

Geo-information Broker

The G in GIM stands for Geomatics. Geomatics is a term born in the early eighties as an act of defence against the marching advance discipline of informatics. In the permanent battle to attract students, institutes of higher education believed the term 'geomatics' sounded more attractive than 'land surveying'.



With geomatics having now reached the age of maturity, we may put forward the question: what is happening to its old-fashioned mother, land surveying?

Image

The great age of surveying resulted in a consolidated image of the land surveyor in the mind of the general public. This, then, is the image of the land surveyor: a lonely pioneer, standing with both boots firmly on the earth, accessing terrain never set foot on before, proud in his skills and

his technology. Modern times have so far altered this image that men are increasingly interchanged by women. Such an image may appear charming and harmless. However, it is not only an archaic, agrarian picture, but also one which is dangerous for the portrayal and survival of our profession. This sounds extreme. But let me explain myself.

Deep-rooted Profile

I am fairly well convinced that the image sketched above represents the surface eruption of an underlying, deep-rooted profile of our profession consisting of the following tripod: the brave man, the hostile earth and the triumphal technology. This introverted image may have been appropriate when mankind still had to conquer nature and large portions of the earth surface showed up as white areas on paper sheets. However, the earth has been conquered and surveying technology has reached a stage of advancement such that the general public takes it for granted that it works. The traditional profile of the surveyor is consequently disappearing just as quickly as that of the trucker as hero of the road.

Non-transparent

The main activity of the land surveyor is to collect and distribute geo-data, with the emphasis on the geometric component. The measured terrain object may be any phenomenon, depending upon the demand of the customer. Consequently, the land surveyor no longer has a particular physical object he constructs or studies; he has no easily identifiable application domain. This deficit results in a non-transparent professional profile.

Technology Driven

A non-transparent profile is also threatening from the perspective of education. We educate our future surveyors from a merely technological-driven point of view. This type of education will result in a loss of

market share and may even cause the disappearance of our profession. The cascade of reasoning underlying this clause goes as follows. We train our students to master a broad variety of measuring techniques and instruments, to transfer the world into mathematical models, to express the quality of the gathered data in quantifiable measures and to represent that data on maps and in appropriate data structures for digital storage purposes. And indeed, they are damned good at this. We teach them well, no doubt about that. However, the emphasis on these abilities occurs at the expense of under-illumination of other indispensable abilities of vital interest in today's competitive, global economy. These abilities include good communication and presentation skills, being client and market-orientated, and being able to work in a multi-disciplinary environment. Due to the narrowness of our education, surveyors are increasingly pushed aside by other, less technical professionals who have been taught to exploit their gift of the gab.

Change of Scenery

I have said it before and will not get tired of repeating it again and again, because this is one of my key messages: there is a huge need for accurate and detailed information concerning virtually every square meter of the land and the sea surface. Consequently, geospatial data is going to be one of the most important components of the digital information scene. (Space) technology will make possible the recording of extensive and remote areas of the earth in a highly automatic manner, whilst these datasets will have to be merged with a variety of other data sources, such as topographic databases, to enable the extraction of meaningful information. End-users will be increasingly able to access geo-information themselves. Geo-data may be increasingly produced by anybody at any required level of accuracy and detail. This change of scenery is not at all threatening. On the contrary, it provides great opportunities and challenges! It empowers us to change our role at all technical levels from one which is orientated towards primary data acquisition to one of combining geo-information and providing services to highly demanding customers.

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I see the appropriate profile of the contemporary land surveyor as a broker at the crossing point of a multitude of geo-information streams. As a broker of geo-services he provides clients facing a geo-management problem with the appropriate ingredients to solve their problem. The key paradigm shifts necessary to arrive at this professional profile are the move from being instrument-orientated to value-added service-orientated, from being a collector of geo-data to being a distributor of geo-information and from being earth and technology-centred to being customer and market-orientated.

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