

For People
Who Mean Business

A Wiesner Publication



Colorado BUSINESS

Magazine

- How higher education's customized training can help your business
- Why economic development should never stop
- Best of Colorado business ballot

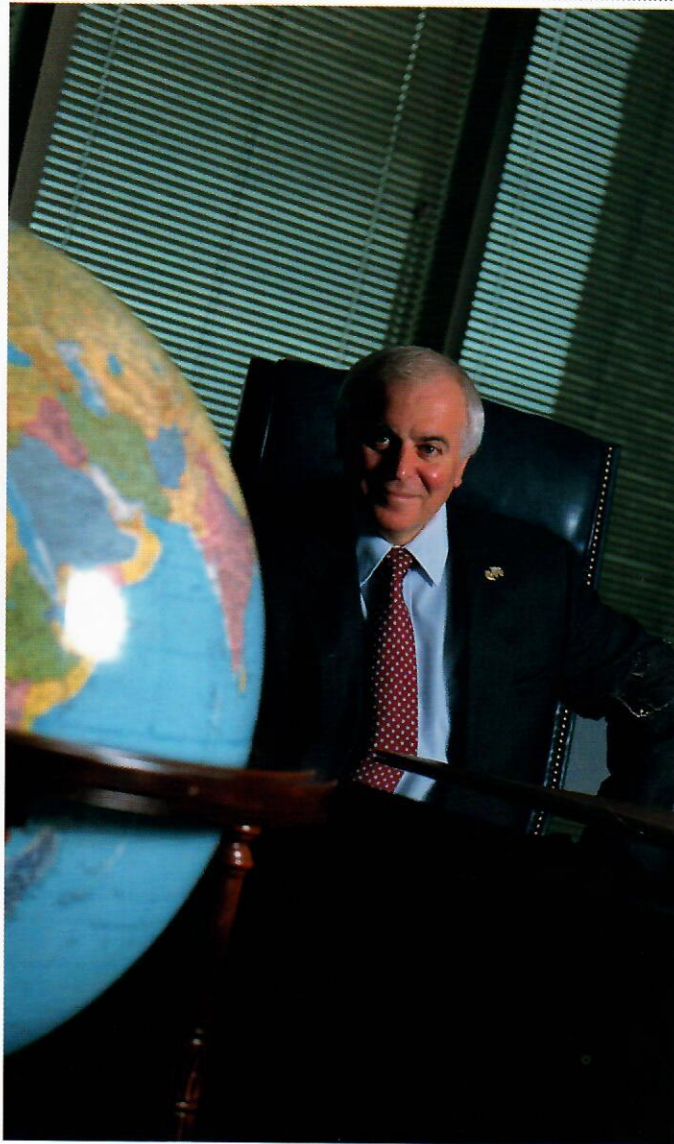
A black and white portrait of John Costanza, a middle-aged man with short, light-colored hair, wearing a dark suit jacket, a light-colored shirt, and a patterned tie. He is resting his chin on his right hand, looking directly at the camera with a slight smile. The background is dark and textured.

IS A NOBEL PRIZE IN HIS FUTURE?

Manufacturing revolutionary John Costanza
has been nominated

John Costanza's Demand Flow® Technology might lead to a Nobel Prize.

By Lynne Eisaguirre



There may be a force that can stop John Costanza's drive to conquer the world of manufacturing, but neither modern medicine nor the marketplace has found it yet.

But then, what would you expect from someone recently nominated for a Nobel Prize in economics?

Two weeks after undergoing sextuple heart bypass surgery, Costanza sat up straight, if a little stiffly, at a conference table for a two-hour interview.

Two days later, he flew in his private jet to receive the 1998 Odyssey of the Mind Creativity Award for his creation, Demand Flow® Technology, in front of 16,000 people at Walt Disney World in Orlando, Fla. Former award recipients include Walt Disney and Jerome Lemelson (holder of the most American patents).

Costanza is founder, president and CEO of the John Costanza Institute of Technology (JCIT), where DFT is taught, in Englewood, Colo., San Jose, Calif. and Nice, France.

Rep. Diana DeGette (D-Colo.) nominated Costanza for the Nobel Prize. Winners will be announced in October 1999.

What started 15 years ago in his basement with a \$10,000 stake has grown to over 200 employees in a 54,000-square-foot headquarters that will almost double in size next year. DFT has been taught to 68,000 people from 2,900 companies in the United States and 53 other countries.

JCIT also has training centers in San Jose, Calif., and Nice, France. The company will add training facilities in Bangkok, Brazil, Mexico and China within two years. In 10 years, Costanza hopes to have the same in *every* country.

Passion for his DFT creation drives Costanza. He did not set out to be rich and famous, nor to receive awards. He just wanted to create a technology that would make manufacturing successful. He has had to overcome naysayers, including other engineers and, more recently, large consulting firms pushing the latest business fads, such as re-engineering.

