

## NEWSWATCH

### MANAGEMENT

## I Want My MVT

**E**xperimentation has never been the darling of most financial managers. It's expensive, disruptive, and time-consuming. But developments in an area called multivariable testing (MVT) are making companies reconsider experimentation as a tool that can give them a business edge.

MVT, for example, has saved DuPont Agricultural Products, in La Porte, Tex., more than \$25 million in operating and capital costs. "We haven't run one MVT experiment yet where we didn't discover a way to significantly improve our operation," says J. Scott Gray II, operations manager of agricultural products at the facility. Adds Charles J. Roesslein, vice president for information services and former CFO of Southwestern Bell Telephone, "It's made a difference in our business. We've used it on sales projects where it has helped us achieve a step-up in revenue growth."

In classic experimentation, factors are tested one at a time. One factor is made variable

while the rest are held constant. This approach can be tedious and costly. Moreover, it fails to identify how variables interact. "Experimenting with one variable at a time is a terribly inefficient way to gain knowledge," notes Charles Holland, president of QualPro, a Knoxville, Tenn., consultancy.

With MVT, experimenters test many variable factors simultaneously. And they use a sampling of tests to determine the probable outcome of all variable combination changes. The method is cheaper than single variable testing, because you're conducting fewer trials, and you can identify what combinations will work best on your problem.

QualPro is a leading MVT advocate. Among its successes is Elo TouchSystems Inc., where application of MVT techniques dropped the rework rate of one of the company's primary product lines for a particular defect from 26

percent to 1 percent. Another is a manufacturer of industrial equipment that saved \$4 million by reducing the average time a receivable was outstanding from 52 days to 38.

Another MVT provider, Mercer Management Consulting Inc., has applied the techniques to database marketing.

And the results can be surprising, says director Eric Almquist. He cites a credit-card marketer who wanted to find the optimum discount to attract customers. "We found that it is the presence of a discount that's important, not its size."

Although MVT has been around since the 1930s, it wasn't

until the late 1970s, when quality issues became crucial, that industry began to wake up to its power. "People used to believe that quality was expensive," Elo TouchSystems president Bob Roeser says. "Now we can bring costs down as we increase quality." ♦ J.P.M.



J. Scott Gray II