

reportWhere 2.0



The Where 2.0 event charts the way ahead for so many businesses that rely on the Internet.

Location hooks in social networks **Matthew Russell's** presentation, Mining Geo Needles in Social Haystack, was one of the best tech talks this year. He very clearly laid out the "what and how" to extracting location from the social networking behemoths of Twitter, Facebook and LinkedIn.

Twitter as you might expect is very open, it's easy to traverse the "graph" that connects you to friends and through them to friends of friends and so on, but the geo information is somewhat limited; tweets can be geotagged but it is optional and not yet widely adopted. Conversely, the condensed nature of individual tweets does make it easier to extract the location "clues" than the natural language that typifies other sources.

Facebook has a much more sophisticated approach to controlling access to location, guarding it closely as part of an individual's personal information. However, their facilities are also rapidly developing, Facebook Places was re-launched elsewhere at the conference and is one to watch as the Facebook Query Language – available through their API to developers – now contains spatial constructs.

Finally LinkedIn, the professional network, has much more complex terms & conditions around usage

incompatible for a little while yet and "hacks" like Phonegap will continue to flourish.

Smart new Apps There were literally hundreds of location-enabled apps, either making their debut, referenced in others' talks or simply ideas looking for money. Here's just a few that caught my eye.

Airbnb – their strapline is "don't stay at a hotel". Airbnb is a global network of accommodation offered by locals. It's marketed as more fun and very cheap, especially in big cities like New York, Paris and San Francisco. Not yet in London - now's the time to invest? They've raised \$8m so far. <http://www.airbnb.com>

BreezyPrints – you are on the road and need to get something printed quickly, maybe you've forgotten to make enough copies of that presentation you are giving in an hour's time. This app apparently allows you to send documents from any device to any printer. By partnering with hotels, airports, coffee shops, print centres etc. they can find the printers closest to your current location. So, the user case is that you log onto the app on your mobile, choose the printer, pay the fee and the app guides you to where your document is being printed. <http://www.breezy.com/>

Social networks, apps, business and... shopping

In the last issue **Andy Coote** explained that Where 2.0 is really about location in B2C. He outlined the positioning of major players like Google, Facebook, Foursquare et al. Here, he takes a detailed look at some of the technology advances, some of the myriad of new location-enabled apps and more on why location is becoming more important in retail commerce.

with deliberately "fuzzy" location information; for example greater Nashville Area, is about as close as you can get to someone's business location.

In the last part of his talk Matthew dealt with digital reasoning: the science of extracting meaning from natural language. Fascinating stuff but for another day.

HTML 5 Currently developers cannot develop once and then deploy the code across several platforms. Apple's iOS and C-based language is very different from the Android environment based on Java. HTML5 is generally recognised as the way forward for device-neutral mobile app development. However, currently it doesn't support cross-platform apps beyond the most simplistic. In his talk, "HTML5 is the Future of Mobile", **Dave Johnson** of Nitobi, talked about Phonegap, an open source framework which does support cross-platform development now. This is reminiscent of the position in previous cycles of disruptive technology when, for instance, cross-platform development was the nirvana for Unix and Windows development. It seems that again we'll just have to see how this one plays out – one suspects that Google's platform and Microsoft / Oracle et al will remain fundamentally

ParkatmyHouse – this one is neat and I can see it working in the centre of our big cities. Imagine the scenario that you live near Stamford Bridge; there is a Chelsea home game on but you are away in the car for the weekend and the drive is unoccupied. Advertise this using the app and someone pays you to use it – job done (alternatively, they may empty your house! - Ed). www.parkatmyhouse.com/

myTown – the producers, Booyah, claim 3.3m players for this app, which runs on a variety of mobile platforms. The concept is that you check-in (sharing your location) at real world places to "unlock rewards". You can also "virtually buy and upgrade" your favourite shops, coffee outlets and collect rent when players visit them in the real world. Described as location-based gaming meets Monopoly, it's apparently very addictive. See <http://www.booyah.com/> or Apple's app store. BTW "booyah!" is an exclamatory statement, often said when someone is extremely overjoyed (not in my dictionary! – Ed).

Foodspotting – this app seemed to be the conference "darling". It is a visual guide to good food and where to find it. There's nothing particularly clever about it as a location-based service; the idea is simple (users post photos of meals



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Figure 1: Commerce 3.0

they eat at restaurants on a website) and I'm not sure if the "hoopla" surrounding it can be easily exported. <http://www.foodspotting.com>

Factual – I interviewed their product director, **Tyler Bell**, during the conference and by contrast to Foodspotting this involves some serious geospatial "heavy lifting" and many ideas which owe their origins to the semantic web and linked data. They are attempting to create the definitive database of local businesses and points of interest from around the world, with currently 30 million entities covering 44 countries. The data is accessed through an API or as downloads and there are a variety of payment models from per click to subscription. <http://www.factual.com>

LocationLabs – this company provides a cloud-based API that enables developers to access, locate, and control mobile devices. Their main application is designed around knowing where your children are and controlling what they are doing. <http://www.locationlabs.com/>

Waze – unsurprisingly, there was a lot about crowd sourcing at Where 2.0, much of it on fairly similar themes, but **Diann Eisnor** in her presentation "Game Mechanics and LBS", tried to throw some light on why people choose to become involved in such initiatives – also how to get them to capture what you need. Her strapline was "this is the most fun way to commute!" See the YouTube video http://www.youtube.com/watch?v=5_xEUJSpu6g&feature=player_embedded#at=27

As a footnote to this section, those interested in the location-based app world should follow Tech Crunch – they now have a European flavour but start with the original <http://techcrunch.com/>

The role of the venture capitalist Venture capitalists have always intrigued me. During the conference I sat in one session next to one who was willing to give me an insight into how they operate, in the US at least. They are looking for very smart technologists (often they come in pairs – Brin and Page at Google come to mind) who have an idea but probably little idea of (or little interest in) how to grow a business. The VC often provides resources to develop strategic direction, business development, recruitment, etc. Of course they also plot the exit strategy (how to sell out at a hopefully huge profit) as a pre-requisite to putting up the finance in the first place.

