

Notes from OpenTech 2010

11th sept 2010: OpenTech, ULU, London

Data.gov.uk talk

- Richard Stirling – Cabinet office.
- Standards... linked data api... NAPLAN is part of those standards... focus on small lightweight patterns... core patterns that can then be specialised. E.g. Data cubes – developed general standard for these, then specialization for payments etc.
- Important: ids for space & time. E.g. <http://reference.data.gov.uk/id/day/2010-09-11> or <http://transport.data.gov.uk...wat>
- <http://Source.data.gov.uk/gridworks> - OS tool for viewing spreadsheet-type displays of govt data. Easy to view data / search through this... could have done with this when was looking for UK LAs. NB can reconcile each column against another data source. Other tools: RDFizer... data enrichment service – gov.tso.co.uk – highlighting recognized text (just off dictionary?) .
- <http://Legislation.gov.uk> Developing standards for publishing information... info for people and data for apps. Any pages : append /data.feed to bring back an atom list. /data.xml will bring back underlying xml. /data.xht brings back plain html. /data.rdf gives metadata. i.e. human website, with access to information underneath it.
- Linked data api... restful api over linked data – maps rdf into human-readable. “avoids having to use sparql”. Default return xml, but also json... can filter via ?x= in url.
- <http://Danpaulsmith.com/gov/orgvis/?dept-bis> ... doing visualisations for DBIS.nOngoing work: “standards, data, production processes and publishing”. Asking for open help...
- Q... linking legislations... working with UniSheffield GATE tools – auto id amendments...
- Q: check <http://data.gov.uk/blog> to find out what they’re doing.
- Q: anyone can implement gridworks api... gridworks development company are now owned by google who are changing its name.
- Q: govt monitoring & authentication of data. See Richard session this pm. Focus on provenance because “repeatability as basic of trust”.
- Q: provenance. Is there machine access to allow auto provenance checks? Work on generic provenance standard, that can access in a machine-readable way. “doing provenance on the web is something that the entire web community is still learning how to do”.

LinkedGov talk

- Hadley Beeman, @linkedgov Hadley@linkedgov.org “the tidying-government-data project”
- Idea - is getting govt data in multiple formats, and all understandable (e.g. no codes)
- Reality – is codes and acronyms, holes in data, multiple formats, lack of modeling & connections. People with answers to these, keen to help, in LAs and govt... getting same

queries from multiple places. Need to provide answer once, in way that's easy for the civil servants.

- Response – data sets → crowdsourcing module (la/govt) → formatting/structure/modeling -? Search/query/filter tools & apis → app, visualisation, search site. Big focus on crowdsourcing. Doesn't appear to be built yet.
- Crowdsourcing: decrypting budget codes, acronyms; dealing with labels and annotations. E.g. label for a 'wrong' piece of data that's already been used.
- Formatting&linking: connecting datasets, standardizing headings, assigning uris, reformatting – didn't we just see a cabinet office data.gov.uk talk on this? Acknowledged, but 'huge pile of data' – want to help by adding into holes here. "where there are standards missing, we'd like to pull together all the people to help in their creation".
- Query tool... looks a bit like Ask, i.e. "how many govt employees work in victoria st", with reliability score and data source – still working on the reliability score.
- Action: How we can help – looking for architects, data structure experts, developers. Join by sending email to joinus@linkedgov.org by mon 20th sept.nQ: how to correlate across LAs... need to label and recognize if the underlyings are disparate. Can't standardize through this project, but could id commonalities and represent that in the data. Like Wikipedia – not perfect, but better than anything else out there.
- Q: suggestion mechanism for datasets and projects from local govt? Can take suggestions on the project. Idea is to fill gap in the open data process, but if there are other things we can do as a community, then we should do it.
- Q: funding. Biggest costs hosting and legal (making sure crowdsourcing not open to lawsuits). Otherwise all volunteers, but also talking to bodies about sponsorship.

