

# no problem's too technical

## interview with Richard Sharpe

It took a little time for Richard Sharpe to get in touch with his inner engineer. But once he did, he discovered a passion for devising technical solutions to knotty supply chain problems. The rest is history.

WHEN A WELL-INTENTIONED PERSON ONCE SUGGESTED HE SWITCH HIS COURSE OF collegiate study from pre-med to industrial engineering, Richard Sharpe was taken aback. "I'm not sure if I want to drive a train," he told his astonished advisor.

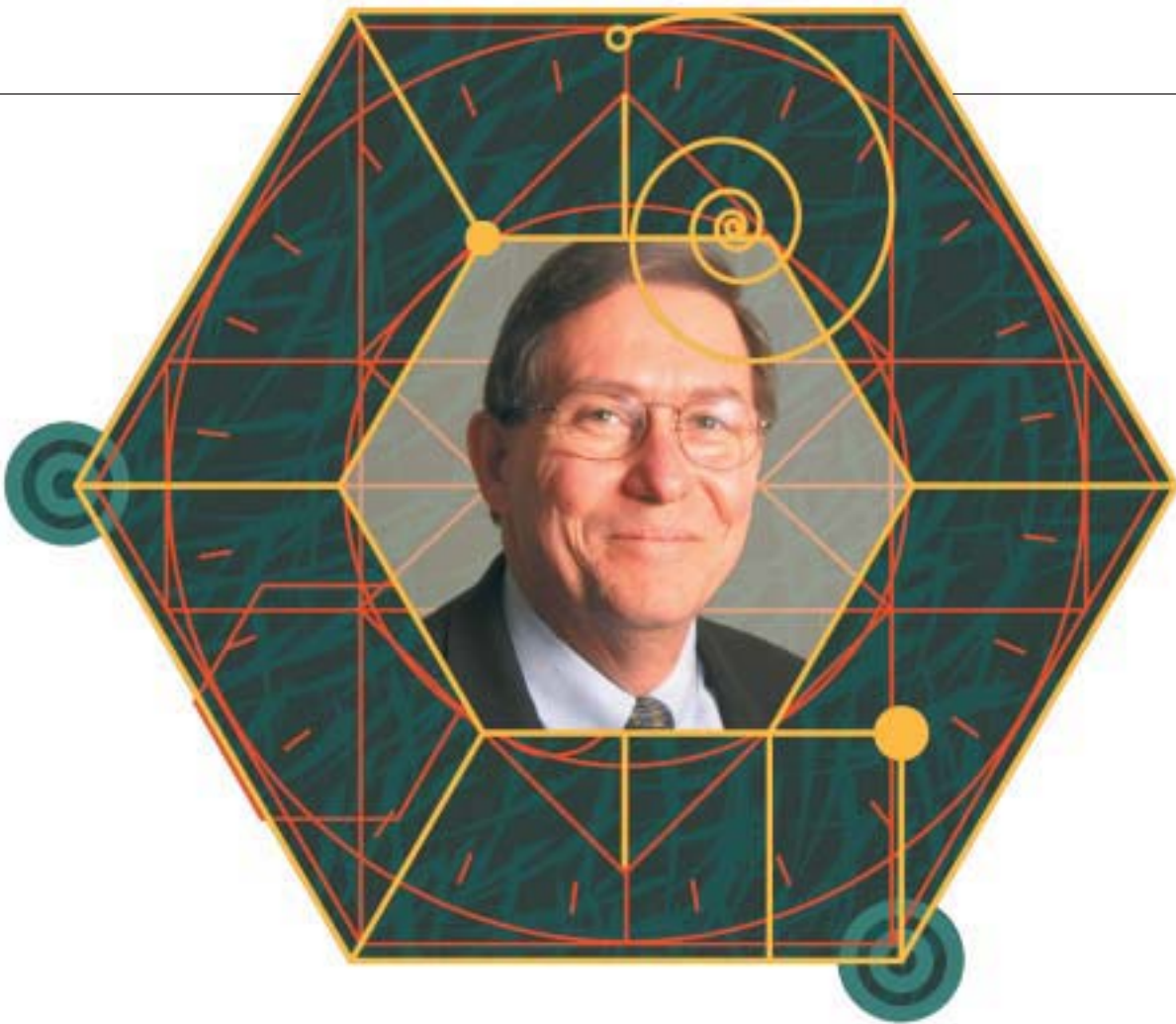
He laughs when he recounts that story, noting that his path took an ironic twist soon afterward. Despite his initial skepticism, Sharpe did look into industrial engineering, and once he learned more about it, he realized that was exactly what he wanted to be doing. After earning both undergraduate and graduate degrees in that discipline, he applied his engineering skills out in the field, analyzing and solving technical problems for the likes of AT&T and the U.S. Navy. Later, he co-founded an Atlanta-based logistics technology consultancy, Competitive Logistics LLC, of which he's now president and CEO.

