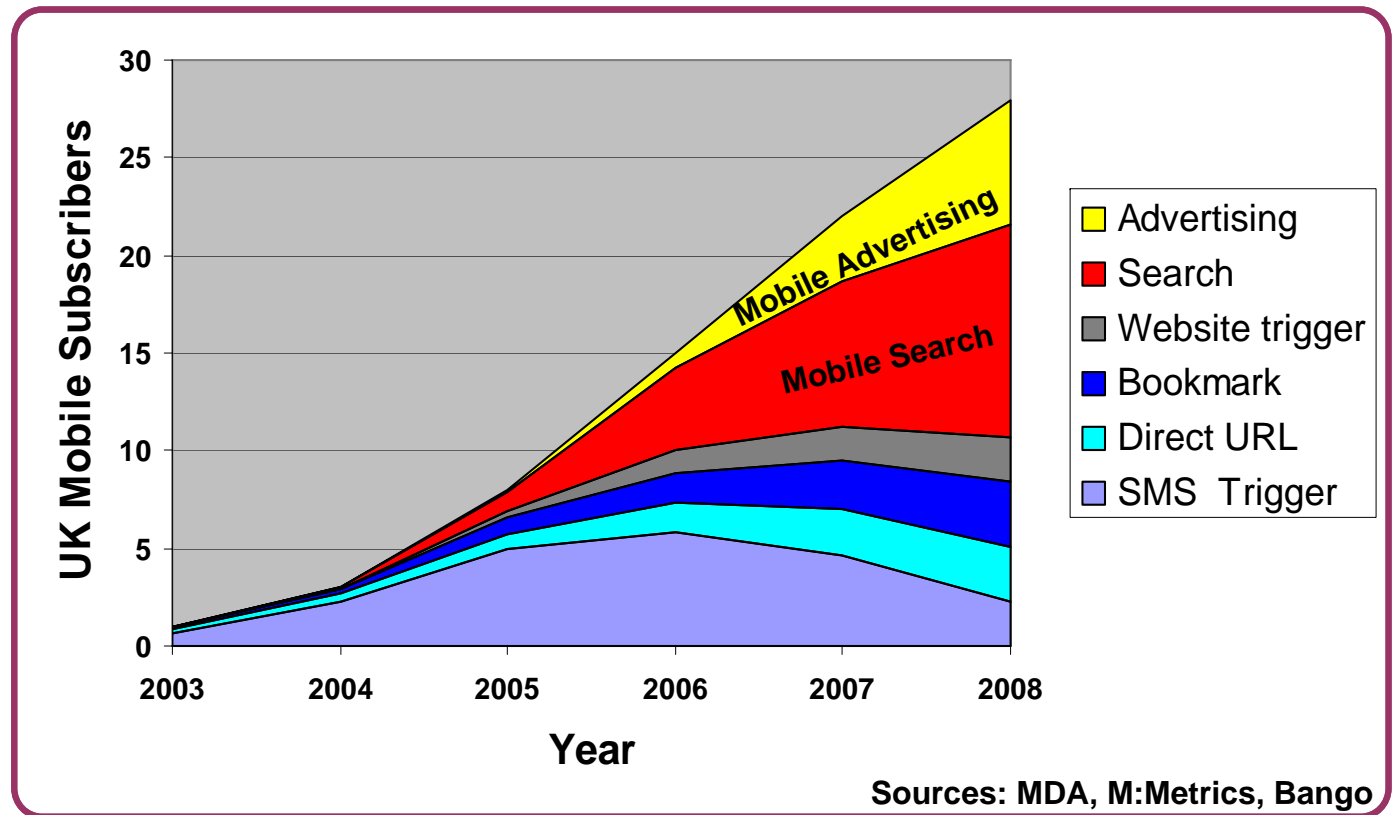
- Google
 - Focus on Android – appears to be at the cost of mobile search and other activities
 - “Control the handset approach”
- Yahoo
 - Launched “Panama” - better mobile tools but not yet bedded down
 - OneSearch updated
 - Yahoo Go launched
 - “Mobile Web approach”
- Microsoft
 - Bought Motionbridge and working on integration
- Several others:
 - Jumptap, Medio, Taptu



