



# GEOTAGGING IS HERE TO STAY

IN MARCH 2008, RESEARCHERS URGED THE MOBILE INDUSTRY TO CAPITALISE ON NEW DEVELOPMENTS IN GEOTAGGING. THAT MESSAGE HAS NOT CHANGED SINCE THEN.

In March 2008, Matia Grossi, an IMS research analyst, said: "Geotagging, or marking photos with precise location information, is poised to move into the mainstream. Today, camera and cell phone makers are exploring ways to support geo-tagging in their devices." In May 2008, consultancy Visiongain predicted that geotagging was poised to become "the next killer wireless application." By the end of 2009, geotagging has grown to be a fairly commonplace element of mobile devices, including smartphones, as well as location-sensitive mobile apps. And the means of tagging have also multiplied from the standard GPS approach to use GSM device location awareness. One crucial question still to be answered for commercial actors is how to make money from geotagging.

## **A geotagging primer**

Geotagging, also known as geocoding, is the process of adding geographical identification data – also known as location attributes – to various media. Its biggest growth area is online and mobile media in the form of navigation apps and location-based services (LBS). It is widely used to tag photos or images of a certain location. However, Visiongain claims that it "clearly has potential beyond this into the realms of mobile search, mapping and advertising."

According to Visiongain, the increasing use of handsets as mapping and navigation tools, coupled with the spread of mobile advertising, Internet and search applications, has created an exciting revenue opportunity. As the geotagging market expands and new services grow, the first-in players will have an edge over late-comers. There are already a number of devices and apps offering very sophisticated geotagging services.

With developments occurring as quickly as they have in the past 18 months, the issue no longer appears to be whether or not geotagging

can be made to work widely and easily. Rather, it is how many business models based on the current range of offerings can prove to be viable in the longer term, beyond the "trend" stage. GPS is currently the basis of most geotagging and growth of GPS in mobile fields is key to the future of geotagging.

*There is no doubt that GPS will become the technology of choice for mobile LBS. Once a clear geotagging technology emerges that works with all GPS mapping applications and is user-friendly and available to all, geotagging will take off. The spread of GPS, coupled with the huge improvements in the quality of cameras on handsets, means that many users have now bought into*

bandwidth is one. AT&T in the US has been criticised for the jams it experiences in its iPhone data traffic. Remember - geotagging uses images and "A picture is worth a thousand words - but uses up more bandwidth than three thousand!" What about the physical problem of constructing, accessing and maintaining the giant databases and even the storage volume needed to geotag "everything".

As for the deeper answer, theoretically it would only be possible to geotag everything in a static world. But the world we inhabit is dynamic and change is natural. Points of interest, whether buildings, elements of our transport networks, or even businesses, come

announced a quick and efficient solution for geotagging photos. Called **Capture and Process**, it involved fitting a device to a digital camera to collect a small packet of information from GPS satellites. This information would then be processed and added to photos automatically by computer-based software when images were downloaded from the camera.

Today, smartphones with their GPS, cameras and suitable apps can do it even more easily. The image quality may not match that of a high-end digital camera, but it doesn't have to. Geotagging generally is not about pixel-by-pixel clarity, it's about showing a place, telling where it is and quickly describing what it's about.

Current leaders in geotagging include: The **Pixelpipe** app allows users to attach geolocation information to status updates which can be posted to more than 30 services, especially social networks.

**GyPSii**, which is available across WeFiApps (a Wi-Fi powered launch pad for data-intensive mobile applications) enables users to geotag their location with related images, comments, status updates and other information.

**Flickr** for iPhone and Blackberry smartphones lets users take photos on their phones, geotag them, title them, re-size them and upload them to the Flickr website for sharing with friends.

**locrExplorer** for iPhone and iPod Touch makes it possible to explore and share geo-related photos and location-based content within the locr geotagging community.

**Locr** and **Skyhook Wireless** announced a partnership to bring Wi-Fi positioning to locr's geo-tagging community, to improve the accuracy and availability of location information for a significant number of existing locr users.



One model of the now ubiquitous Blackberry smartphone with geotagging capability – the new Curve.

The Flickr® Uploader for BlackBerry smartphones allows you to snap and share your photos, just like Flickr's desktop version.

One of Nokia's many new breed of smartphones with image geotagging capability

*device convergence - their phone is also their digital camera and their MP3 player, and much more besides. The astronomical success of the iPhone is testament to this.* Source: Visiongain

### Limits on geotagging

How long before the whole world is geotagged? The short answer is - "A long, long time yet." The more realistic answer is that it will never all be geotagged, but does that really matter, as long as the most important bits are tagged? Or rather, those things are tagged that are of importance to a large enough user group to make tagging worthwhile, whether for commercial reasons or not?

To arrive at the short answer, consider that it would currently take months and probably years to geotag every point of interest (PoI) in even one big city and its surrounding area. If every smartphone and digital camera user were to start geotagging now, there would still be inconsistencies in standards and parameters needed for a global system. This is similar to the sort of activity that the open source/open data community are currently involved in via projects such as the OpenStreetMap – and OSM has yet to 'go global'.

There are also physical limitations, of which

and go. This implies that geotagging could be a never-ending process – which means never-ending business for the successful players if geotagging can be made sustainably profitable.

### The what and the how

What should be geotagged seems clear enough to Dr Tyler Bell, leader of the Yahoo! Geo Technologies product team. Asked if it would be possible to geotag all the content currently available online, his response was simple and direct - we don't need to - and "We don't want to geotag all of it, just the significant proportion that is about a place or specific to a place, for example a pizza parlour or a local news item." Geotagging can be kept simple and local, for example by using a structured address for the location of a store or restaurant. Yet such simple geocoding "doesn't necessarily disseminate location information to the relevant audience, or content that is not address-based." Profitable geocoding would have to take account of this.

### Who is geotagging now?

Recent growth of geotagging doesn't plot as a rising straight line, but more as a sharp upwards curve. Little more than a year ago Geotate, a UK-based spin-off of Philips Research,

### But where's the working model?

Lately the big social networks have introduced some form of geotagging and there are third-party apps that can add location and geotagging to Facebook and Twitter. So geotagging may proliferate - but it still has to make money. TheWhereBusiness's editor, Thomas Hallauer, offered one possibility for monetisation when he was discussing Abaq.us and other geotagging services. "The operator could be paying for the app and act as service provider, but most likely it will run as a service deployed by the operator with a revenue share model," he said. "The customers would be charged minimally to geotag photos, post their location tracks, share location data on personal hubs and feed it into their chosen social network. Besides smartphones, the location could be provided by the operator's network in the case of feature phones, which seem to be the target."

*Based on an article by Christopher Backeberg, appearing in thewherebusiness.com online magazine. The full original article can be viewed at: <http://news.thewherebusiness.com/content/geotagging-not-just-trend>*