Manufacturing's REBEL

“You must walk, talk and breathe your work. You must wake up at night and think about it.”

Costanza's advice for other would-be entrepreneurs is simple: “Only do it if you have to. Don't do it to be rich and famous, or because you think you'll have more time off. If you do, you're a fool.

“You must walk, talk and breathe your work. You must wake up at night and think about it. For the first 10 to 12 years, I didn't slow down.”

His family shares his passion and work at JCIT. His wife, Linda, helped with everything when they started JCIT. Their daughter, Melissa, started at age 3, helping her parents set out workbooks and pencils for seminars they held in hotels. Today, at 17, she's interested in marketing.

Melissa also shares Costanza's other passion, drag racing. He's having a race car built for her to drive, complete with purple flames painted on the side.

Costanza combines his racing passion with his work. One company-sponsored car ranks fifth nationally in one drag-racing category, and Costanza is ranked in the top 30 nationally in another category. His cars focus on speed—going from 0 to 100 mph in less than one second, with his fastest car capable of 310 mph—just as his technology focuses on “speed-to-market,” getting product to market quicker.

Costanza and JCIT use his cars and high profile on the National Hot Rod Association circuit to build relationships with clients by inviting them to races and painting their logos on cars.

Though it costs up to \$70,000 per car, the marketing works: Clients love being considered part of the race team.



BILL SWARTZ

Costanza describes DFT as a manufacturing method based on actual demand, not anticipated demand, and claims it provides a competitive advantage.

It's in contrast to most Western models of scheduled manufacturing (such as Material Requirements Planning or Manufacturing Resource Planning). DFT forces engineers to think about the design of the manufacturing process. If DFT works, speed-to-market is improved, competitors are beaten and it's easier to meet constantly changing customer demand, he says. DFT also forces quality checks throughout the process, rather than at the end, and reduces paperwork.

It's all in Costanza's self-published book, *The Quantum Leap: In Speed-To-Market*, which has sold more than 250,000 copies and has been translated into five languages.

The best way to explain DFT, Costanza insists, is to look at how Subway sandwiches are made.

Other fast-food restaurants prepare food in advance of demand. Subway takes orders, then makes each sandwich quickly, efficiently and with fresh ingredients. More importantly, it's in response to customer demand, not guessed. The process reduces inventory and working capital costs.

It's almost revolutionary for a manu-

facturer to adopt DFT. And it can't be done in small steps, such as in the management fad called “continuous improvement.”

Costanza scoffs at the notion: “The term is almost insulting. When I hear someone mention continuous improvement as a business strategy, I want to know what they were doing before. You mean you were not continuously improving before? What were you doing?”

When he promises the results of DFT, such as working capital and that a product currently taking two weeks to produce now will take only 20 minutes, no one believes him—except some of JCIT's trainees, such as General Electric, American Standard, Hewlett Packard, Microsoft and Kodak.

Adopting DFT cut manufacturing time from at least 30 days to three days or fewer for Mobile Tool International, Westminster, which makes truck-mounted aerial lifts. “DFT has allowed us to produce a consistent product with higher quality (and) with running changes,” President and CEO Van Walbridge says.

JCIT claims manufacturing time was cut from two weeks to two days at Rockwell Automation, Madison, Ind., and from seven weeks to five days at TRANE, Clarksville, Tenn.

“When I hear someone mention continuous improvement as a business strategy, I want to know what they were doing before.”

DFT was born in an airport. President Reagan has appointed David Packard, co-founder of Hewlett-Packard, to the President’s Council on Productivity. Packard asked Costanza (then an HP engineer) to fly around the world to study successful, innovative manufacturing facilities, especially those of the then-admired Japanese.

But he soon wearied of traveling. He decided a more revolutionary approach—not just adopting others’ ideas—was needed.

“I’m an engineer,” he thought. “Why don’t I do what engineers do—engineer? What’s the best way to do manufacturing?”

He threw out all assumptions about the manufacturing process. A factory, he discovered, could be programmed like a computer. Customer orders would determine the rate of production.

Costanza began the project at HP, but eventually realized he would need to leave to do what he wanted.

Currently privately held, JCIT doesn’t reveal revenue figures, but claims to have saved \$4.7 billion for clients and to have grown at least 40 percent each year. Costanza says the company is debt-free, except for the buildings.

JCIT emphasizes educating everyone, from CEO to line workers, in DFT. That training overcomes initial skepticism. “If you train people, you eliminate fear,” says Costanza, including the fear from unions that some workers will lose their jobs and will have to learn new jobs. With DFT, every worker has to learn his or her job, and the next jobs up and down the line.

Passion. Innovation. Creativity. These things drive Costanza’s work. These are the forces of a true entrepreneur. Neither medical problems, the skeptical market nor other dragsters can stop the force of this passion—at least not until Costanza transforms the world’s manufacturing.

