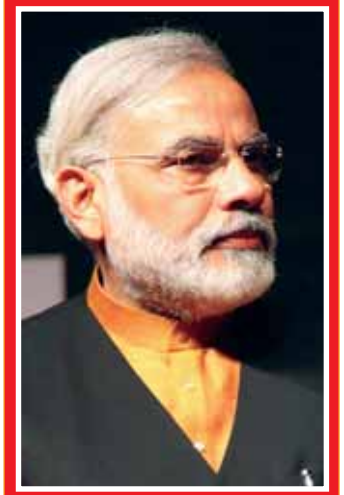
GEOSPATIAL WORLD FORUM

BULLETIN

TUESDAY, 19 JANUARY 2011, HYDERABAD

GEOSPATIAL PARK IN GUJARAT



India's first geospatial technology park will be set up in Gujarat. This was announced y Gujarat's Chief Minister Narendra Modi in Hyderabad today. Modi was here to present the awards at the ongoing Geospatial World Forum 2011. "Gujarat is ready to host India's first geospatial tech park. We will provide all the facilities that the industry needs." He also invited GIS Development to host the next Geospatial World Forum 2011 in Gujarat.

'UNLEASH THE POWER OF GEOSPATIAL INFO'

HYDERABAD, 18 JAN, 2011: An elegant ceremony marked the inaugural of Geospatial World Forum 2011 here today which saw the confluence of diverse stakeholders in geospatial sector discussing the 'Dimensions and Directions of Geospatial Industry'.

Calling on the geospatial professionals to unleash the power of geospatial information, chief guest Kapil Sibal, Union Minister for Science and Technology and Earth Sciences; Human Resources Development; and Communications and Information Technology pointed out that any technology, including geospatial technology, is an enabler and a vehicle through which information could be delivered to the citizens, empowering them.

The national geospatial data authority bill, which is on the anvil, will be a great step in this direction, he opined. He informed that Survey of India has embarked on creating a national topographic database on 1:10 K scale for all the rural areas of the country.

The project will also produce 1:2 K maps for the cities and 1:1 K scale maps for the metros. The minister said the project will be completed in three years and added that once the maps are in public domain, they will open up several sectors. Information is a public good and government strongly believes in making 75-80% of geospatial information available to the citizens subject to the concerns of security, the minister said. To empower common people with this information, Sibal said the government is working on a framework of licensing and a regulatory policy which would streamline the activities of geospatial sector.

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"Unleash the power of geospatial info'

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He called on the industry to be an equal partner in communicating the meaning and utility of geospatial technology to one and all exuded confidence that India will be a breeding ground of geospatial solutions in the future.

Keynote address

Detailing the high level of awareness level and commitment towards geospatial technology at the highest level of policy making in the country, Dr K Kasturirangan, Member, Planning Commission, said – geospatial industry in India has several supporters including Prime Minister Manmohan Singh and Deputy Chairman of Planning Commission, Montek Singh Ahluwalia and added that the prime minister has mandated the Planning Commission to use geospatial tech for national development in the subsequent Five Year Plan. He then discussed various policy initiatives to take geographic information more closer to the common man. He called on the citizens to demand development and create a participatory movement for more geographic data. To enable this, Dr Rangan said, the government is working on establishing a national system for GIS. The idea is to synergise many spatial data systems available across the country and create a seamless system to access data. Further to this, the national task force will look into the capacity requirements for this industry and evolve a geospatial culture in the country. This task force will look at building geospatial capacities at school, university, higher education and research level.

GIS Development Awards

The Geospatial World Forum 2011 recognised the exemplary contributions made by organisations and professionals to the growth of geospatial technology and industry around the world. The following organisations/ professionals bagged the GIS Development awards -

- Premier Mapping Agency: Natural Resources Canada
- Education / Capacity Building for geospatial technology: Department of Geography, University of California, Santa Barbara (Dr. Val Noronah)
- Geospatial Personality of Decade: Vanessa Lawrence CB, Director General and Chief Executive, Ordnance Survey, UK
- Leading Professional Society: International Cartographic Association (ICA)
- World Leaders in Geospatial Technology: Rolta Group
- Lifetime Achievement : Dr. K Kasturirangan

Earlier, welcoming the gathering, Dr MP Narayanan, Chairman, GIS Development, outlined the core philosophy of the Forum in bringing together all the stakeholders of geospatial industry – policy makes, professionals, industry and the academia – to raise the awareness levels about the increasing relevance of geospatial technology in every day life.