Ben Goldacre & Louise Crowe on unpicking dodgy scientific claims

- There are a lot of useful datasets out there that could be used. Biggest prob in medicine: selective publication, i.e. don't have to tell anyone about bad trials results. FDA etc doing v badly about telling anyone about the negative results that they receive. Published data isn't accurate reflection of results.
- 1) Nobody's job to check if something has been done but not published
- 2) Incompetent regulators. E.g. drug company telling FDA about heart risk on diabetes drug but FDA not telling anyone else. UK E.g. Seroxine doesn't work in children – drug company knew but didn't publish. Was an aside in a MHA submission. V common that drugs are used off-license in children... not so bad if we can see all the evidence. GSK lawyers pointed out that they weren't obliged to tell govt about this because it was used off-license.
- Solutions in-place are failures. E.g. clinical trials registers. 58 created... diff to find info... is nobody's job to go back and check that trials data is published, or that trials being done are pre-registered. 1/3-1/2 not registered properly; 15% not registered at all. Clinical trials dbase has clinical trial id – then search for this id in published trials. Then produce a list of all the trials that are unpublished. Louise tech on this... recruiting people to work on it... repositories inc <http://clinicaltrials.gov> which includes change history of each trial, e.g.

- status changes. Finding lots of odd patterns in these trials. <http://isarctn ?UK registry...> big text fields... issue of being coherent across different repositories. Udract – totally closed repository... difficult to access this... ‘unresponsive to need to open up clinical trials data’... register of all trials in EU 7k-10k trials per year – can see trials, but can’t see what they are.
- Taking trials data into pubnet... checking here to see if anything is published under each id... looking for level of false negatives – i.e. is it unpublished, or published but not with the id; is this a structural fault in the system? Looking for patterns of bad behavior, good/bad publishers, drugs to be aware of because there’s a lot of missing data under the surface.
 - Main outputs: spotting the patterns. A website where anyone looking at a drug can see which trials on it have been published... ie. Missing data and which companies hold it.
 - Most trials dbases have a contact email – are going to flood these with “where is the data on” emails.
 - Q: safebiopharma EU project. Also a US equivalent. Seen a few random repositories of results. Are looking specifically for clinical trial data.
 - Q: URL? Is slightly secret at the moment. Github/probot? ben@badscience.net – looking for people to help, e.g. cross-checking results.
 - Q: anecdotes. Not us, but <http://patientslikeme.comn>

RewiredState

- Emma Mulqueeny... rewiredstate 2 events a year – national hackgovernmentday, rewiredstate.
- After govt got involved, decided to include next generation of kids in getting involved with data. Youngrewiredstate (yrs)... example: Izzy who wrote govspark.
- Ben Webb on yrs Manchester 2010. Yrs decentralized this year – London, brighton, mancs, Norwich etc. week-long event. Tools include finding bus routes (because mancs and London have released their bus timetable data).
- Q: project repository? <http://rewiredstate.org/> <http://dev.dfey.org/>
- Q: involvement with schools. Tried, but no real response from the schools. Probably because coding isn’t being taught in the schools. Norwich recruited from schools, but via media and creative arts departments. Plan is to use this to put pressure on govt on this.
- Carbon energy hackday on 30-31st October.. hardware as well as software hacking... need arduino people.

Louise Crow on FixMyTransport

- Aim: give people simple tangible benefits... this to find out what happens with more complex problems. Looked at <http://www.fixmystreet.com> ... e.g. Euston station problem – Camden and NetworkRail & TFL both claiming the other was responsible.
- One of the reasons its tricky is the question of responsibility... i.e. who to tell about graffiti on a bus stop... council, ad company, transport exec etc. High cost of finding who to tell.
- Datasets – Naptan... public transport gazetteer... third dataset mptdr (accessibility dataset) –

once a year, record all the public transport journeys taken. Need to know routes and route operators. E.g. operator codes not unique... crowdsourcing finding details of transport company details...

- Action: contact Julia about this.
- Visibility: i.e. knowing if someone else has had the same problem.
- Workingprogress section – i.e. handwavy part – can now report problem to responsible org – what can we do next about this. Two points: dearth of campaigning tools on the internet (i.e. how to start a mini-campaign about a transport problem), and things that influence decision makers are people... e.g. campaign pages on fixmytransport e.g. “save the c10” – to get people to join a campaign. Have planned this out but not developed it yet.
- Tools: mysociety tools for e.g. write to representative, print flyers & posters – this is the project Fosbury part... “a piece of civic infrastructure that can be useful to other things and other people” i.e. a kind of broker to send people off to do specific tasks... callbacks when jobs are done etc... something that democracy.gov did in a very straightforward way... i.e. can share between applications. “how do you figure out what the most effect thing to do next is”... i.e. give list of tools, sysadmin suggests something to you, “we think the next thing you should do is this” emails, recommendation from other campaigns, i.e. ‘other campaigns that were successful did these ind of things next’. Will release something later this year – will be relatively simple. Appreciate any thoughts and questions on this.
- Q: have you spoken to transport companies? Richard George...
- Q: what types of data? All the transport places that might have been or will be.... Not real-time at all... longer-term view. Are looking for people to help put in their own local authority transport details. [Twitter.com/mysociety](https://twitter.com/mysociety) – link is in the last post.
- Q: talking to transport authorities.
- Q: fixmystreet – what % of councils are now in the process for this? Now can report to almost all councils in the UK now. Councils are beginning to get problems input into their problem reporting process (instead of just sending emails). With this, can now start doing stats on how long it takes each council to fix e.g. potholes. Thought about breaking fixmytransport into fixmytransport and Fosbury.
- Action: check out how this maps onto Ushahidi deployment... what are the overlaps between them?

