"We never inspired to create a dominate PC-based software and never dreamed it would get this big." Dr. Thomas A. Smith founded a company that has a profound influence on the way the oil and gas industry uses geophysical, geological, and reservoir data.

Thomas Smith, Associate Editor

As I got off the elevator and entered the SMT's offices to interview Thomas Smith, without ever knowing the man, I immediately knew who was standing at the reception desk. He was chatting with some employees in the reception area, all who were engaged having big smiles. At that point I knew I would be shaking hands and soon be sitting down with a very special person. His wife, Evonne, joined us in his office and our very informal, cordial visit began.

Seismic Micro-Technology (SMT) was founded in 1984 by an individual with an interest in developing geophysical ideas through software and who saw the need for this software. The founder and president, Dr. Thomas A. Smith, along with his wife Evonne, grew the company one customer at a time drawing on life's important lessons and experiences from Tom's heroes. His attitude toward people, accomplishments, great sense of humor and infectious smile have, and will continue to be, a positive influence on the oil and gas industry and the people he touches.

Tom started the company by offering MS-DOS seismic programs designed "to help the consultant and the small independent compete technologically with the larger companies". From these early beginnings, SMT is creating the first fully integrated Windows-based software that takes the geoscientist from "seismic through simulation".

Tom's future goals are to improve and integrate the software to serve the next generation.

Tom's Heroes

During his childhood years, Tom met the first of his heroes. That person was his swimming teacher and coach, who was "the first adult to talk to me as a person". Tom went on to become quite a good swimmer under his direction.

Tom was introduced to his next hero while an undergraduate in college by way of a text book. This book has been referred to as one of the most influential publications in the history of exploration. Updated versions have been used for at least two generations of geophysicists. Milton Dobrin's "Introduction to Geophysical Prospecting" left Tom with the desire to meet and study with a man that was such an influence in the geophysical field. The opportunity came when Tom went to Houston to work for Chevron and started a doctorate program at the University of Houston. Tom found Dr. Dobrin "very infectious" and "just loved chatting with him one-on-one". Dobrin's professional competence, dedication, and humility touched many and Tom was no exception.

"I have had the good fortune of meeting people that have had very positive and important influences on my life. Four of these people really stand out; these are my heroes. Three are pictured out on the wall of our reception area."

After leaving Chevron, while consulting and teaching short courses, he met the next two of his heroes. Norman Neidell, another consultant, became a mentor to Tom. Evonne claims "they would have starved without the help and encouragement that Norman gave to them".

Tom met the last of these heroes while teaching classes in Calgary, Canada. Leo Sheftel, the owner of a hotel where Tom stayed, "always knew everyone's names, kept his staff happy and motivated, giving personalized service to all the customers". These influences helped Tom form a business plan and attitude that would lead to his success.
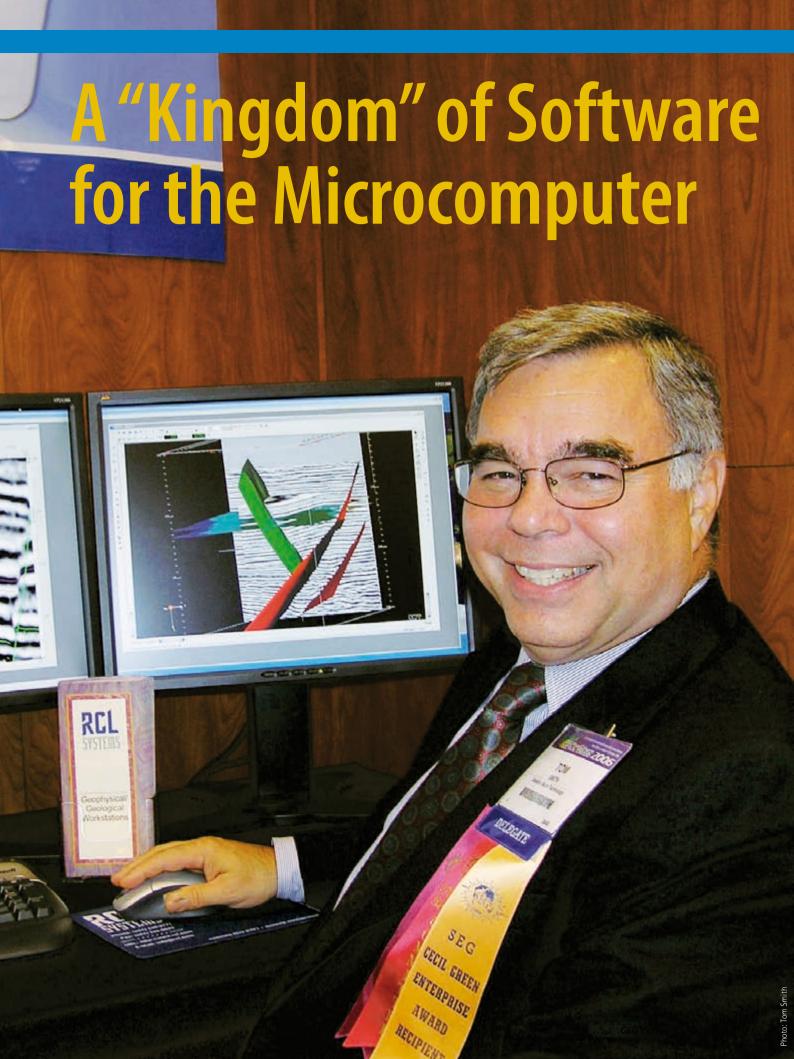
Starting SMT, One Customer at a Time

The progression of new software packages and growth, as needed, came next. The company, SMT, was started as a "one man business" by Tom in 1984. They stayed in business over some of the lean years in the mid-1980's by providing personalized service and affordable software to many consultants. In turn, they helped the consultants stay in business by providing a software package where one person and small independents could have the technology at a price where they could compete with larger companies. At the same time, these consultants "gave us feedback and we used their input to improve the product".