Delivering the message of KK Singh, President Association of Geospatial Industries and Chairman, Rolta Group, Atul D Tayal, Joint Managing Director, Rolta India Ltd, said advances in space technology, internet and GIS have significantly transformed the way we live. With latest technology making all things easy, the one challenge that remains now is to make the fruits of this technology reach the common man. Enumerating the business drivers for the industry, Atul said that the one input required to make exciting solutions in this sector is 'geographic information'. While on one hand technology has enabled the production of quality geospatial information, on the other more than half of the world still remains to be mapped, giving a huge opportunity for the geospatial industry, he said. He concluded saying that the Association of Geospatial Industries is a step towards organising geospatial industry in taking on these challenges and harness the potential of this technology and contribute positively to the country's economy.

Emeritus Prof Fraser Taylor – Chairman, UN International Steering Committee for Global Mapping (ISCGM), stressed the significance of location information to all aspects of modern society. But to realise its potential, he said several challenges need to be met. In this direction, he said, we need to enable more effective data sharing among stewards of locationally referenced data; enable a greater degree of interoperability between and among datasets; make location data an integrated part of mainstream ICT and not a standalone system; link geographic information more effectively with socio-economic information; effective spatial management of geospatial information. In the emerging digital economy, Prof Taylor said, there are an increasing number of participatory information infrastructures and added that these should be integrated with more formal approaches, communicate the results of analyses in more effective manner. Calling climate change as the greatest challenge of the century, Dr Shailesh Nayak, Secretary, Ministry of Earth Sciences, Government of India enumerated the significance of geospatial technology in understanding the complex interaction between and among different components like atmosphere, biosphere, hydrosphere, cryosphere etc. Ocean and seabed mapping is the next big frontier for geospatial industry as future generations will increasingly depend on ocean for their resources, he said.

GUEST ADDRESS & PLENARY -1

'Respect environment'

Innovation without destroying the environment was the focus of the speech of guest speaker Dr F J Radermacher, Director, Research Institute for Applied Knowledge Processing/n (FAW/n), Germany. Speaking at the Plenary Session I, of the ongoing Geospatial World Forum, Radermacher said, "We expect innovations from industry. But we need to respect environment to serve generations to come." Elaborating further, he said, "IT/GIS is the key for it. Through innovation in technology, we can deliver more goods by using less resources, if we do it right." Stressing upon the need for the right use of resources for the betterment of people, Radermacher said, "Every person has a right to a dignified right. The main issue today is to create conditions under which dignity of every individual can be protected." Elaborating further, he said, "Innovation is the key for better world. Innovation is the key for the betterment of people. This is absolutely essential. However, there is a small problem. We call it Boomerang effect or rebound effect. The better the tech, the faster is the destruction of environment."

He explained the effect by citing two examples. "There was a time when we were told that IT would lead to less use of paper but that didn't happen. In fact, it has only increased it. Similarly, the technology made us feel that people would not be required to travel too much now but that too didn't happen," he said. "We need to respect tech to create better result."

He also talked about the climate change and the need to bridge the gap between poor and rich countries. "There is a belief that India and China didn't agree at Copenhagen and Cancun. But I have a different view. India and China were willing to limit their Carbon di-oxide level." He then elaborated that limiting emissions are an important factor in controlling climate change. "Emission is very high in regions like US, Europe, China and India. But the question is what is the problem? Is it highest emission per person or the fact that there are more persons. I think the latter is a major problem." Calling upon all the nations to come together to fight this problem, Radermacher said, "We need a framework for global economy. It's a matter of international compromise and cooperation."

"There is a need for right kind of sharing by government, people and industry. A right kind of sharing by rich and not so rich countries."He added, "In a world approaching 10 million people and with the kind of problems we have, the only solution is consensus.

Defining the future of GIS

The Plenary Session I was chaired by Dr Shailesh Nayak, Secretary, Ministry of Earth Sciences, India. The plenary speakers of the session were Ola Rollen, President & Chief Executive Officer, Hexagon AB, Sweden and Jeff Jonas, Distinguished Engineer and chief Scientist Entity IBM, USA.