Mobile Advertising

- Google
 - Mobile Adwords
- Yahoo
 - OneSearch PPC results
- Admob
- Medio
- Admoda
- Mkhøj
- Screentonic
- MADS
- Quattro Wireless
- Plus many more

Direct to consumer market – access methods 2003-2008



The iPhone – a must have gadget for technophiles

Attributes

- Fantastic user-interface
- Superb photo viewer
- Excellent applications
- Great music player
- Good browser (on WiFi)
- Reasonable camera
- Mediocre phone
- Poor games console
- Terrible for security

Effects

- Encouraged mobile web browsing
- Has made the other handset manufacturers wake up and listen to user feedback. New devices on their way in 2008:
 - LG Voyager; Nokia “Tube”; Sony Ericsson “Cybershot phone”



Smartphone growth

Popular due to:

- Email anywhere anytime
- Full keyboard
- 2.5G/3G/WiFi

Challenges:

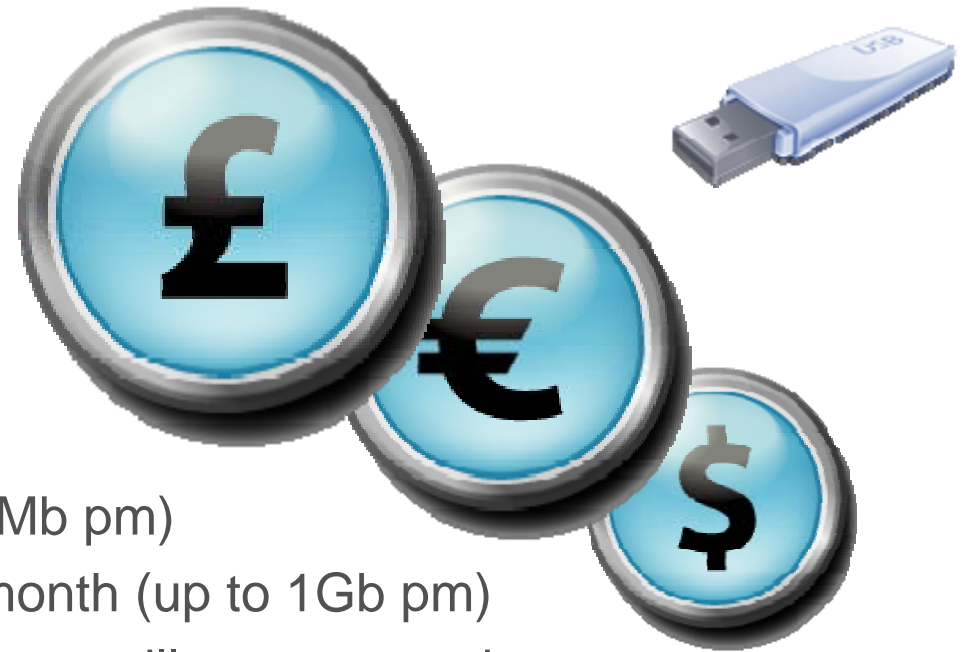
- Don't always use operator WAP gateway
- Flip between connections 3G & WiFi
- Users have to register or log-in
- Bango is lobbying operators so we can automatically identify Smartphone and Blackberry type devices.



Data charges

UK Data tariffs

- Most operators have several plans
- “Stop the clock” is popular;
 - £1 per day (Vodafone & T-mobile)
 - £2 per day (Orange)
- O2 “bolt-ons” £7.50 per month (up to 200Mb pm)
- T-Mobile “Web’n’Walk” from £22.50 per month (up to 1Gb pm)
- Virgin Mobile £5 per Mb off-portal browsing – still very expensive



Trends

- Data bundle is becoming a big part of the mobile sales pitch
- There are a few trials with wholesale data tariffs.
 - Zero rated to the consumer, these are an interim tactical step.
 - Hard to explain to consumers when it differs by operator.

Q and A