FRONT LINES

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EVERYTHING OLD IS NEW AGAIN

D o you think there really is absolutely nothing new to be said on the subject of quality?

Well, yes and no, according to QualPro, a consulting firm based in Knoxville, Tenn. The company tells its clients it is able to project and track several desired processes simultaneously, instead of using slower and more traditional "one-factor-at-a-time" methods. But QualPro's modern secret weapon is more than 50 years old.

QualPro claims to achieve breakthrough quality results for such clients as GTE, Southwestern Bell Telephone, Du Pont and Milliken using statistical technique called screening experimental design.

In a nutshell, screening experimental design takes everyone's suggestions—even wild ones—for improving or redesigning a given process, puts them into an organized statistical hopper, and sorts out those that don't work. It also tells a client how much improvement to expect from the

workable ideas. The method can be used to redesign virtually all processes, including such non-manufacturing ones as customer service, marketing and advertising.

"Screening experimental design also allows for what we call 'gimmees," or wish-list improvements, says Charles W.



Holland, president and CEO of QualPro. He cited a textile company that flushes its dye hoses with water to clean them. The company might want to air-blow that water out to eliminate waterspots on the next batch of fabrics. He also mentioned a telecommunications operation that might want to eliminate maintenance calls going through two organizations before reaching the actual service arm: "No one had seen fit to change this before."

Holland used screening experimental design to achieve a near-zero defect rate at the Oak Ridge Nuclear Weapons Complex, where he was head of quality. Holland gives credit to such quality giants as W. Edwards Deming (with whom Holland maintained a professional relationship for the final 11 years of Deming's life). What does Holland think about reengineering? "[Our technique] gives the reengineering people heartburn," he says. "I heartily agree that processes are grossly inadequate and that they need to be redesigned. But reengineering does not have the methodology. To obliterate what you

have is terribly hard to do. Screening experimental design is making what we've got a whole

lot better.

-Barbara Ettorre