Rollen began his speech by introducing his company to the audience. He then talked about the recent Intergraph acquisition and also elaborated Hexagon's vision for the future of GIS. The company had indeed come a long way in just 10 years. It's now defining the future technology. "Static GIS is very professional, very accurate but very slow. Elaborating further, he said, "Google maps are now easily available, so what's left for professionals. That's why it's more and more important to develop tech. There is a need for dynamic GIS, that is, combining accurate maps with tracker. There is a need for accuracy but real-time." "We are looking for digital terrain models with millimeter accuracy."

He also talked about the need to move from 2D to 3D. "By combining these technologies, we can find all kinds of solutions." Giving examples of the application areas of GIS in future, Rollen talked about the agriculture market and explained how we can use this technology to improve this sector. "GIS motion and tracking is the future of GIS."

The next speaker, Jeff Jonas too began his presentation with the background of the company but soon introduced the audience to terms like 'sensemaking on streams' and called upon companies to evaluate new information against previous information, as and when it arrives.

He then explained the audience how data collection is good for a company. Jonas explained the importance of space-time-travel through a very interesting example.

Highlighting an instance of data collected about twins, he emphasised that sometimes two people can have same features but two people can never be at the same place. "space-time-travel is going to radically change the future.

It will turn out to be the ultimate biometric tool." Although he did raise concern about privacy issues, he said, "surveillance society is irrestible" The session ended with an interactive session of question answers with the audience.

PLENARY - 2

EXPLORING COLLABORATION

Collaboration with geospatial technologies is enabling to deal with various challenging areas including environment, economic as well as social challenges, observed Jill Smith, Chief Executive Officer, DigitalGlobe. Smith was addressing plenary session on the first day of Geospatial World Forum 2011, organised by GIS Development in Hyderabad, India. The session was chaired by Lt. Gen. N. B. Singh, VSM, Director General of Information System (DGIS), India. Talking about geospatial database, Lt. Gen. Singh said it is a tool to develop interactive maps that can be manipulated digitally for real-time situational awareness. About GIS, he said it has a very significant role in infrastructure development. He reiterated capabilities of GIS in telecommunication, mapping of boundaries, flood-prone areas and other topographical and topological properties.

Followed by the address of Lt. Gen. Singh, Smith defined sustainability in two different ways. According to her, sustainability is the capacity to endure. In addition, in human context, sustainability is the potential for long-term maintenance of well-being, which has environmental, economic and social dimensions. She showed a satellite image of New Delhi Flood 2010 and demonstrated how collaboration with geospatial technology was capable to deal with that disaster. Explaining capabilities of constellation of DigitalGlobe satellites, she claimed they can cover 1,500,000 square kilometer of India per day. She precisely stressed on the power and benefits of 8-bands images in vegetative and carbon analysis which make decision making faster and effective.

Bryn A Fosburgh, Sector President – Engineering & Construction Emerging Markets, Trimble, talked about *Construction – The Five Dimensional World*. According to Fosburgh, additional two dimensions of construction are cost and time. He precisely talked about Building Information Modeling (BIM) and aid of Trimble technologies in getting the optimum output. He said that the these five dimensions have not changed over time, however, method of modeling, collecting, measuring and managing of the construction work has changed dramatically. In supporting his statement, he explained the architecture of China Pavilion of Shanghai EXPO. He also counted the significant contribution of Autodesk and Bentley in introducing Chinese Revit and Navisworks in 2009 and introducing V8i – modeling software in 2009 respectively.

Fosburgh recalled McGraw-Hill's study "Green Outlook 2009: Trends Driving Change." Some of the highlights of the study include:

- "As much as 50% of construction in the commercial and industrial sectors will be existing buildings by 2010."
- "Green" building market is accelerating at a dramatic rate – the value of "Green" starts grew dramatically from 2005 to 2008.
- Drivers – public awareness, increase in government regulations, and recognition of ROI (lower operating costs, higher revenues due to "green" premium).
- Green trends will touch every building and deeply involve all trades that will reposition existing buildings.