Atoms, Bits and the future of shopping **Jack Abraham**, is Director of Local at eBay's subsidiary Milo, where they collect inventory information in real time and let consumers know what is available now, where and at what price. He explained that he spends a lot of time thinking about the future of shopping (but so does

my wife, I'm thinking!). However, what he had to say was really rather profound, arguing that the idea that everyone will in future use the store just as a showroom is fundamentally flawed. Jack characterised the retail world into two fundamental types of products: bits and atoms. Bits travel at near the speed of light, for atoms you have to go to get it or it has to come to you. Disruptive technology has the biggest effect on products that can be transformed into bits, such as:

- **Music** – file size is low, so pretty easy to download
- **Video** – bigger volumes but streaming allows you to start using almost immediately (10% of all internet bandwidth is used by streaming applications)
- **Books** – ebook purchases have now eclipsed physical sales in the US
- **Others "bit" products include software and games.**

His thesis was that: "any product that can be digitally transformed into bits will be – period, BUT any product that can't be transformed, i.e. is inherently atoms (clothes being the most obvious example) will continue to be sustained by "bricks and mortar" retailing. To support this he showed a graph of eBay's research into where consumers spend their money. Ecommerce is only 5% of total commerce and although it will grow, it will remain only a tiny proportion of the market. However, cross-channel commerce, characterised as online research but offline purchase is 30% of the total and growing much more rapidly.

This huge market is being transformed by "wrapping the atoms in bits" – what he describes as Commerce 3.0, which includes loyalty cards, check-in, self-scanning and check-out, in-store research, shopping lists, store locations, mobile commerce, promotions and coupons (see Figure 1). Many of these innovations have a strong location element. Particularly, important is that once a decision to buy is made, the consumer wants to know where they can buy it locally, now. This is driven by the need for "instant gratification". It's also pretty important for retailers to get people into stores as statistics show they spend on average \$150 more in-store than in an internet transaction.

http://www.youtube.com/watch?v=ZkG9nWXU7qM&feature=player_embedded#at=13

Emerging business models As part of the conference this year there was a "marketing bootcamp" on the opening day. **Rob Bailey**, from SimplyGeo (an open source location software solution) but also technical advisor to a number of venture capitalists, gave his view of the future. In a presentation he called "5 emerging business models for making money from location" he started by invoking Maslow's hierarchy of needs, suggesting that funding, good data, tools and users were all in place, and making money was beginning to happen. My interpretation of his top five list is:

Monetising slack – using the analogy of the

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Ecommerce is only 5% of total commerce and although it will grow, it will remain only a tiny proportion of the market.

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1980s movie *Wall Street*, this is identifying under-utilised assets and making money by selling the "slack". The easiest example to visualise is selling use of your drive as a car park while you're out – see ParkMyDrive above.

Games and location – Playing games with real-world location data. Booyah's myTown is an example of this type of application. It's not much to buy the basic app (£0.69) and upgrades are pretty cheap too (£3.99 for unlimited upgrades) but if you have the claimed 3.3m users, that's pretty good money.

Really accurate place data for the world – an example of this is Factual, see above. It seems that there will be relatively few who can make this pay. Upfront costs of acquiring rights to authoritative data are often high and it will require very large numbers of users to make a return. Also, where do initiatives like OS OpenData leave such companies?

Localising users – this is using location functionality in the cloud to support applications like geofencing; alerting a command and control centre if an asset goes outside a pre-defined area). Doesn't seem like anything new – except it's now in the cloud.

Pay developers for places – this is the proposition of CityGrid Media and others. For developers it purports to be a win-win – "give your local audience access to premium local content including user

reviews, editorial content, merchant messages across 75k neighbourhoods nationwide and get paid to do it". The full set of Rob's slides can be found at <http://www.slideshare.net/robmbailey/2011-0419-presentation-for-where2>

Tailpiece: Context is everything Genevieve Bell is a social anthropologist with Intel. So why would Intel want to employ an anthropologist? Reading between the lines, along with all the other big players in the industry they are struggling to understand social networking but know it is having a profound effect on their business. This lady should really be a stand-up comic. She started by explaining that in Australia, for instance, there are outback areas where the internet is "a destination" and might also be perceived by some as a threat.

Her point is that location and place are deeply complicated concepts, not just coordinates. She illustrated this through an insightful set of case studies. In Malaysia the mother-in-law is GPS: she is the one who knows where everything is in Kuala Lumpur while an indigenous Australian's response to "where do you come from?" relates to your responsibilities for conserving the land you occupy. There is a "must see" YouTube clip for anyone interested in the psychology of place, (http://www.youtube.com/watch?v=_A2481RJsUg&feature=related)



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