Tom Steinberg on Failfair/ groupsnearyou

- Failfair – evening for people to get together to talk about projects that didn’t work and why. Talk about groupsnearyou and why it’s failed in its current instantiation.
- Idea: internet great at connecting people together but useless at connecting people in local neighbourhoods. Gathering list of pre-existing neighbourhood organisations... e.g. neighbourhood watches... there is no definitive list like this – mostly in heads, on flyers through doors etc. Platform neutral... web service... built apis – google maps with rectangles around groups. Included crowdsourcing interface to take yahoo groups and convert them into groups in this system. Connected to fixmystreet... realized at this point that there was a

problem. Problem was that the data quality was 'awful'. Probs: groups were miscategorised (e.g. bible study group classified as general); groups put in wrong areas (e.g. single uni group covered whole of London)... 7-8/10 users were given inappropriate groups to report their problems to.

- What went wrong? Didn't have the money to do this project properly. Had money for a lightweight crowdsourcing tool. Fixmystreet didn't have data quality problems because not conceptually difficult. Groupsnearyou didn't have people in council fixing problems in the data, and was a different level of abstraction. Why more money needed to make it work? Proper AD conversion testing – could have modified and tested until shrank number of people producing bad data. Didn't have money to have anyone to fix the site... site didn't have the obvious appeal to attract volunteers to go in and fix info problems.
- Future from here? Mysociety isn't going to do any more with this – perhaps someone else will take it on. Political and technological salience of this has gone up – matches govt big society agenda. Something like this needs to exist if we can get large number of people across UK involved in local societies... e.g. local council sending out residents association address at bottom of council tax bills – but does need a reliable database underneath it.
- Want real failfair in the UK – thinking about organizing.
- Q: diff between geographical and catchment areas. SJF: could build this in... i.e. "near my house/ near my work/ near my station/ 30 mins away"
- Q: demand. Mysociety builds things that might become useful rather than what people ask for.
- Q: idea of group is nebulous because people don't know what they're supposed to be putting into it.
- Q: crowdsourcing. To get energy from volunteers, need site where people get something immediate from. This is a nice to have piece of the internet – main beneficiaries are other people who run internet sites.

Evan/Tim on election lessons

- Never been done before – never been a candidate quiz where every individual candidate was asked and answered questions. Specifically wanted local questions.
- Lesson 1: divide and conquer. Democracyclub gathered volunteers then fed them to other projects and asked questions, yournextmp found local candidates, theyworkforyou sent questions out to candidates. Don't try to do it yourself – get someone else involved and share. Conquer: do what you're doing and do it well.
- Lesson 2: anyone can do this. Python/perl. Being geographically distributed is now no longer a problem.
- Lesson 3: build on other people's work. Lots of tools already exist & are powerful. Main tool: `$twfy->getConstituency($postcode)` is basis for most of this work. Find out what other people have done, and use it.
- Lesson 4: share your data. Share it early, share it dirty, but just get it out there. E.g. json/csv links at bottom of each twfy page. Users grabbing data for apps – e.g. Terence

Eden wrote a mobile app. People used data, and sent corrections back to the site for it.