Today, Sharpe also serves on the board of directors for Datatrac Corp., the Warehousing Education and Research Council (WERC), Georgia Tech's Executive Masters in International Logistics (EMIL) program and as a director for Feeding Children Better Logistics Solutions (a three-way partnership with the ConAgra Foundation, America's Second Harvest and Competitive Logistics).

Sharpe recently shared his insights into the logistics profession and the technologies that support it with *DC VELOCITY* Editorial Director Mitch Mac Donald.

**Q** What was your first experience solving a technical engineering problem?

**A** Back when I was earning my graduate degree in industrial systems engineering from Georgia Tech, I became part of a two-person team that worked with the sponsoring professor to build the first interactive scheduling routine for the U.S. Navy. Basically, we helped them replace that system of moving ships using those long sticks across a table map that you see in the movies. It was truly an interactive scheduling routine focused on assigning ships to coverage areas in the Atlantic while maximizing crews' time in port.



**Q** Did that experience lead to a job with the military when you finished graduate school?

**A** No. When I finished at Tech, my first assignment was with AT&T. We built an interactive planning system to allow them to schedule job shop manufacturing operations for all of the component parts used for the phone system. That's approximately 6,000 major parts. They had no way to accurately predict how much space they were going to need in the facility and how much capacity they'd need to meet sales requirements five years out. I applied the research that we did at Tech to that problem and we solved it for them.

**Q** That must have required a fairly comprehensive look at their operation.

**A** It was extremely extensive. This was a problem that had never been solved before. The results of our analysis gave them the number of machines they were going to need in the job shop operation as well as projected space requirements for each year going out five years. It also supported their efforts to streamline operations in the days prior to the breakup of the Bell system. I was fortunate to find a mentor in the system—a gentleman who was selected by what later became Bell South Corp. to oversee the regulated side of Bell South's logistics and supply chain management operations to make sure they were in compliance with the law.

**Q** That put you on more of a logistics-based career path?

**A** It really did. At that time, no one had ERP [enterprise resource planning] systems in place to support logistics. Bell didn't have a common repository of data and information to drive the operational systems from a common platform, so we built one. We actually built a system that would serve as a single source of information for the operational systems associated with purchasing, material management, warehousing, transportation, cataloging and ordering.

**Q** Sounds like an early version of an integrated supply chain management system. Of course, you were doing it before anyone had heard the term "supply chain," right?

**A** That's correct. This was before the term had even been coined. It was a common informational repository that was basically the driver for the supply chain operation. It covered 100,000 different products and 15,000 vendors.

**Q** Sounds like the ultimate logistics system challenge?

**A** It was really a wonderful opportunity because we were translating these systems from theory into very detailed practice. The operation, again, wasn't just a matter of seeing that the product was in the right place at the right

time; we had to demonstrate conformance to the rules of the AT&T breakup as ordered by the courts, or find ourselves in violation of the law. So there were both legal and operational requirements to meet.

**Q** With all the legal compliance issues to consider, did you even have time to worry about how all this was affecting customer service?

**A** Well, the customer always remained the operating company's focus, simply because you have to keep the phone system operational. That was a given. The issue was making sure you were sourcing correctly from your vendors and that the products were actually being ordered and stored and delivered to meet the operating companies' needs. The other big issue was keeping costs down. I can't quote the exact number, but the process we put in place to assure compliance with court mandates also yielded a very significant efficiency gain.

**Q** How long did you remain at Bell?

**A** I spent eight years there and I realized during that time, that what I really enjoyed doing was acting as a bridge between the worlds of supply chain management and technology. I recognized that I could understand the business world and translate its requirements into a technical environment and I could understand the technical environment and translate that back to the business world.

**Q** That emerged as a very important skill set coming into the 1990s. The tech wave was starting to hit the beach and people were being told: "You need to understand what technology can do for you because if you don't fully exploit its capabilities, you're in trouble."

**A** That's exactly right. So I went over to a six-person shop whose name you won't immediately recognize. At the time that I joined it, the company was called Computer Aided Planning and Scheduling; it was later renamed CAPS Logistics.

**Q** There's one we know!

**A** They had done a great job in building innovative technology. Their primary customer base was the U.S. government in military crisis deployment systems. There were no commercial customers at that point.

**Q** You came in as the company's president?

**A** Initially I served as the group's vice president of consulting. But before the close of my second year there, I was asked to serve as president and to join the board of directors. We looked at the application of the technology.

Again, they were looking at crisis deployments with regard to both the Air Force and the Army. But that was about to change. They actually had a commercial offering in development; they just didn't have a commercial customer to showcase. We looked at what they were doing and the people who had expressed interest. Within a year of my arrival there, we landed a contract with one of the world's largest soft drink companies. It was the first national deployment of routing and scheduling technology in the world.

**Q** Was much of the expertise you gained serving the U.S. Defense agencies, like the Army and Air Force, transferable to this commercial work?

**A** It actually was somewhat different. Back in those days, people were still thinking about large applications, about running operations research applications on mainframes. We were starting to move to the PC, you know, the early Windows application releases. What was really interesting at that time was the emergence of the GUI [graphical user interface] aspect, the actual visualization of what all that math was accomplishing.

