

MicroSurvey:

20 Years in Turbulent Times

Curtis Moore

Surviving in the software business for 20 years with a continuous line of products and operating with the same owners is unusual. The surveying software business is littered with products like Pacsoft, Civilsoft, Maptech, or Ageo that have been absorbed or have disappeared. MicroSurvey Software Inc, a Canadian company, started up during a boom time in Edmonton, Alberta. Alberta is receiving a lot of attention these days, and a hundred billion dollars in construction, because it has the second largest oil reserves in the world. All that oil requires a whole lot of surveying, so back when the first personal computers hit the market in the early 80s, MicroSurvey was formed to provide surveyors with affordable COGO and drafting solutions.

Founded by Darcy Detlor, in his final year of Engineering at the University of Alberta, the company established itself as the Canadian leader in surveying software. Over the next 10 years, five other established Canadian software firms dropped out as they could not keep up with MicroSurvey's pace. Jump forward and the company now has several thousand customers in 55 countries. Just in the past year major sales in Croatia, Sri Lanka, and Chile are an indicator of how far the company is attracting attention. No real attempts are being made to pull in these sales with international advertising; they are finding the company based on product quality and word of mouth. According to Darcy, "It would have been unthinkable to have sales like this when we started. Now we are preparing an international campaign to vastly increase our reach. Our products are better than our distribution, so we are looking for partners worldwide."



Darcy Detlor, founder and CEO of MicroSurvey

The company has developed an easily translatable version of its data collection software that allows distributors anywhere to translate the product without requiring any changes to the source code. This allows distributors to have control over their own language. At the recent ACSM conference held in Orlando, Jason Poitras, Director of Product Development at MicroSurvey, demonstrated the translation system, and it should open doors around the world. Latin (N/S America/European), Cyrillic (Russia), and wide character (Chinese/Japanese) fonts are supported. Changing the regional settings on the data collector is all that is required to switch languages.

Like most companies that have been in business for a number of years, there have been some "learning experiences" for the MicroSurvey founders. Darcy elaborated by saying, "In 1989, our company had expanded across Canada and we were starting to have success in the U.S. market. As we established a dealer network, we were introduced to DCA Engineering Software (later called Softdesk,

later purchased by Autodesk), and we licensed the product to them. Unfortunately, too much control was passed over in the contract, and they only sold about 10% of their target. It almost killed us, because after the one year contract was up, we had to start all over. We had given them our customer list, handed over our marketing and product manuals, and had converted into a pure programming company. Good things often come from bad, because during the year we picked up the company and moved it to Kelowna, British Columbia, one of the most beautiful places on earth. When we hit bottom in 1990 it was a low time. It was my "Business 101" course, with an Engineering background I never took. Those first few years were definitely on a roller coaster."

Ten years ago, the company released a product that launched it back into the U.S. market. Written by Darcy and released in late 1996, MicroSurvey CAD (MSCAD) was a combination of the company's surveying software with





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MicroSurvey CAD is a complete desktop survey and design program specifically for surveyors, contractors, and engineers.

a CAD engine from Europe. Since then sales have risen by over 2,500%, and the company has grown to more than 20 employees. In the past few years the company has supplied software solutions based on MSCAD for Simplicity Systems, SMI, Sokkia and Topcon. "MicroSurvey CAD continues to be the right product for thousands of Surveyors who want a full CAD system, but not the cost of traditional AutoCAD-based products. MSCAD now uses the IntelliCAD engine and it has proven to be powerful, stable, and dead easy to run if you have AutoCAD experience."

Darcy Detlor is now an Officer of the IntelliCAD Technology Consortium (ITC) because he knows that the ITC is critical to the success of MicroSurvey and its customers. "The ITC is a unique organization of more than 40 companies around the world who have partnered to build a world class CAD engine. There are now 15 programmers working on IntelliCAD, and the development path is very well managed. Combined with the 15

programmers building the DWG engine (The Open Design Alliance) you have a strong team pushing the CAD engine forward."

Since the introduction of MSCAD, three significant expansions of the company have taken place. In 2000, crime scene and accident reconstruction diagramming software was added with the MapScenes line, and in 2001 data collection was added as FieldGenius for the surveying market and Evidence Recorder for the forensics market.

"Since our expertise is in the creation of highly accurate maps, adding forensics was quite a natural fit. Police have used our software to construct diagrams of some of the most well-known major crimes in the U.S. and Canada. People remember the sniper who was shooting people in the Washington, D.C. area out of the trunk of his car. Many of those crime scenes were collected and diagrammed using our Evidence Recorder and MapScenes. The U.S. Army purchased the system to map mass graves in Iraq.

Sales continue to be strong in the forensic market, as last month we sold 44 complete mapping systems to the Ontario Provincial Police."

Data collection has introduced MicroSurvey products to many new customers. Designed from a clean sheet, the FieldGenius product was made possible by the introduction of Windows CE devices. "Everything out there was instantly made obsolete when compared with the amazing graphics in today's devices. When we show people a 3D image of a stockpile they measured, or real-time contours in a golf course, or even the linework created as you pick up shots along a road, they know they will benefit. We have the most advanced graphics that you can carry in your hand. Anyone who has seen FieldGenius knows we have something special."

Although the company sold complete systems back in the 80s, hardware has not formed a big part of the company's income until they spotted the Jett computer from Two Technologies. Now they are making a big splash with their version called the Tracker Xtreme. "Selling data collection software was difficult until we had access to this box, because we could not find a suitable platform. Now we are carrying a device with all the bells and whistles—Bluetooth, WiFi, USB, and it is really fast. It is nice to be at the cutting edge of the hardware market, and be well below the price of devices manufactured by the industry. I was expecting this to happen, but it took about two years longer than predicted."

Last year a completely new concept for the company was launched with OfficeSync, an Internet and cellular solution for moving files between offices and field crews. "It's a wireless world now. With \$3/gallon gas, people are thinking more about costs. We have found there are a couple of dozen different reasons why people buy OfficeSync. Wireless data transfers help customers save money, or make their company run smoother. People just don't want to wait for data to move at the speed of a pickup truck when it can arrive in a few seconds.



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Managers want to confirm that a crew picked up enough shots for a topo or collected enough legal evidence before they pack up and drive to the next job. People make little mistakes in files, or when they are uploading in the office. They grab the wrong file, or the developer wants a quick change. These days a little mistake shouldn't cost the company hundreds of dollars in wasted time if there is a simple fix. Fax machines and then email proved that. Now we do data, and we do it so you can track it."

How are the company's future prospects? "It's easy to look back over

20 years and say they were the good times, but the reality is that the people we have now are the best, the products we sell are the best, and future looks better than ever. We make more money now, generate better profits, and have virtually no debt. That is what guarantees success for both our company and ultimately our customers. We can make customers better products so they too can make more money and have more success."

Business is always a gamble, but for 20 years MicroSurvey has been rolling the dice and is still in the game. The variety and quality of their products

is impressive for such a small group. One look at their web site, which is just packed with information about their products, is another example of how they do more with less. More than 85 training movies are on line for their surveying data collection software alone. This level of support is how they do business. It is probably safe to bet that their latest products will carry them forward as they expand around the globe. †

CURTIS MOORE is a freelance technology writer based in Ontario.