- Lesson 5: use the crowd. Having generated the data, you get a crowd. Use it. Democracyclub.... Homepage suggests tasks you can do... (SJF: could do this on cc page – i.e. suggest tasks for each person). Researched 4150 candidates this way... found 3255 local issues. 949 leaflets uploaded... 52% of candidates answered the survey (used local faces to convince them to do it). Yournextmp worked well with crowdsourcing (finding contact details for candidates). Crowdsourcing worked well for straight choice – is it a leaflet or not. Local issues was a bigger crowdsourcing problem. Form optimized for quantity, which led to lots of low quality entries, which needed to be moderated and rewritten. Became a massive bottleneck in the process – small team of moderators were spending their evenings doing this. Similar problem with govt cuts website, e.g. what to cut – became a big discussion forum rather than a clear black or white.
- Q: crowdsource rewriting? i.e. like this one, but would rewrite like this, or don't like. Given more time, would build checking into this. Lots of effort to build an interface for this.
- Local issues worked in the end mostly. Not a good crowdsourcing exercise – need to better crowdsource the moderation.
- Lesson 6: think like the media. Yournextmp is a database – this isn't very sexy. Media weren't too interested in this, but did get interested in the democracyclub. First article was BBC "mps to be watched on local issues". Also got interesting quotes to send to journos... built up relationships with these journos... i.e. instead of sending out press releases about how good db is, need to explain how people use the system, e.g. how someone could be held to account, dodgy leaflets etc. %ge of conservatives who didn't answer the quiz etc. Think "what do they want in a story" rather than "what is cool in itself".
- Q: wht would you do differently next time. Start earlier. Get quiz out earlier – week's notice for quiz was too late in terms of newspapers – getting out earlier would attract more users. Talk to parties more, e.g. get conservatives onboard instead of just writing to their inboxes.
- Q: what did you do with the volunteers after polling day. Haven't. ideal to do same for local elections. Concern that same as Obama not maintaining validity of volunteer lists and not keeping them engaged. Energy disappears after elections. Circa 60k candidates for local elections – many more. If retain volunteers from this, they become basic cadre for the next elections. NB 3 volunteers put in circa 1 year of unpaid work... wanted their lives back after this.
- Q: need to engage the election agents.
- Q: need for moderating crowdsource questions. Better to get volunteers to ask the questions? Prob was that were trying to make a body of questions – were v concerned about bias, e.g. Tory candidate being able to login and bias the question base. Diff problem to get round.

Lunchtime chat with Tony Archer, W3C

Richard Stirling on transparency in Government

- Data.gov.uk oct 2009 – said we will be launching <http://data.gov.uk>. Lot happened since then. Data.gov.uk, OS maps (postcodes, vector maps, os identifiers)
- Biggest thing is the momentum that's been built up. Enabled by 'opening up; data – PM who really cares about this stuff... and published detailed commitments (look at these, e.g. spending transparency and other key govt datasets). Has a transparency board (Francis Maude) – meets to ensure govt does what it says it's going to do. "Nation of armchair auditors".nFirst commitment – treasury dbase on public spending (COINS website... 120Gb csv file)... Guardian's COINS data explorer... q is "what is it that we can do to get the data out there"... in a form that people can work with it... at this point, good things like this happen.nIs happening across the whole public sector. Real stars are London, Windsor&Maidenhead, Kent all doing amazing things.
- Challenges: finding data, licensing data, using data. "need clear permission statement on reuse". "winning the war with pdf". Crown Copyright license that's compatible with CreativeCommons attribution... i.e. can use standard creativecommons license.
- Open approach: open data, open standards, open source tools where we can (Drupal, CKAN as registry, CMS etc).
- Using data: csv. Api "flexible way of serving up chunks of data". Linked data: joins up data and datasets, and can create a customizable API on top ("spitting out json", with SPARQL on top)... possibly most flexible way to serve the data.
- Data: about 4k items. Not all perfect... get all the national statistics including pdf. DfiD Pakistan flood monitor went up yesterday. NB random data set button.
- Action: tell Spike about DfiD flood monitor site.nWhen building stuff, reference back to data.gov.uk and mention the dataset you've based on.
- Next: more of the same. Lots more data to get out. Quality (Hadley's linkedgov work). Read/write: accept community data. Make it easier to publish rich data. Want people to "get excited and make things".

? On London data experience

- Started scoping in GLA last October – police, London development agency, city hall, 1 other agency.nHad an open day – "come and help us to free London's data". Key messages: don't worry about standards, go ugly early, and don't let perfection be one of the goals. Key concerns were crime and transport. Isn't just about city hall, is about partnership with developers. Difficult to get data out of govt – people saying isn't technically possible – developers return with "this is how you do it", also helping my coming to meetings with her. Getting data is incredibly slow... officials emailing each other, meetings etc – not very visible... is keeping this visible via twitter.
- Main challenges: real-time data for transport, and licensing conditions (TFL). Licensing: still asking who are you and what want data for, but are working on this... tfl have come a long distance from this.
- Action: also talk to this speaker about transport data provision and hits on servers... big pressure to provide real-time data to end users.

