

MARKET IS READY FOR VERY HIGH RESOLUTIONS

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The world is moving towards producing very high resolution imagery (even sub-half-metre). How is the uptake and application of this imagery?

We have seen a steady increase in the application of high resolution imagery. A leading international energy company is using our satellite imagery to help site the location of solar panel systems that cover an area the size of a football field. We've seen everything from using imagery to map and monitor the monarch butterfly habitat in central Mexico, to using imagery over coastal waters to mark the location of large schools of sardines. In some Middle East countries, we found that high-resolution imagery was being used at country level to update the census.

That could be very relevant to India. Despite the economic downturn across the globe, India has experienced dramatic economic and population growth. The population is growing so fast that planning officials are racing to keep up with urban development, new telecommunication lines, new roads and energy distribution systems. We know the Indian prime minister said that India must build hundreds of power plants over the next several years to end the electricity shortages that threaten economic growth. Satellite imagery

can help in all these areas, especially given India's large size – India's landmass covers over 3 million square kilometers.

Let me give you a few reasons why we see this increase. We think some of these applications are materialising because business users are more aware of our technology. The mapping search engines, especially Google Earth and Google Maps, are driving this increased awareness.

Once our customers start using imagery, they seem to want more and more of it. They have come to depend on us for the best imagery products, exceptional technical expertise and customer-focussed, dependable service.

Another reason for the increased adoption and demand for high-resolution imagery is because it's more timely and accessible for the average business user. Historically,



geospatial technology has been confined to the defence and intelligence agencies of the world. Now, geographic information services and location intelligence are available to just about anyone with an Internet connection and inexpensive software. In our era of instant mapping and Google Earth, it can be hard to imagine a time when people had no clear concept of the Earth on which they stood. Access to high-resolution imagery in unprecedented detail, to a global audience, through simple interfaces is now the norm rather than the exception. Now, we're making it even easier – we're developing a platform that will make it easy for our business users to get access to our imagery on-line and to mix and match that imagery on-line.

What would be the most conducive environment for better uptake? What do you expect from the user community?

We have seen a terrific increase in the number of users over the past couple of years – especially from the entry of the online distributors. For the online industry, open markets are mandatory so that imagery can flow easily across borders. By the very definition of global observation, global markets should be open for imagery providers to do business.

The increased use of geospatial technology around the world isn't being driven by one technology alone. It is the result of the innovations coming from the merger of fast Internet connectivity, accurate location information from GPS, inexpensive software and of course, high resolution satellite imagery. Governments must fully integrate this technology into the way they do business for the taxpayers and put fears about the negative impact of global observation behind them. We have truly entered an

age of transparency and governments should welcome this and use it to the full advantage of their citizens.

We hope our customers will provide us feedback and talk to us about the problems they need solved, so we can build the applications to help them. We want to know what our customers are thinking and what they care about.

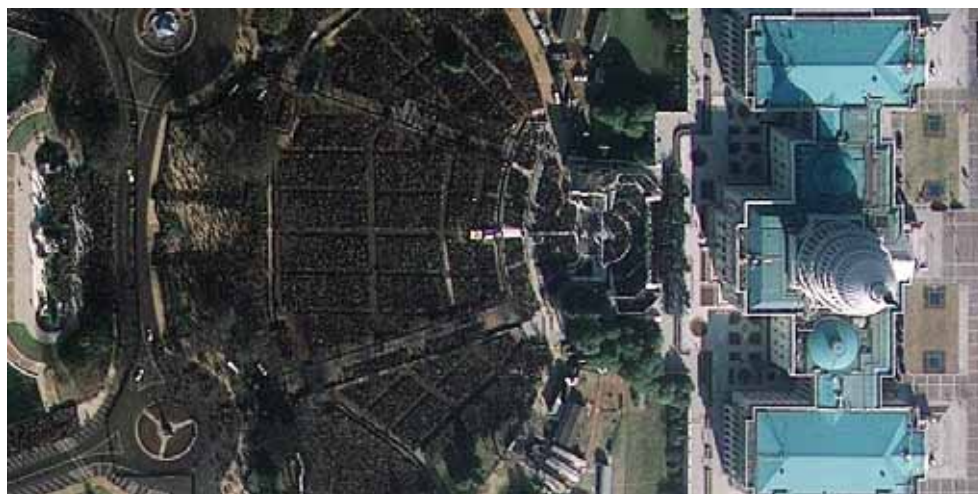
Do you see demand for real-time imagery growing?