Why have they been so successful? I think this story tells it all. "Many years ago, when we had the MS-DOS software, Brian Kalinec was interested in buying our package. We came to his home address at 5:00 p.m. I was led back to a bedroom where a PC and printer were on a card table. I loaded the software off floppies onto his computer, installed and got a color printout of some seismic traces. I was pleased to get it all to work. Then out in the kitchen, here was Brian's wife cooking dinner and his disabled daughter doing her homework at the kitchen table. Brian, also at the table, was putting his personal money down on my software. He was putting his consulting future into my product." With such experiences, Tom was more than ever dedicated to provide a product and service at a price that was superior to any of his competitors. They still have many of their original customers as clients.

Since then the company has evolved into a global enterprise going to the MS Windows format in 1994 and now has over 5,600 interpretation licenses in 70 countries along with 150 employees. All this from people that "never inspired to create a dominate PC-based software and never dreamed it would get this big". They

Founder and president of Seismic Micro-Technology, Dr. Thomas A. Smith's achievements through his hard work, great attitude, and smile speak for themselves.

A "Kingdom" of Software for the Microcomputer

Photo: Tom Smith

Tom and his wife Evonne make a most successful team.

also have given back in a big way. Over 260 colleges and universities have the software and support through generous donations from SMT. Their motivation is to "pay back our debts, we have stood on the shoulders of giants and this is our way of saying thanks".

The company stands out from others by the integration (in 2003 they completed The KINGDOM Suite), the price, and the user interface. Tom insists, "the software should be easy for anyone to use and have broad appeal". Tom is also proud that "his software has made it possible for the geologist, geophysicist, and the reservoir engineer to have a more common bond and can communicate better than ever".

Early Lessons

Tom is an early baby boomer from a small town in Iowa. He grew up as a resort kid on the shores of the Iowa Great Lakes (kettle lakes left over from the last ice age advance about 12,500 years ago) helping his mother who ran a resort and, at age 16, started helping his dad in the "dirt" business. By having and working with parents running businesses, Tom started learning early how to deal with people and develop a positive attitude and work ethic. In the meantime, Tom had his fun fishing the lakes and swimming.

After high school, Tom enrolled in the physics program at Iowa State University in Ames and had to take Geology 101 as a required course. The open air of a few field trips got him hooked as he "could not see being stuck in an office or laboratory all the

time". He graduated with a BSc in Geology in 1968.

Tom met Evonne during their senior year. She majored in clothing design and, before marrying Tom, moved to Denver for a short stint designing clothes. After marriage, she received a teaching certificate and was a secretary while Tom was working to get his Master's degree, also at Iowa State. From the start, "Evonne was the financial expert of the family", which she continues today as the CFO of the company. Tom received his MSc in 1971 by completing a refraction seismic survey over the Manson disturbed area, a 35 km wide impact crater in northwest Iowa.

Working years

While shooting his thesis refraction survey, Tom managed to shut down one of the local town's water supply by blowing up a water main. He learned that geophysics could be hazardous as well as fun. In spite of this mishap, Tom was hired as a geophysicist for Chevron and while working completed a doctorate program at the University of Houston.

After leaving Chevron, Tom did consulting and taught short courses in seismic acquisition, seismic processing, and seismic evaluation of reservoirs. This is when he wrote his first software package in MS-DOS to use in his classes that took the seismic traces and put them into spread sheets for computations and display.

Tom developed more seismic interpretation software in MS-DOS at about the same time Landmark Graphics was developing

their revolutionary 3D workstation. This was also a time when companies first started to shoot 3D surveys and the software development was, in part, a response to the need to analyze these seismic surveys. Using the PC as a base lowered the costs and opened the door to consultants and small independents to be able to analyze the seismic data. Tom and Evonne scraped together a small fortune to buy (what else) a Fortune 32:16 to run and develop the new programs Tom wrote.

So now comes the big disappointment of the interview; the name of the software. It turns out that the name came early in the development, but was not by divine intervention. No, it was "at a cocktail party after a Parent Teacher Association meeting, we were explaining how the software worked and the person they were talking to suggested it was like a chess game, where the King is most powerful (actually the Queen is the most powerful)". Kingdom has been the name of the software ever since.

Vision of the Future

"Picture three fingers of one hand pointing down. These represent geology, geophysics, and reservoir engineering with three fingers of the other hand pointing horizontally across the three vertical fingers, which are data, technology to work with the data, and knowledge management." Integration in the nine boxes cre-

"Time is the most valuable commodity in the world. Never squander your time; manage your time – accomplish things faster and with greater impact."

ated here is his next goal. The ultimate goal is to be able to "preserve the value of enhanced data forever. We want our technology, software, and data management system to be a complete digital repository. The data becomes intellectual property as it has value added through interpretation and technology which will continue to grow in value over time. Our part is to preserve the technical gains and to give future users the opportunity to access this data base of both data and interpretation and grow from the past gains."