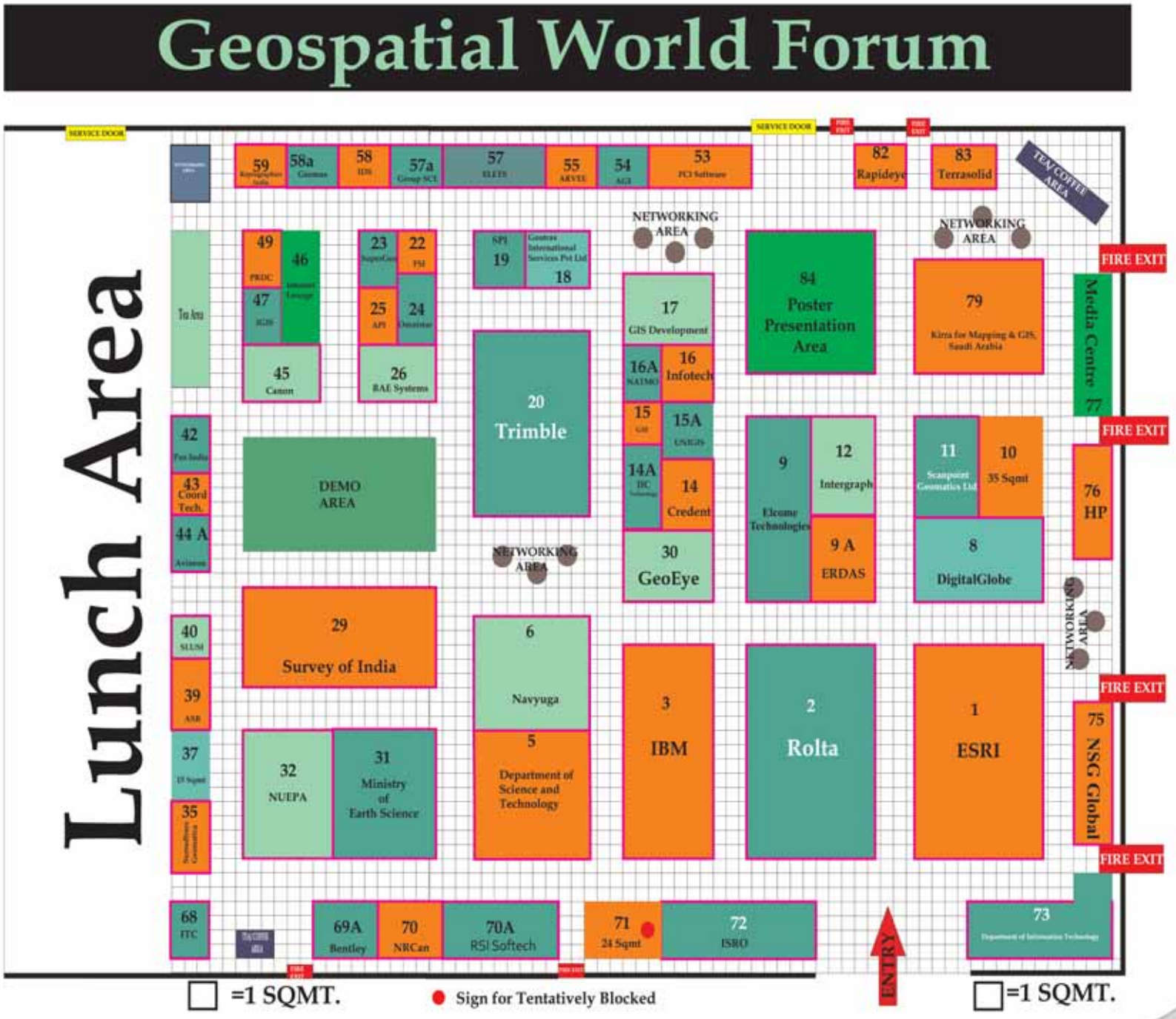
Rajesh V Mathur, Vice Chairman, NIIT GIS, India talked about a new emerging trend on the horizon of geospatial technology, Geodesign – intersection of geography and design. Through an interactive presentation, Mathur demonstrated how GIS will remain in the center of the core practice of geodesign. He said that design is all about geographic planning and decision making. In addition, Mathur talked about other market driven geospatial practices like Web GIS and location intelligence.