Our customers in government and business often want imagery as soon as possible and they would like it updated frequently. But we are not getting a lot of demand for real-time imagery. And, for many customers, archive imagery is suitable for their needs. The defence and intelligence communities need information very quickly, since national security issues may be at stake. Government and civilian customers seem to

What, in your view, are the future trends in the use of very-high-resolution imagery?

The biggest trend is growth. We have had a very good year and our bottom line shows it. We are also hiring new employees. In 2001, we had 60 employees. Today, we have more than 530.

Another trend we are seeing is that the market is ready for the adoption of even higher-resolution imagery than what GeoEye-1 offers, which is currently 41 centimeters to the U.S. Government and half-meter resolution to commercial markets. We are building GeoEye-2, and that system will have a ground resolution even better than GeoEye-1. We are trying to get the necessary permissions from the U.S. Government to sell sub-half-metre resolution imagery to commercial markets. We expect more and more use of sub-half-



Inauguration ceremony of President Obama as seen by GeoEye-1

want imagery sooner than later, but they can't always afford the cost of high-priority collections. As we expand our constellation, we will be able to increase revisit times, gather more information and create more affordable products for our customers.

meter imagery for defense and intelligence, homeland security, national security, mapping and monitoring of highly sensitive areas, urban mapping and planning, topographic mapping, cadastral mapping and updating, biodiversity mapping and so on. We're see-

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ing a trend to get more details from the satellite imagery to create, map and update the geospatial databases.

Our customers want the most accurate and highest resolution imagery and they want easy access to it over the Web. They want timely, accurate location information.

That's where the industry is heading, and that's where GeoEye is going. As noted above, we are investing a considerable amount of time and energy in developing platforms that will deliver imagery and imagery products faster and facilitate the creation of advanced information solutions based on imagery.

We see a trend in distribution and dissemination of information, where data and applications reside in cyberspace rather than on company servers or desktop hard drives. It is a service where a customer's imagery, products and other information technology are hosted and updated in cyberspace. There's an increasing convergence of all types of geospatial technologies within mainstream information technology. In this fast-paced industry, we have to keep changing to stay competitive and keep up with our customers' expecta-

tions. In the end, we hope these innovative services will eliminate our customers' need for investment in specialised infrastructure and resources, and give them a seamless way to integrate and manage their data so they can make smarter business decisions.

We see an increased use of collaboration and international cooperation as a trend. For example, GeoEye uses Indian scientists as an extension of our own staff. When we bid on GIS production contracts, we do so with the intention of having that important work done in India.

The world population keeps growing, but resources are finite, especially in urban areas. In 2007, for the first time in human history, more people lived in urban areas rather than in rural ones. That means 3.2 billion people now live on 2.8 percent of the Earth's surface. Use of geographic information like satellite imagery can help urban planners manage the ever-changing urban environment accurately and efficiently.

What is your strategy to position GeoEye as the leading imagery provider?

We are already a leading imagery and services provider, with a decade-long relationship with our overseas partners. We have a growing global sales network of 12 big strategic government and commercial partners, and more than 100 resellers around the world. Our business partners know their markets well, and they are close to customers who use location information for a variety of applications.

We have been saying for years that our goal is to move away from merely providing pixels to providing information services and products to help our customers manage an ever-increasing amount of information. We don't want our customers to have to invest in spe-

cialised infrastructure and resources – we want to make it easy for them to access their information. All that our customers should need to access our information is a Web browser.

We also realise that, as a leader, we have an obligation and social responsibility to share our technology and resources to help train others to use geospatial technologies. That's why we started the GeoEye Foundation in March 2007. The Foundation awards imagery grants to universities and non-governmental organisations that need satellite imagery in their research. The Foundation has approved more than 90 imagery requests, totaling 80,000 square kilometers. Students have used our imagery for archaeology, coastal zone management, land cover assessment, climate change, forestry, geospatial intelligence, and many other studies. Even non-governmental organisations have used our imagery for humanitarian relief and disaster response. These entities are doing important, interesting work, and it's satisfying to know that we have contributed to their successful research.

What is the role that we (GIS Development) can play in making the geospatial community *Citius, Altius, Fortius*?

First, we would like to thank *GIS Development* for their perseverance in a difficult and ever-changing geospatial community. Your steadfast role should be exactly what it is today—to give our industry broad coverage and address the issues that affect us. The magazine's reporting on current trends, recent research, emerging technologies and even policy issues is important. As demand grows for geospatial information, it would be great to see the magazine cover new uses and applications for geospatial technologies. ■