OverCognition

Journeys through development data.

<http://overcognition.com>

- Got locations of bikes via freedom of information data request. Need realtime datafeed to cycle data.
- Next phase: NHS London phoning up about how to release their data... told is about engagement with developers, not just putting out the data... are hooking-up community with NHS to visualize their data etc. Mayor recently announced his “digital advisory board”.

Geoff talking about <http://ASBORometer.com> app that uses this open data.

- Tool to measure levels on antisocial behavior at a location. Queries open data sets about asbos and antisocial behavior in your location. Was more popular than facebook on istore for a while.
- Asbo dataset is poor, more interesting data in home office survey about concerns on anti-social behavior... used this. Inc leaderboard of worst offenders... Did because huge public appetite, wide audience, content matters etc.
- Datasets mostly csv files. Opportunity to “beat the goldrush”. Took 5 days, basic process: geocode data, write query logic, construct API, build mobile client apps. Used google app engine, geopy, geomodel, google chart tools, android sdk, appcelerator titanium. Could have used yql, yahoo placemake, scraperwiki, fluiddp?
- Advise to:
 - make it mobile – device always on, always with you, knows where you are. Open OrdSurvey data making easier (e.g. to locate borough/town from postcodes etc).
 - make it local. People interested in what’s around them. Unique experience depending on location. Exploit local pride and rivalry. (e.g. top trumps theme, people picking their hometown in bars and comparing crackhouse figures etc).

Post-talk chat with transport folks **Fixmytransport**.

Chris on Mapping DFID’s reach in Africa

- Looking for patterns in CSV data. NB csv in various levels of ugliness... “getting a measure of where things break”. NB want open.gov to use ISO country names instead of current ones. Started looking at different countries, and how much aid is spent in them per year and what this is going into.
- Some huge CSV files on local spending – e.g. Guildford council data... huge list of local depts. Not enough explanation, e.g. huge spent of vehicles in October – but types of vehicles not explained.
- SJF: how about being able to crowdsource data holes, e.g. knowing what types of truck!
- Need to spend time thinking about the people looking at what we create, e.g. visualization.
- Examples: <http://www.Owlsnearyou.com/> site! And <http://mrsanearyou.appspot.com/> - both early stuff.

Rufus Pollock on OpenTech a year ago

- Compare with other govt it projects... UK being looked to as a bit of a world leader here. Q: where does our money go when we pay taxes? “show us a better way” competition. Uses lots of data.gov.uk data and coins. Big thing done: sorting out the licensing, i.e. what could happen if you start reusing data – could people make you take it down was an issue.
- Want to automatically download datasets, then start doing something with them. V tedious to wget everything line by line... not reproducible or automatable. Datapkg is a tool to do this.
- Ecosystem around datapkg... e.g. community can clean up the datasets. Lot of work is about cleaning up the data, and joining it together. People don't want to know why something is wrong- it's just wrong.
- Example from ckan.net... i.e.. someone cleans up someone else's data and restructures it – where do they put it?
- Data.gov.uk apis: catalogues and datasets.
- Giving people control, but beware the porn upload problem.
- Q: is squeezing data out of govt depts. – will it still be tough in 5 years' time. Mindset is part of public management – are asking people to turn orgs round 360 degrees, e.g. huge organizational change. Will take a long time, but door is open and there's no going back. IS it a tough sell? V tough – risk averse culture – audit- people afraid of criticism if data is wrong... and officials have to engage with data questions, political to answer questions on this. Risk/reward setup not an easy one for public servants... i.e. pats on back for right vs probs if erroneous or wrong data gets out. We need to be willing to reward govt when they put out data. Journey likely to be painful, but in 5 years time... conversations are getting easier over time. E.g.. transport, things like release of NAPLAN and world didn't end. Really good environment for making progress quite quickly. “Won't be the massive culture hit that it is today”.
- Q: Talos platform – thanks for mentioning it (Phil Archer again!). Would apps have been better if data were available through something like Talos or another Sparql engine? Issue at the moment with linkeddata – developers “reach for their guns” over rdf. Issue is lack of toolset for rdf... getting rdf store on system could take half a day to do rather than v quick. CSV because every program can parse this. Lovely thing about talos platform is that can get json back.
- Q: experience of getting hold of datasets that might be used in safety-critical applications. Example: pilot. CAA publishes NOTAMS list... is published on 'gruesome' website... CAA edited out machine-readable line that gave this. Other countries give xml formatted datasets for this – people go to these to get it. eNotams! Answer: MPSI unlocking service is on data.gov webpage for this sort of question – current call out for datasets that can be unlocked – get to service before Wednesday next.
- Q: Trying to extract spending data from local authority. Keep getting back, if lucky, 3 costs aggregated from 3 different categories, and cite curious exemptions. LAs tend to be v risk-averse and closed; easier for someone on the inside to be pushing from the inside.
- Q: behavior change (couldn't hear question). E.g. Website: “whatcanibuy” – put in e.g. 20 pounds and see what city hall has spent that on.