TODAY'S AGENDA

WEDNESDAY, 19TH JANUARY, 2011

09:00 - 11:00	Plenary III
11:00 - 13:00	Exhibition Inauguration & Visit to Exhibition
14:00-15:30 16:30 - 18:00	Seminar: Open Source Initiatives
14:00 - 15:30 16:30 - 18:00	Seminar: Climate Change implication on Socio Economic Development
14:00 - 15:30 16:30 - 18:00	Seminar: Spatial Data Infrastructure
14:00 - 15:30 16:30 - 18:00	Seminar: Utility
14:00 - 15:30 16:30 - 18:00	Session: Web GIS
14:00 - 15:30 16:30 - 18:00	Session: Remote Sensing and Image Processing
14:00 - 15:30 16:30 - 18:00	Forum: Integrated Design Education Forum
14:00 - 15:30 16:30 - 18:00	Forum: Geospatial Users Forum

EXHIBITION FLOOR PLAN



Bentley
Sustaining Infrastructure

Visit **Booth # 69-A** to meet Bentley team and learn about software products for the creation and management of intelligent 3D City Models, Geospatial Information Management, Land Development, Mobile Mapping, Geospatial Web Publishing, Water and Wastewater Utilities, and Energy Utilities.

We also invite you to attend **Bentley's presentation on "Geospatial Modeling – A Critical Component of a 24x7 Water Supply System"** scheduled **today** under the 'Utilities' seminar.

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GEOSPATIAL WORLD AWARDS

It was a night that everyone was waiting for – the Awards night. About 173 submissions were received by GIS Development out of which 73 made it to finals. And then began the process of reviewing and re-reviewing the nominations. The winners were presented their awards at the Geospatial World Forum 2011.

The Geospatial industry has been evolving and maturing as one of the mainstream businesses having its own identity in world economy. Undoubtedly, this has been possible only by innovations and excellence brought forward by geospatial technology developers, professionals, end users and policy makers. In order to recognise and encourage such efforts, GIS Development decided to confer awards for exemplary innovations and practices in geospatial industry.

GEOSPATIAL EXCELLENCE AWARDS

Category	Awardee
Agriculture	Cane Smile - Mitr Phol Sugar Group, Thailand (979) conf.
Business Intelligence	Ministry of Municipalities & Agriculture Affairs - Bahrain - 733 Conf.
Governance	NIC, MP - India - 1000 Conf.
Transport Management	Taipei City, Taiwan - China - 763 Conf.
Utility	Penang State Subterranean Data Bank - Malaysia - 784 Conf.
Mining & exploration	Anglo Platinum South Africa
Energy and Power Distribution	Spectra Energy, United States
Telecommunication	Bharati AirTel, India
Land and resources management	Taranaki Regional Council, New Zealand
Geospatial Policies & Programme	Abu Dhabi Systems & Information Centre (ADSIC, Abu Dhabi)

The 'Geospatial state of the country' award was given to Gujarat

And the award goes to...

GEOSPATIAL INNOVATION AWARDS

Category	Awardee
3D	Avinion – India
Photogrammetry	Microsoft Vexcel Imaging
Mobile Mapping	Dataworld – India
Remote Sensing	DigitalGlobe – 8 Band World View II
Web GIS	Aalto University, Finland
LiDAR	Terrasolid, Finland

Dimensions and directions of geospatial industry

The plenary panel session on the inaugural day of Geospatial World Forum 2011 saw industry stalwarts deliberate upon the dimensions and directions of the geospatial industry. Session chair Dr. Vanessa Lawrence CB observed that geospatial industry is fast becoming part of the mainstream industry worldwide.

In his address to the audience through a video presentation, Jack Dangermond, President, Esri, shared his vision on the new modality of the geospatial industry that builds upon enhanced sharing of knowledge and data as technologies evolve. According to him, putting map on the Web involving volunteered geographical information would result in development of integrated system where all devices are connected. This would lead to collectively creating an ecosystem of knowledge. Jack observed that the benefits of having GIS on Web are driven by: technology, with hardware getting cheaper; measurement, with systems getting more real time; software development itself; impact of the technology on science; and new open data sharing policies. This implies that GIS is becoming an integrated system, offering enhanced benefits across businesses, citizens and governments and enhancing communication and efficiency.

