

GIM INTERNATIONAL INTERVIEWS CHIKAI OHAZAMA OF GOOGLE EARTH

The Freedom to Express

Keyhole, the company that founded the technology for Google Earth, developed EarthStream to combine advanced 3D graphics and network-streaming innovations enabling intuitive manipulation of maps. Founded in 2001, the company was acquired by Google on 27th October 2004. In this interview, Keyhole co-founder Chikai Ohazama tells us, "The goals of our technology, compared to a standard like GML, are different."

When and how did Google start focusing on GI?

Google's mission is to organise the world's information and make it universally accessible and useful. Keyhole took this mission to the next level for geographic information. When Sergey Brin, Google co-founder and president of technology, discovered our product he recognised its value and contacted us.

What is Google Earth's current main business case and who are your competitors?

Actually, there are two main sources of revenue. The main source of income is sales of the plus and pro versions of the product. Besides that, we are exploring other ways, like putting ads on the map. And right now we are experimenting as to how the user himself can add value. Google Earth is partly its own competitor. It wants to be a community of users, like a living organism. The idea is only alive whilst users put in their own content.

Short History of Google Earth

Founded in 2001, Keyhole received initial funding from Sony Broadband to develop its EarthStream technology to combine advanced 3D graphics and network-streaming innovations to enable anyone intuitively to manipulate a rich map of the Earth composed of imagery and feature information. Over a few short years Keyhole acquired over ten thousand customers, including hundreds of "Fortune 1,000" companies and a cross-section of government agencies. In June 2003 Keyhole further defined its leadership position with funding from In-Q-Tel and deployment by NIMA, the US National Imagery and Mapping Agency, one of the most prominent users of earth imagery and information. On 27th October 2004 came announcement of the acquisition of Keyhole by Google. In 2005 the product was renamed Google Earth, and it is currently available for use on personal computers running Microsoft Windows 2000 or XP, Mac OS X and Linux. In addition to releasing an updated Keyhole-based client, Google also added the imagery from the Earth database to its web-based mapping software.

What about the business model for the server technology?

Enterprise system selling was the main revenue during the Keyhole phase; it was about democratisation of the data. Right now we are focusing more on search appliances. This is a growing business, because it is what our customers want. In future we want to include more information, but there is nothing concrete I am allowed to talk about.

How is data delivery warranted?

Apart from satellite images, we are focusing on aerial photography. We do not give any financial details on the contracts we established to get the data on our servers. We are also working on an alliance with CNN. Furthermore, an amazing number of governmental organisations are willing to share their data with us. This is a development that is currently happening especially in, but not limited to, the US. We didn't even ask for this, but the data is offered nonetheless because it is served on a free infrastructure. On the other hand, even in the US some towns are not willing to give their information to be put in a global database. Finally, it is important to notice that we served the public ourselves during events like Katrina and Pakistan.

Is there a focus on the professional GI industry and use of open standards?

In some respect there is: with the pro version of the viewer product and with the enterprise products. But really it is our focus to take GIS to the masses, to make that technology easy and accessible. With respect to items like resolution and accuracy, we want to deliver the best possible quality for a consumer audience. With respect to Google's position regarding the support of open GIS standards: for us, we want the best thing for a consumer audience. This means the goals of our technology, compared to a standard like GML, are different. However, we are in dialogue with the Open Geospatial Consortium.

What would the ideal future bring?

A growing Google Earth community, with people publishing and visually expressing what they want to express. In short: the freedom to express.

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