

# Bread and Butter for the Surveyor

The future for the surveying professional is bright. This is one of my favourite adages, and one I have expressed in a variety of wordings many times over in the columns of this journal. However, it does not tire me to repeat it again and again. I do so because it is the truth, and because there are still surveyors today who believe the opposite is true. In our interview this month Hans Hess, exiting CEO Leica Geosystems tells us that he too encounters this attitude: 'Sometimes I hear our customers say, "Well, the surveying profession is dying and there is no future for us." But Mr Hess joins me in the belief that surveyors face a great future; witness his observation '...the need for geo-information is tremendous, and growing; geo-information has to be more up to date, more 3D, more accessible over the internet, and so on. There are not many industries that offer so many exciting prospects.'

Given the excellent prospects, why do some surveying professionals still fear that their profession is threatened with extinction? Of course, we are living in a dynamic world where things evolve at breathtaking speed. Nothing is as it was before; nothing seems to be certain anymore. The world of ten years back differs in many ways from the world of today. This can make one afraid for the future ten years from now. But is that reason to be pessimistic about one's professional future?

Maybe the fear of extinction originates from an over-restricted view of the profession. Let us therefore vet the question: what are the prerequisites to becoming professionally active? The answer: knowledge, material, and skills to transform material into products and services using the tools and customers required for it. The reason methodologies used by a profession change over time is probably that all over the world scientists and researchers see shortcomings in present methods and are busily searching for improvements and new methods. And once in a while they succeed. So every professional has to upgrade his or her knowledge by following courses or attending conferences and congresses. In some professions, for example in medicine, one is even obliged annually to attend such refresher courses.

Since developers are just as restless as scientists and researchers, tools too continually and gradually evolve. We are usually confronted with the changes once a year, when we attend one of the major geomatics trade-fairs. Most are not all that spectacular, involving additions or improvements driven by developments in the basic technologies, such as chip technology, which provide elementary construction components. But once in, say, three to four years, some revolutionary technology penetrates the surveying profession. In retrospect, the examples leap out at us: electronic distance measurement devices, [total station](#) s, geographical information systems, GPS, airborne Lidar, digital cameras, mobile mappers and terrestrial laser scanners. These new tools have a vast influence on the way in which we must carry out our profession. Some may grumble: "This has nothing to do with where I come from and am used to, this is not part of my profession." However, tools alone do not make a profession. And only a bad carpenter blames his tools.

Also, the customer is changing. The majority of traditional clients are cadastres, municipalities, engineers, (landscape) architects, title-insurance companies, real-estate brokers, land-development, and construction companies. However, a broad palette of new customers is joining them; roughly portrayed, these are the GIS users. Coming from a variety of backgrounds, such as forestry, transport, building maintenance and farming, they have one thing in common: to run their business processes properly they require accurate, detailed and up-to-date geo-data. As a result, the demand for geo-data is increasing throughout all sectors of the economy. This development, which is taking place all over the world, creates sky-high professional opportunities for the surveyor.

For those who continue to believe the surveying profession is endangered, let me put to them some other prospects. First of all, mankind has divided land into pieces and plots all through his history; it is a natural habit, and most likely we will continue to exhibit this behaviour for as long as there are two or more people on the planet. But whilst the Earth allows the human population to grow, it refuses to expand its land area, hence land is becoming more and more scarce. So folk are prepared to pay a lot of money for bits of land. Indeed, property, or real estate, is the largest category of tangible assets within the economy. And something of value needs precise and accurate registration, in which surveyors are expert.

The need for surveying services is driven not only by the demand for property but also by the many construction and transportation activities necessary to feed and house a growing world population. You have only to look at all the civil-engineering activities going on in your vicinity to realise the growing need to be able to locate - with small positional tolerances - natural or artificial objects on and near the surface of the earth. And all this provides bread and butter for the surveyor.

Conclusion: the surveying profession is more vivid than ever before. The secret is not to think in standard solutions but to develop solutions adapted to the needs of the customer, and to keep an eye open for new customers and new demands.