Dr. BVR Mohan Reddy, Chairman and Managing technological aspect of dimensions, he opined that the future is the cloud. Sharing his vision for industry direction, he observed that the outlook is very positive. According to him, the industry faced challenges in 2008, 09 and 2010 but business is coming back now. He concluded that the industry needs to ensure that they deliver value to customers. Absence of same will impact not just geospatial industry. These are increased reliance on satellite imagery by governments around the world, users increasingly wanting services that will help them make decisions using geospatial information and users wanting easy access to flawless geospatial information any time, on demand through Internet. He informed the audience about on-demand Web-delivery platform from GeoEye to address this user demand. Kanwar Chadha, Founder, SiRF Technologies discussed the trends in geospatial industry from consumer perspective and discussed the impact of cloud content and relevant location on geospatial industry. Observing that devices are getting connected and world getting clouded, he said that content in cloud is accessible anywhere, anytime. Also cloud is going to be a unified source of information. According to him, this shift is changing dynamics of geospatial industry with the industry becoming part of part of larger information ecosystem, rather than being centre of an ecosystem. These dynamics are creating new challenges and opportunities for the geospatial industry. Steven Hagan, Vice President, Development of Server Technologies, Oracle discussed the drivers of geospatial industry from point of view of platforms. The four global drivers according to him are big data, big software, real-time analytics and big hardware and scalability is needed to support all these.

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In Scanpoint Geomatics we believe in building long term relationships. We consider our valuable clients and customers as our partners and we strive to meet their Geomatics needs in the best way possible. Our software comes with the promise of continued support and hand-holding. We listen to our partners suggestions and strive to improve our products to meet their goals. We consider ourselves as solution providers because every institution buying our software is interested in applying it to develop a system as a solution to meet a particular need. For us meeting that need is important and we know that no two needs are the same. That is why we have built into IGiS the facility of customization. While experienced users can do the customization themselves we are always available to help and if required we can provide the end-to-end customization needed for each solution. Our partners are many and from all areas of endeavour from Agriculture to Zoology. We believe that their solutions will help to protect our environment, foster development and provide security. We believe that this is the way we can live up to our motto: **"Let's utilise the earth perfectly."**

No matter which industry, IGiS can help

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RECEPTIONS

NMO Lunch with Shri Kapil Sibal

8-Band Challange Winners

The winners of DigitalGlobe's inaugural 8-Band Research Challenge received their awards today. The winners included:

- **James F. Bramante, from the National University of Singapore, Tropical Marine Science Institute. His paper was titled "***Derivation of Bathymetry from Multispectral Imagery in the Highly Turbid Waters of Singapore's South Islands".*

