Boost in Business May Mean (Ugh) Statistics

By Helen Pike

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ADS in quality management come and go in the United States, but Chuck Holland says statistics still provide the most consistent boost to a company's bottom line.

Dr. Holland, president and chief executive officer of QualPro, a \$15 million consulting firm in Knoxville, Tenn., is a proponent of a discipline that is viewed by some as arcane and too difficult to implement. But "you don't have to be a math giant to use statistics effectively," Holland says.

While Holland is just one in a field crowded with quality advocates, he stands out in two respects: He guarantees his clients better results financially or else he will refund his consulting fee. He also spends little time on what he calls the "warm and fuzzy approach of empowerment, communications, and mutual respect."

Foreign companies already use numbers to their advantage, and now more US firms are giving it a try

The number of consultants specializing in the use of statistics to improve a company's performance is on the rise, says Larry Schein, director of the Total Quality Management Center at the Conference Board in New York. So, too, is the number of courses, seminars, and curricula these consultants offer as a way to enlarge their portfolios, he adds.

The consultants are responding to a trend in manufacturing, Mr. Schein says. High technology is changing the way products are made, and the new processes require a skills-upgrade. Consultants who promote statistics are simply responding to signals from their customers, he says.

"Foreign competitors have already been using statistics to their competitive advantage," Schein says. In addition to the success of Japanese companies, many European firms are proving they can win market share by using statistics in production and distribution. "Ford, Xerox - they didn't do it until they were threatened by foreign competition," Schein says.

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> – Larry Schein, TQM Center

nesses," he adds. "Total quality is everybody's business, from manufacturing to the front office."

About 20 years ago, Holland began working for the Union Carbide Corp., which was then managing the Oak Ridge National Laboratory, a federal nuclear research facility. Statistics are used at the facility to achieve a zerodefect rate in the manufacture of nuclear weapons.

He later assisted the late statistics guru Edward Denuing, helping to run his four-day seminars around the country, including one in Knoxville, where firms such as Alcoa Aluminum, Martin Marietta, and DeRoyal Industries, a manufacturer of medical supplies, have processing plants.

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Mr. Phelps lea representatives that been filed in tempt to get managers.

Today, QualPro has 39 fulltime employees and 16 specialized contractors. The company's daily fees average \$2,500, and consultants generally work with a client for 15 days a month. In addition, 32 of QualPro's seminars are certified for college credit.

"The size of an organization and the degree of top management involvement determines how long a quality program will stay in place," Holland says.

Laboratory, a federal nuclear research facility. Statistics are used Kieffer Paper Mills, a \$40 million pulp and paper processing plant in Brownstown, Ind., recently decided to use QualPro's statistical methods to uncover and solve production problems.

For example, during a four-day seminar for the top 40 semior managers at Kieffer, QualPro discovered that a poorly adjusted paper machine rewinder was working at uneven speeds, costing the company money.

Mr. Phelps learned from union representatives that grievances had been filed in a frustrated attempt to get management to solve the problem. He also discovered that some shop floor employees did not have the skills needed to interpret statistics.

Kieffer mills quickly established a general education diploma program for employees, repaired the rewinder, and solved other problems that eventually resulted in a \$1 million savings to the company. "In 90 days we recovered the consultant's fee," Phelps says. "All these statistics let us produce a consistent product [and] quality is ultimately to have customers satisfied."