

KEYNOTE PRESENTATION TO ACSV ANNUAL GENERAL MEETING 12 JUNE 2007

Ollie Hedberg
Chair, Victorian Spatial Council

Words of introduction...

Position is fundamental to Victoria's spatial information management framework.

However, a major paradigm shift is underway in the way we think of spatial information generally and positioning in particular.

While the survey control network has been the framework's mainstay, the advent of satellite navigational systems and GPS are rapidly becoming the basis for determining position, and are providing opportunities for the advent of new applications such as Location Based Services.

And the rate of change is accelerating – in surveying alone, the changes that have occurred in the last 50 years are equivalent to all the change that had occurred since surveying began. Looking to the future, it has been estimated that the changes that will occur in the next 15 years will be equivalent to the changes that occurred in the previous 100.

As a result of this change, more and more people are accessing spatial information in an increasing variety of ways. GPS receivers and Google Earth are obvious examples, but there are many others.

A wide range of spatial information applications are being developed and made publicly available, supporting new and more sophisticated innovations.

For example, Google Maps has recently introduced a new mapping feature that enables users to create their own custom maps.

Or there is the recently released 'GeoCommons', which will be a repository for spatial information available to create so-called mash-ups. It will provide the capacity to upload, download and search for spatial data, and create new applications by combining data from numerous sources.

Through what is known as Web 2.0, or the 'participatory web', greater numbers are involved in creating location based applications. Google Maps is an example of a Web 2.0 application. Through the free API software provided by Google, numerous value added services in the form of mash-ups have been created, linking Google Maps with other internet accessible data sources.

As a result of such changes, non specialist users are now able to access information without the need for any specialised hardware, software or training.

These users are increasingly expecting up to date, quality data at the time of their choosing.

Fundamental issues such as climate change, water availability, emergency management, environmental management, and welfare delivery are also demanding solutions, and spatial information, including position, can play a major role in delivering them.

Address is becoming a significant source of ‘location’ data, particularly as eGovernment and eDemocracy grow. Address is increasingly being used to better understand community demand (where it is coming from, who is making the demand) for government services and the services it delivers (and how well it delivers them).

These and the many other initiatives that are being released on what seems a daily basis present challenges for the whole spatial industry, including surveyors, to deliver the services that users are demanding.

The Victorian Spatial Council is leading the way in Victoria to find a way to define the future of the industry and meet the challenges presented by these changes.

The Victorian Spatial Council

Before I continue, I’d like to recap briefly the history and role of the VSC for those who may not know the full story.

The Council was set up in September 2004 to be the peak body for spatial information in Victoria and to lead the development and implementation of the State’s strategic direction for spatial information.

In that spirit, the role of the Council is to provide a coordinated approach to policy and management, and facilitate opportunities for a greater strategic focus on spatial information development, including greater partnership building, collaboration, cooperation and education.

I have the pleasure to be the independent Chair, and my fellow members are drawn from all sectors of the spatial industry, that is, the Association of Consulting Surveyors Victoria, the Spatial Sciences Institute, ASIBA, academia, Local Government, the Victorian Government Spatial Committee, and the Australian Government through Geoscience Australia.

I am also pleased to announce that Chris McRae, the Executive Director of Land Victoria, has accepted the Council's recent invitation to represent the whole land administration sector, encompassing surveying, valuation and land registration interests, and will take up his position at the August meeting.

The key words and phrases that I think describe the Council's approach are

- 'cooperation'
- 'communication'
- 'promoting spatial initiatives'
- 'forum for examining issues'
- 'building networks'
- 'promoting best practice in spatial information management'

In this vein, facilitation, advocacy, and communication are the cornerstones for the way we operate, encompassing

- sponsoring and/or championing major spatial information initiatives;
- publishing policy statements, guidelines, and discussion papers; and
- running forums and briefing key decision makers in business and government.

Under its collaborative approach, each sector also has a particular role to play. The Council has published a set of business principles that are intended to define these roles and provide a sound basis for coordination and collaboration

of all sectors. They cover policy and standard setting, data provision, development of new products, developing markets, and research and development. These roles may be performed individually or through cooperative approaches, but together they are intended to contribute to the growth and development of the spatial information industry.