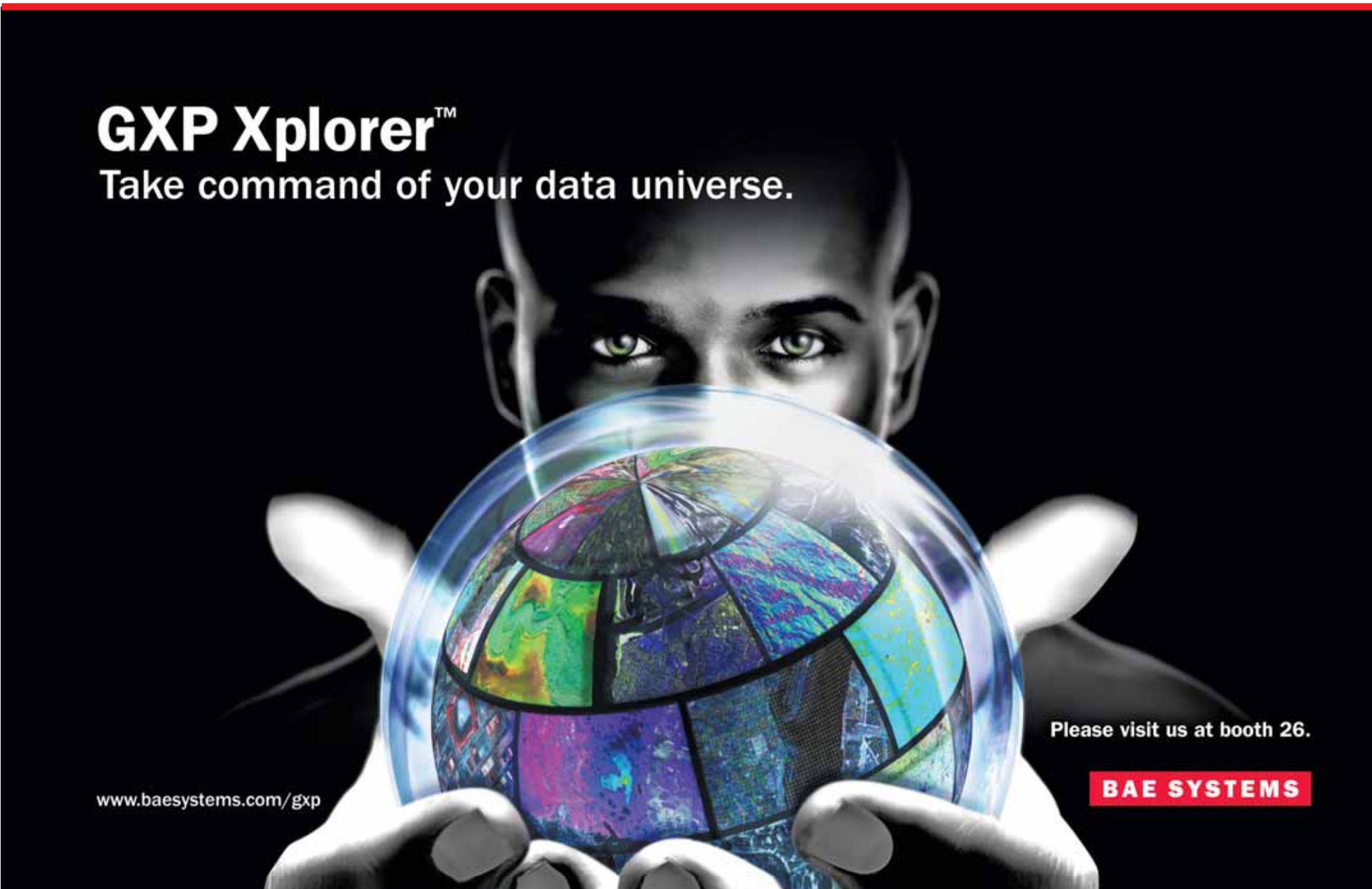
the WorldView-2 satellite offers new capabilities for monitoring threatened coral reefs;

who studied *vegetative canopy parameter retrieval*

"Commercial Timber Tree Species Identification Using Multispectral WorldView-2 Data"

His paper studied ways to use *WorldView-2 Vis-NIR MS imagery to support land mapping and feature extraction using normalized difference index ratios.*

The challenge was meant to showcase innovative insights into how DigitalGlobe's unique 8-band imagery can enhance analysis and classification research and enable the development of next generation geospatial applications. The Research Challenge, inaugurated in 2010, attracted hundreds of submissions from researchers around the world. DigitalGlobe's commercial 8-band high-resolution imagery gives scientists a more detailed view of the earth and the ability to analyse information in completely new ways.



Bushehr, Iran
50 cm Image

Faster revisit and delivery with
AssuredLook

Debre Zeyit, Ethiopia
50 cm 8-band False Color Image

More detail with
8-Band Imagery

Instanbul, Turkey
50 cm ImageScape

Better visualization with
ImageScape

Expect More...
Imagery. Insight. Innovation.

With DigitalGlobe, you can always expect more—more capacity and assured revisit, more detail revealed with 8-band imagery, more coverage with our powerful constellation and Advanced Ortho Content Programs, more rapid delivery and more innovative products to help you solve your most complex problems. And there's more to come with WorldView-3.

Booth
#8

Learn more: Attend our User Meet on 20 Jan, 14:00 - 19:00 hrs, Hall 2

8-Band Research Challenge Winners to present their findings.

- Visit Booth #8 for a research summary and presentation schedule.
- Attend our User Meet to hear the winners' panel discussion.

www.digitalglobe.com/8bandchallenge

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