Sebastian Brannstorm on Wild Ducks mobile OS at Symbian foundation

- Trying to build own smartphone off its hardware.
Symbian – 100m devices shipped/year.
OS since feb 2010... EPL/LGPL. Symbian foundation London (non-profit)... arguably world's largest open-source project.
"what good is open source when there is no open hardware".
i.e. can't flash the hardware. Current open source stakes are generally linux. Symbian decided to make a phone of their own. Currently Nokia, Sony etc... starting own garage project to use open hardware for this... using the BeagleBoard.
BeagleBoard – is a Texas Instruments garage project. System-on-a-board platform, OMAP3530 chipset... cheap (\$100-\$150), extensible, open specifications. Lacks a few things, e.g. modem, radio, internet, support for lcd displays etc. Antrax Germany built BeagleUTMS board for connectivity, Chinese BYD Industries ("build your dreams" conglomerate) built the touch LCD display... will soon be commercially available. Current device – needs external power, but works pretty much as a phone should.
- Have corporate support from Symbian corporate members, e.g. Accenture, Nokia etc... some people (1+) now full-time paid on the project, but still meeting Tuesday evening for pizza discussions about it... will buy pizza for anyone (i.e. us!) who comes to this.
- Now: lots working, simple to get started, simple to contribute (e.g. documentation, todo lists, backlogs in wiki, code repositories, know-how), good hardware, active mailing list. But need more help – more drivers, more functionality, usb host, etc. Need to provide feedback, exchange ideas, help with developer outreach and project promotion. "Need people to talk to about how we should take this project".
- Wiki <http://tiny.symbian.org/wildducks>
Q: Symbian? Symbian 3. QML in Symbian 4.7.
Q: Drivers opensource? UTMS probably not entirely opensource. Are some GSM, but not UTMS – some qualcomms patents prevent this.
- Q: what can we do with this magical piece of hardware? Not solving good phone problem.. is opensource attitude to this...
- Q: get core members into providing a development version of their mainstream phones? Are drivers that can flash, but not there yet.
- Q: why not use OpenMoco hardware? OpenMoco is getting a bit dated now... BeagleBoard was closer to existing baseboard they already have.
- Q: ideas for the powersupply. Haven't really thought about this yet. Not a priority at the moment.
- Q: do you need regulatory approval for experimental phones in the UK? Not using GSM, so not an issue – and are buying type-approved phones.
- "Come and have pizza with us on Tuesday".

TerenceEden on "why doesn't your site work on my mobile phone"

- @Edent is mobile phone consultant. US federal govt stickers on each car for e.g. safety records and QR codes (<http://fueleconomy.gov/m>) – takes to a mobile website... which is usable, and works on every phone with an internet connection and a web browser.

