New Software Is Helping Reps Fill Custom Orders Without Glitches

Henry Ford supposedly said about Model T customers, "They can have any color they want, so long as it's black." Today, buyers insist on customizing their purchases. That can be a huge headache for sales representatives and an added problem for the people at manufacturing plants who have to deal with salespeople's mistakes.

Some computer and telecommunications companies are trying to make customization easier by using a new software program called SalesBuilder from Trilogy Development Group, a startup in Palo Alto, Calif. SalesBuilder promises to be one of those rare programs that changes the way business is done, because it makes sure all the parts of a customized system can work together, providing quality control before a product is built.

"Quoting and fulfilling orders is very critical," says Alan Inamoto, corporate marketing systems manager at Hewlett-Packard Co., which has agreed to buy more than $3 million of the software. He compares its importance to the material-requirements-planning software that controls the actual assembly of products.

Stephen Baxter, vice president of corporate marketing at Data General Corp., says: "The problem is that the sales rep is charged with putting it together in a way that works." At Data General, which expects to buy the program soon, configuring a high-powered Avion system can take a salesman four hours.

SalesBuilder lets the salesman ask the customer what he wants — the number of disk drives, amount of memory, the number of people using the system — and the computer finds the parts to accomplish those needs. SalesBuilder will then configure a system, including all the needed cables, connectors and controllers. It can even optimize the system for either the lowest price or the highest performance.

If the customer wants to know the cost of adding another hard disk, the computer will add that and remember to include another controller, a bigger power supply and a bigger case — things salespeople might forget.

Trilogy isn't the first company to attempt to solve the problem, but its approach is a big improvement, companies that plan to buy the software say. In fact, at least two are abandoning their home-grown systems to buy SalesBuilder.

Trilogy was founded three years ago by Joseph Liemandt and several other Stanford University undergraduates. Mr. Liemandt has a computer-rich bloodline: His father headed General Electric Co.'s information services unit and later revived and sold Uccel Corp., a big data services company. The 24-year-old Mr. Liemandt started Trilogy after operating and selling his own database consulting firm as an undergrad. Once Trilogy got going, Mr. Liemandt quit Stanford. "It's hard to focus on your next Spanish exam when you have a $500 million idea," he says.

"The company's biggest problem is that Joe Liemandt is a golden boy," says Esther Dyson, editor of Release 1.0. "They're bound to misstep sometime. Still, we see Trilogy's technology as the foundation for a new kind of business."

After six months on the market, SalesBuilder appears to be sweeping the industry. Mr. Liemandt, Trilogy's president, says that by the end of the year, SalesBuilder will be installed in 65% of the nation's biggest computer makers at an average cost of a pricey $1 million.

People familiar with the program expect it will rapidly be applied elsewhere. Walter Maximuck, manager of the commercial-consulting practice for Advantage KBS, a software developer in Edison, N.J., says his firm has used SalesBuilder to design configuration systems for industrial automation projects and pharmaceutical machines. "We're looking into the potential for insurance and banking products," he says, noting that insurance agents often have to combine numerous products to create a unique package for an individual or company.

Trilogy says that some large computer buyers are considering purchasing a copy of SalesBuilder so their own purchasing agents can configure systems. Another possibility is kiosks in computer stores for savvy consumers to order customized machines electronically.

Trilogy has taken a new approach to the configuration problem. A number of companies use software validators that check a salesperson's order to make sure it will work. But they can't do the initial work of picking the parts. Other companies, such as Digital Equipment Corp., have developed massive expert systems that know the rules for putting together every computer system, working much like an expert engineer. However, expert systems are notoriously difficult to update as new parts are added, because new rules have to be written throughout the system.

Trilogy uses "object-oriented" software techniques, the latest fashion in programming, to overcome that problem. Each part of a computer system is represented as an object that knows what it needs and what it does. The high-resolution-color-monitor object, for example, knows it needs a power cord, an interface card and a certain wattage from the power supply. If the computer maker later offers another monitor with the system, only that object has to be rewritten.

Early buyers of SalesBuilder say it saves money throughout the process. Salespeople can spend 25% more time with customers because they spend less time in the office developing quotes; fewer people have to double-check salespeople's work; there's less work by quality-control people at the factory; repair people don't need to make as many trips to the customer; there are fewer disputes and thus quicker payment; and fewer unbilled parts and excessive discounts.