**Q** I'm going to guess that this soft drink company was blown away by this capability.

**A** Well, back in those days, there were just a few players in the market. With the technology for that rollout in hand, we were looking to implement it in over 200 sites and that had never been done before.

**Q** What else did you accomplish at CAPS?

**A** We began to provide solutions for problems associated with network design, transportation planning, routing and scheduling—helping clients decide where to store products, how to source them, how to service customers, from what facilities, and how to use assets effectively, whether it was a dedicated fleet, a manufacturing plant, or a warehouse. When I left in 1997 after seven-plus years there, we had 16 percent of the *Fortune* 500 as active customers and we were 140 employees strong.

**Q** Wow. From a six-person shop in 1991 to almost 25 times that size in just seven years.

**A** It was a good run, and a good time to be in that corner of the logistics field.

**Q** What came next?

**A** It was becoming increasingly clear to me that people were starting to recognize technology's potential. But I had also observed that all too often people were looking to the technology as the answer to their problems in and of



itself. That's where they got into trouble.

So we decided we wanted to start a business to help people get the return on their investment they're really looking for as well as help them cut implementation time. We built a new company, Competitive Logistics, that would focus on "people, process and technology," or P.P.T. Today, what we do is offer expertise on key technologies and in helping folks think about how they can get the maximum advantage from them—but only as an enabling tool, as one leg of that three-legged "people, process and technology" stool.

**Q** I'll bet you had also seen cases where a company failed to be sure these elements were properly interrelated, and it ended up underperforming.

**A** Absolutely. Busy people tend to look to technology for immediate relief to their operating problems, but unfortunately, it's not the silver bullet. The technology is absolutely an essential component for solving many problems, but unfortunately, most people tend to discount the importance of thinking through the people issues.

**Q** Do most potential clients recognize that technology is just one of the three components or do most of them expect the technology to solve their problems for them?

**A** It's a little bit of both. We make a point of telling new clients, "The problem you're facing here can be addressed by using this type of technology ... but you have to recognize that all the technology is going to do is enable you to perform the operation in a way that is different from what you do today." You still have to address the people whom you are going to ask to take on that solution. You've got to make sure that they are actually embracing the technology and being empowered by it so they can ultimately take ownership of the technology you provide. For a lot of people, particularly when it comes to ERP, hearing the words "process change" sets off alarm bells in their heads because they're thinking about process re-engineering. We have to reassure them that while their processes may require adjustments, more often than not, it's just that. It is an adjustment or tweak to an existing process versus a total redesign.

**Q** What are the most important skills you've acquired over the course of your career?

**A** Analytical and communication skills, thinking through a business problem and explaining the various options and their potential gains and risks.

**Q** Let's switch gears. What does your "crystal ball" show regarding the future of logistics operations? What's the next big thing?

**A** From a business perspective, the future hinges largely on how well companies remain focused on their own customers when launching supply chain initiatives. The bottom line is that it's the customer that ultimately matters. It's no longer acceptable to rely on metrics that focus on

cost efficiencies and gains without understanding what financial impact those initiatives are having on the customer itself.

I also think inventory optimization is going to become a very big area. The existing technology was developed to automate traditional inventory deployment strategies—managing the flow of raw materials to manufacturing and moving finished goods from manufacturing to warehouses. Today, though, there is new technology that allows managers to address inventory questions across the entire supply chain, that lets them look at what those inventory deployment strategies should be for each of those segments based on customer demand.

It's very new. It's very exciting. It hasn't really caught on yet, but it is something that people are going to want, especially when they see that you can truly reduce the amount of inventory that you have in any one of those segments: finished goods, raw goods, inventory in process, any of those areas. The savings go right to the bottom line.

**Q** What it comes down to is it's a financial measure?

**A** That's exactly right. I think that's going to be very exciting for people. Another big challenge is building a justifiable value proposition around RFID. With RFID, the trick will be to make smart use of intelligent data. RFID will provide people with information that is meaningful in a timely way. The tough part will be figuring out how to use it. I think that's what a lot of people are going to be focused on: Now that I have the ability to capture this information about this product, how do I integrate that into the decisions I make and the way I manage the operation to gain competitive advantage?

**Q** Information can be powerful, but information isn't automatically powerful.

**A** It is not knowledge. You have to be able to use it. And as folks figure out how to use this information, I believe that the distribution center will play an increasingly critical role in how well they can carry out their competitive strategies. I say that because if you think about the problems most companies face—putting a postponement strategy in place, say, or offering what's being termed "mass customization of one," or simply meeting each customer's specific demands for display-ready merchandise or special labeling or whatever—where's the most logical place to do that? The distribution center. The DC is no longer just for storing and handling product. It's the ideal venue for performing value-added services—even when it comes to processing returns, since it often represents the closest point to the customer. Therefore, in many cases, it's the most logical place for a lot of those activities to occur. The DC will continue to be one place where supply chain information is translated into specific benefits to a company's customers and shareholders. □