WebRTC: What is it & why is it important?
Dean Bubley, Disruptive Analysis

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About Disruptive Analysis

- London-based analyst house & strategic consulting firm
- Cross-silo, contrarian, visionary, independent
- Advisor to telcos, vendors, regulators & investors
- Covering VoIP since 1997 & 3G/4G mVoIP since 2007
- Published report on “Telco-OTT Strategies”, Feb 2012
- New report on WebRTC, Feb 2013, updated Jun & Oct’13
- Workshops on Future of Voice & TelcoOTT

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Forget about the technical definition….

WebRTC is a way to “democratise” the use of voice & video communications beyond traditional phone calls.

It enables developers to embed “real time” communications directly into websites & apps in innovative ways.

It also permits low-latency streaming data between browsers.

This significance of this is huge & underestimated.
Remember these?

Creating & distributing standalone applications is **hard & limiting**
Design & software made simpler via the Web
In a nutshell: What’s different about WebRTC?

- Easy
- Flexible
- Now
Benefits of WebRTC

- Democratises voice & video in websites & apps
  - Goes far beyond Adobe Flash
  - Much easier than “traditional VoIP”
- Add context to communications & vice-versa
- Cheap / easy / open-source components
- Advocacy from Google, major vendors, telcos, IETF, W3C etc
- Inherent flexibility (signalling, cloud, P2P vs. server etc)
- Growing ecosystem & momentum even pre-standardisation
- Realtime data even more disruptive
Many use-cases & sectors
WebRTC implementation: desktop & mobile

Most WebRTC on PCs will be “inside the browser”

On mobile, it’s more complicated

Native browser  Natively in OS  2nd browser  3rd party SDK

WebRTC also now appearing built-in to other devices
Voice ≠ Telephony

Now: PSTN, VoIP, 2G & 3G

Future: WebRTC, APIs, apps/browser

Voice

Telephony

Video

Voicemail

Conferencing

PTT

Gaming, CEBP, surveillance, social voice, TV voice etc

Video, context, sense

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Dirty little secret: Phone calls are an old, clunky, compromised product

“Hegemony of the caller”
Better than “being there”

“There”—same place and time

Telephony aspires to be “like being there”
The chart you’ll never see…

Phone calls by purpose

- Gossip
- Meeting up
- Flirting
- Spam
- Showing off
- Work
- Wasting time
Different contexts

Living room

Board room & Multi-tasking
Concentrating
Drunk
Asleep

Out walking

Public transport

Airline lounge

At work

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1 OR 2 “UBIQUITOUS” SERVICES CANNOT FULFILL ALL THESE PURPOSES WELL

(MORE LIKE “DUMB SERVICES” THAN UBIQUITOUS ONES)
Voice/video moving from service to function

**Service**
e.g. SMS, Telephony

**Product**
e.g. Viber, Uberconference

**Feature**
e.g. In-game chat

**Function**
Fragmenting voice/video is happening anyway

WebRTC has appeared at exactly the right time & right place
WebRTC supported on >4bn devices by 2016

Installed base, m

- Other
- Tablets
- Smartphones
- PCs

Source: Disruptive Analysis WebRTC Strategy Report update October 2013

January 2014
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The battle for the soul of WebRTC

Existing web services

Adding real-time comms capabilities

Extending via the web, blending web capabilities

Existing realtime comms services

?
View Oct’13: lead WebRTC use-cases

Early enterprise adoption
- “Call me” buttons
- Contact centre
- First telehealth apps

Initial consumer web apps/devices
- Remote 1-1 education/training/sales
- Free standalone video-calling
- Chromecast
- Developer SDKs & APIs

Live & commercial
- Vertical niche solutions (finance, health)
- Corporate conferencing
- Full enterprise UC

Trials & demos
- Telco core/IMS extension
- Entertainment & consumer electronics
- M2M, CDN & data-centric apps

Pilots / pre-commercial
- Vertical niche solutions (finance, health)
- Corporate conferencing
- Full enterprise UC
## Early WebRTC deployments & services

<table>
<thead>
<tr>
<th>Call centres</th>
<th>Conferencing &amp; chat</th>
<th>Developer platforms/infrastructure</th>
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<tbody>
<tr>
<td>zendesk</td>
<td>TenHands beta</td>
<td>tokbox</td>
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<td>SkyWay</td>
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<td>appear.in</td>
<td>NTT</td>
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| Expert Market         | Dating                  | CDN                                 |
|-----------------------|-------------------------|                                     |
| live ninja            | Available               | Streamroot                          |
|                       |                         | OnDello                             |

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<th>Healthcare</th>
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Main WebRTC strategies for SPs?

- Extend on-net services & IMS / SS7
- Turbocharge Telco-OTT apps
- Strengthen enterprise & verticals
- Enhance developer platform
- Sell packaged WebRTC services to subscriber

Also: invest / incubate
Improve own CRM & systems
Maybe M2M, devices etc
For telcos WebRTC is really a magnifier/catalyst

Now

With WebRTC
Bigger opportunities
Worse threats
Faster speed
Conclusion

- WebRTC is maybe most exciting thing in comms for 10 years
- Already here & being used
- A “movement” as well as a standard
- “Democratisation” of voice & video into web & apps
- Goes beyond traditional “call” model of user interaction
- Realtime data will be the real surprise
- Not just about browsers
- A new ecosystem for developers, telcos & cloud players
- Billions of devices & users!