- Stats –<http://www.opera.com/smw> <http://communities-dominate.blogs.com>
<http://www.gartner.com/it/page.jsp?id=1306513> – give apple at 14%, rim 18%, android 17%, Symbian at 41% of the smartphone market; worldwide sales = 19% smartphones, 81% dumb phones.
- Dumb phones are not smart, but they do have web browsers.
- Tip: http://www.forum.nokia.com/Develop/Web/Mobile_web_browsing provides a whole bunch of templates for mobile apps. “more or less guaranteed that your service is going to work on all mobile phones”.
- Tip: Also see [deviceatlas](http://deviceatlas.com) or [wurfl](http://wurfl.com) to investigate phone screens. Can shrink images using <http://tinysrc.net>Tip: KISS. People are still using phones from a long time ago. Don't over-rely on javascript... doesn't run on anything but the most expensive macbook. Think about what your users really need. Make accessible to the most amount of people.
- Tip: wordpress. Plenty of mobilization plugins.
<http://wordpress.org/extend/plugins/wordpress-mobile-pack/> (@edent helped to write this).
- Tip: don't ignore the smartphones. Sure, create something beautiful for the people with rich kids toys, but make your app open to as many people as possible. NB more people have private access to a mobile phone with a web browser than to a pc. If it's sensitive, e.g. rape data, most people share a pc. Are more likely to use their personal, private mobile phone for this.
- <http://shkspr/mobi.blog/> <http://edent.tel/>
- Q: do most people with mobile phones have internet access? People with older phones do access the web, but don't access it as much, partly because of the dearth of sites for older mobile phones. Are using in a fairly limited way because the services aren't there.
- Q: how to test that software is compatible. Easiest is to buy a bunch of cheap phones... also services like [deviceanywhere](http://deviceanywhere.com) will give free testing times. Also [zoonu](http://zoonu.com) and [utest](http://utest.com) (which crowdsource phone testing, e.g. people in Africa, Russia etc). Are also good emulators for higher-end phones; easiest way to check older phones is to buy a couple and test on them.
- Q: less-developed countries. More than 90% of people's internet access in these is through mobile phones. If you want data to be enabled in these countries, need to think about low-end use. Also services in e.g. Kenya are done through SMS and voice. Talk to people who can provide good SMS and voice links.
- Q: WAP phones – WAP completely forgotten? Still significant number of WAP devices around. V. different protocol and way of writing. Not a bad route if want really wide dispersal, but WAP use is shrinking in e.g. Kenya.
- Q: what features work on which devices? See [deviceatlas](http://deviceatlas.com) and [wurfl](http://wurfl.com) for this.nnCraig Heath (Symbian Chief Security Technologist) on People Power in your PocketnOpportunity for activists/ community to address privacy and security concerns.
- World's most widely used opensource pc platform is Symbian.nAreas of interest: information asymmetries and better mgmt. of personal info.
- “reciprocal surveillance” i.e. simple recording of service provider calls, with “digital notary” – hash, with trusted third party signature on hash... for “we've got no record of that” problem. (q: nb Ribbit speech to text could be used here to provide transcripts for court).

OverCognition

Journeys through development data.

<http://overcognition.com>

- Premium-rate charges. Phonepayplus (OFCOM subsidiary) holds data about premium-rate charges. Currently can check charges with free sms to 76787... more useful if phone could do this automatically, and enforce rules, e.g. “don’t spend more than 5 pounds”, “don’t send more than 2 texts a day”.
- Personal data sharing controls: e.g. private, not employer, people I trust etc. Could borrow “sensitivity labels” from MLS (multi-level secure) orange book, where label is indivisible from the data.
- Control of own identity. Mydex.org – UK govt pilot project; “can share this with you but you can’t pass on to third parties”. Legal/regulatory framework as well as technology. Looking for Symbian volunteers (C++). User-driven identity.
- Craigh@Symbian.org <http://Secblog.symbian.org>
<http://developer.symbian.org/mailman/listinfo/privacy>
- Q: reflashing Symbian phones. Concept of eclipsing – may need to get operator permission to do this. Difficulty depends on which APIs you need access to.
- Q: change in Symbian culture. Will this feed through into phone manufacturers. Speculation: change in culture. Symbian much smaller (100 not 1700); new focus on getting incoming contributions. Remains to be seen if this culture extends to phone providers – but might be under pressure from regulators. Hoping for some reflashable phones eventually.

FrontlineSMS

- “technology doesn’t work everywhere”. Ken Banks work <http://kiwanja.net> in Bushbuckridge.
- 4 million people in the UK are offline. 39% over 65; 38% unemployed; 19% adults with children. Mobiles reach everywhere, and are in the hands of many.
- In places like Nairobi, see entrepreneurship, e.g. mobile charging stations – battery in backpack.
- Tech to auto-reply to messages, subscribe to groups etc over SMS. Ken wrote s/w for this, frontlinesms, when he broke his leg.
- Hardware: GSM modem (O2 10 quid) in laptop/pc, outlook for SMS... can send out alerts, jobs, prices etc. and get input into radio programs... “did you experience bullying today” etc... get connection into field to send back data...
- Auto-reply to sms; auto-subscribe; forward to email; forward to person; use to trigger an external command. Frontlineforms: create form onto java-enabled phone – sends compressed messages back to base. MMS: multimediamessage receiving just now, picture messaging includes cell-level diagnostics. New: regularly-scheduled SMS reminders (e.g. to take medicine, go to clinic).nSister orgs: Frontlinemedic, frontlinelearn, frontlinelegal.
- Use cases: UN FAO has been texting market prices to fishermen. CELAD txtng out agricultural advice. Foleshillfield vision project in Coventry towerblock – building community cohesion – use software to send out e.g. gardeners meeting reminders. SurvivorsConnect – to report trafficking.nIdeas: Mencap to campaign and send out reminders on e.g. probation and health appts. Domestic violence helplines... people have sms helpline available – quiet,

deletable and safer. Support for depression... microfinance... Manchester soup van to homeless people "are in your area".