The Council is continuing to provide a means for the industry to share ideas and discuss issues through its annual series of Public Forums, and through the successful Landmark magazine, of which it became publisher in January 2006.

Our major task for the remainder of this year will be to work with the whole industry to identify and respond to the challenges emerging from the likes of Google and Microsoft and other innovations.

These will be tackled in the next Victorian Spatial Information Strategy, which will cover the period 2008-2010.

The paradigm shift in location information

I referred earlier to the paradigm shift occurring in spatial information generally.

This shift applies equally to the way we think about ‘position’ or ‘location’, as evidenced by the increasing use of mobile devices to identify and locate many types of objects, such as manufactured goods, animals, and even people.

Radio Frequency IDs, sensor networks and intelligent objects are just three examples of this trend.

Consider RFIDs.

RFIDs use electric or magnetic fields at radio frequencies to transmit information. They can be used to identify many types of objects. RFID readers wirelessly communicate with the tags to identify the item connected to each tag.

The European Union has estimated that worldwide there were 1.3 billion RFID tags and two billion mobile service users in 2005.

Further, the RFID market is expected to grow rapidly over the next ten years. If the main technical and economic challenges are resolved in the near future, the global RFID market might grow exponentially to be almost ten times the size in 2016 that it is in 2007.

In this world, 'location' not only relates to the position on the ground, but what is happening within an object (a good, an animal, the environment) at a particular location.

The potential benefits from using RFIDs are many – they can help improve safety in food traceability, healthcare, anti-counterfeiting of drugs.

They can contribute to improved efficiency and security in transport and the mobility of people and goods.

In healthcare, they have the potential to increase the quality of care and patient safety, and to improve medication compliance and logistics.

In many industries the use of RFIDs may allow products to be recalled more efficiently and to prevent illicit goods from entering the supply chain or spot where these actually entered it.

Victorian Spatial Information Strategy 2008-2010

So what do these changes and the pace at which they are occurring mean for the traditional spatial industry –including surveyors?

And what are the strategic and policy directions needed to meet the challenges these changes provide?

The Victorian Spatial Council will be attempting to respond to these questions in the development of the next Victorian Spatial Information Strategy.

The 2008-2010 Strategy will be the fifth such plan for Victoria, and the first to be led by the Council.

Development was ‘kicked off’ in December last year with the VSC Forum *‘Where to next for the spatial Information Industry?’*

And will continue throughout the remainder of 2007 through a series of workshops and wide spatial information community consultation.

The aim of these activities will be to identify the key challenges faced by Victoria in the next three years that the Strategy will respond to.

The Council will shortly release a background paper to stimulate the discussions that will take place in the next 6 months. It considers 10 areas of change and

development in both the spatial and non-spatial arenas, such as positioning and location based services, spatial enablement, the growing power of technology to deliver information, the importance of the quality of spatial information, and the impact of new innovations.

The surveying industry's contribution to where Victoria's Spatial Industry is heading are important. And I invite you to participate in developing the Strategy by:

- Visiting our website regularly for updates on the Strategy and reading the material published there,
- Staying in contact with your Victorian Spatial Council Representative,
- Participating in Forums the Council will run later in the year, and
- Commenting on the Strategy as it is released.

Concluding remarks

Such changes as those that I have outlined above are making the attainment of position simpler, and as a result are opening up the market to new players.

And they are serving a much broader user base – which is increasingly expanding to cover policing, vehicle fleet management, farming, and the collection of spatial information.

Such a changing environment requires changing responses – those that embrace the new and let go of the old.

Why should we do this?

Because our evolution is the key to our survival.

Because Google is not made up of a group of surveyors, but it is satisfying so many of our traditional clients' requirements with their on-line services that reduce the need to invest in data collection and hardware and software. These clients are demanding solutions, and the likes of Google provide them – by making access to data simpler, and providing the services and tools that enable users to develop their own applications.

Position and location have not lessened in value – on the contrary, they are now more widely recognised and more important than ever.

This brings significant opportunities as well as challenges.

The challenge will be to take our unique competencies and use them to create solutions demanded by the market.

The Victorian Spatial Council recognises the importance of this challenge.

And I invite you all to join us as we take the challenge offered and set our future course.

Thank you.