

## Municipal geomatics, a new inescapable paradigm.

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### Survey

A quick survey among municipalities that use Geomatics: those who are saving thanks to Geomatics raise their hand! Hum, not too many hands.

An easier question: those that presently use Geomatics effectively, raise their hand, please... only one hand... It's a little better, but still very poor.

OK. Those who've made a real commitment towards the implementation of Geomatics, raise their hand... Ah! That's better! But we should still see more hands.

Why do so few municipalities use Geomatics when it has been proven that savings are possible using it? In a world of budget cutbacks, Geomatics should be used almost everywhere.

### History

Not so long ago, the word "Geomatics" was practically unknown. It is becoming increasingly popular in the municipal world.

Originally, those who developed this new discipline presented it as an aid to decision-making and a tool that was to allow a saving of time and money. Very early on, theme maps were produced which made it easier to analyze complex data or to quickly understand phenomena. Geomatics promised to support better decision-making, based on easier analysis.

Ten years later, what happened with these fair promises? Well, not all became reality and those that did, offered less than what was predicted.

In your municipalities, where do you stand with Geomatics? Firmly established? First infancy? Thinking about it? There is no budget? What does Geomatics mean?

And your colleagues from other cities, where are they at? Do you know?

The fact that a technology is not quickly and easily accepted is not new, even in the progressive and technologically advanced world where engineers, municipal and others, are involved.

### Remember the birth of computer-aided drafting (CAD)?

Yes, the world of engineering already lived through a similar story. In 1982, specialized CAD magazines titled "CAD makes it possible to work 10 times faster than on the drawing table". And many articles compared marvelous systems worth \$50,000 (basic obviously) to draw lines, curves, circles, and the next version promised us ellipses...

Ah yes! I almost forgot. The "new kid on the block" in 1982, a new computer, the IBM-PC for less than \$5,000 including a

small CAD software called AutoCAD for \$2,500. Of course, its future seemed doomed to the closet when compared to the TRS-80s, Commodore 64s, Amigas, etc.

### A new paradigm

However, nothing will ever be the same again. Since that "new kid on the block", all has changed. And these systems which made experts laugh, quickly gained their nobility and invaded our lives. And in fact, mainframes computers were also affected and filled warehouses (because they could not fit in the closet).

And for the municipal sector, from large to small municipalities, the words "computer" and "CAD" are part of their life now. Faster, less expensive and more reliable, computers are integrated into our office decor. The difference with older systems was the implementation costs, the need for consultants and specialized personnel.

### Geomatics too!

Geomatics was initially used by municipalities of more than 100,000 inhabitants which could make the considerable investments required for the software and hardware. As with CAD, a Geomatics workstation with software cost at least \$50,000 without counting the expenses of consultants, the training of employees, conversion, and much more... And results did not come in the short-term either. Here also, a revolution happened!

Today, for less than \$10,000, almost any municipality can buy a Pentium computer with excellent Geomatics software (for example, AutoCAD-MAP). Add 2 days of training for an employee who already knows AutoCAD, and you are ready to enter the area of Geomatics. In fact, AutoCAD, which was originally just another piece of software, now holds 85% of the world CAD market, and its creator, the Autodesk firm, is the fourth largest PC-based software firm in the world, and is, by the way, in excellent financial health.

I believe that Geomatics should be implemented in all well organized municipalities, except perhaps those who are not concerned with their operation expenses. ♦

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