- Think about your audience – do they have broadband, are they heavy SMS users. Think about, then choose a tool. "we learn from you because you're the innovators and we're providing the tool".n@laurawhudson <http://frontlinesms.com>
- Action: talk to Laura about CrisisCamp day on 25th.
- Q: setting up. Noted that getting a short code takes a while, but this is v easy to set up.
- Q: BT microcell project? Can find out and tweet about this. BT is opensource project. Maybe better for camp etc.
- Q: can plug into web services to send out text? Yes.
- Q: skype send text? No... only just found you can do this.
- Q: geographical? Have to register with a group that corresponds to your village etc.
- Q: USSD e.g. automatic getting of data? Tweet to ask frontlinesms about this.
- Q: security and encryption of data. Person sending/receiving sms details, lots data on laptop. Issues in oppressive environments; tacticaltech have good security section.

Iris on apps for good; CDI EuropeAlso self-invited.

- Went for higher end, e.g. app development instead, deliberately. CDI train young people to program mobile phone apps. Innovation comes from fringes of society. Useful to ask groups you haven't asked before.
- CDI founded 1995 by Rodrigo Bargas? Use tech to help people to solve their own problems. 3 pillars (Educational models): learn better when you try to solve something you care about; community action; technology – latin America = pcs; UK = android apps.
- Spent last year thinking about how to add value in the UK. "train young people to develop mobile apps to change their world" NEETs.
- Stop & search app... geotagged... initial release doesn't include police epaulette numbers yet.
- Launching again in a Tower Hamlets girls' school.nLessons learnt: 4 key lessons.
- • Programming isn't for everyone. Using app inventor for android next.
- • Platform wars: be pragmatic and start somewhere – the course is larger than this
- • Apps are currently 3m: male, middle-aged, middle-class. Brixton teens are using Blackberrys. Provide phones & use emulators.
- • Poverty – in Brazil poverty of stuff, in UK poverty of ambition. Don't have vision of where they want to get, and confidence to get there. Take ambitions and dreams seriously, but challenge them and don't provide answers – can provide bridges, but people need to walk themselves over them.
- Bottom-up innovation: design for multiple outcomes; don't focus on specific tools; be pragmatic about adoption; try to raise ambitions.
- <http://appsforgirls.eventbrite.com> iris.lapinski@cdieurope – can go join them in this event next Wednesday (5-7pm). <http://cdieurope.eunq>: where. Are talking to people in Brighton too, and planning to create an opensource online project too.

- Action: spread word about Weds session to WomenInTechnology and GirlGeeks.nnOpensource building design software

Random bonus talk... opensource/ free software for building design is 'shocking' and want to do something about this.

- Lots of software, but proprietary, for windows, and v expensive. Need to satisfy building controllers with it – looking at 450 quid upwards. Dewpoint calc software at 350 quid e.g. 500 quid for something else that's easy to fix. Online calculators aren't flexible enough, and need to put same info into multiple apps. V. easy to reimplement some of these, e.g. ones based on British Standards.
- <http://Bimserver.org/> one of the few free sw projects online – no software on this yet. Needs people to write user interfaces online. Get e.g. info from manufacturers websites (e.g. builddesk has this info in, and manufacturers all publish datasheets that could be linked to – finding these could be crowdsourced) – looking for techie people... have sums covered, but need help on the interface.
- Action: look for a UK crowdsourcing site. If there isn't one, ask why not.
- Q: is there opensource autocad software. Yes. E.g. qcad "bit 1980s"... works, but tedious (provided under Aladdin GPL model).
- Q: why not use sketchup. Not free, and difficult to run on Linux. Building information modeling – has standards. Is a dutch opensource implementation of this, but license for this isn't really opensource. Learnt from OpenStreetMap to start really simple, then make more complicated over time. If get system architecture right, this will help enormously over time. "real shortage of stuff that's genuinely open at the moment".
- Q: frontlinesms needed to make room for e.g. plugins – e.g. an appstore for apps that can sit on top of frontlinesms – are having to go back and think again about their architecture and how they do it.