Dell's Second Web Revolution

Few companies rose to Net stardom faster than Dell Computer Corp. (DELL) In 1997, before rivals had even begun to understand the Internet's impact, Dell was booking gobs of business over the Web. By the late 1990s, everyone from Ford Motor Co. CEO Jacques Nasser to Eastman Chemical chief Ernie Deavenport was asking for counsel from Dell CEO Michael Dell--who adroitly used those opportunities to sell even more Dell gear. But there was a dirty little secret to his e-success: After Dell's customers clicked the "buy" button, their orders were largely handled the old-fashioned way. A 200-person procurement staff would figure out the chips, screens, and other parts they needed--and then deal with suppliers via phone, fax, or e-mail.

Sure, this system was the best in the business for a pre-Net operation. By requiring suppliers to set up shop near Dell's plants, the company could get inventory quickly and easily. But to reap the most from what the Web offers, companies often have to fix what ain't broke--and that's just what Dell has done. Since June, the company has reinvented its procurement and manufacturing processes, and can now complete 90% of its purchases entirely online--up from virtually zero just a few months earlier. "They already had a system that optimized the entire supply chain, and now [thanks to the Net] they're improving that," says Haim Mendelson, a director of the Center for Electronic Business at the Stanford Business School. The new system makes Austin (Tex.)-based Dell one of the leanest manufacturing operations on the planet.

This second Web revolution at Dell started last year with what employees call the "dog food" e-mail. While the company was a leader in e-commerce sales, Michael Dell asked execs in the supply-chain group why they weren't "eating their own dog food" and using the latest Web techniques. "We had made some pretty fantastic progress on [the sales side] and were lagging in procurement, and I was goading our team to get with the program," Dell recalls.

That set the wheels in motion. Now, dozens of suppliers--representing 90% of Dell's purchasing--have been hard-wired into the company. Since June, those suppliers have been able to see exactly what parts Dell needs today and how many it expects to need in the coming weeks. "We've been able to more accurately forecast and produce for Dell real-time" since the system was put in place, says Mike MacKenty, supply-chain chief at Nypro, a Massachusetts-based...
manufacturer of plastic parts used to make laptop casings. Once a few remaining wrinkles have been ironed out, Nypro should be able to cut the inventory it keeps on hand for Dell by 70%--from two weeks' worth to three days.

Dell's new approach takes the concept of just-in-time operations to new levels. The company's most efficient factories, such as an Austin plant that makes its Optiplex line of corporate PCs, order only the supplies required to keep production running for the next two hours. As the two-hour clock winds down, suppliers--who keep gear in a warehouse near Dell's factories--are electronically told what to deliver so Dell can build the next two hours' worth of computers. That virtually eliminates parts inventory. And manufacturing improvements, such as cameras linked through the Internet that spot bottlenecks and a Web hookup to shipping companies to arrange pickups, are helping Dell's operations accelerate to warp speed. Now, PCs often are loaded onto trucks for shipment just 15 hours after the customer clicks on the buy button, down from at least 30 hours in the past.

Dell is pushing to improve its Web lead on the sales side, too. Take its Premier Pages. Since 1997, Dell has built more than 50,000 of these Web sites, which are customized for companies ranging from startups to American Airlines. Until recently, each page had to be created and maintained by a Dell sales rep. If a customer wanted to add new products or give more employees access, the rep had to manually make changes. In September, Dell updated the program to allow customers to make changes themselves--leaving the reps free to go out and chase more business.

Dell will need that kind of speed and efficiency if it is to continue to prosper. With its PC sales growth slowing from 50% per year in 1998 to 30% or less today, Dell hopes to keep growing with the help of new businesses, such as Web hosting services. But to add new chapters to the Dell legend, the company will need to keep returning to the dog food bowl--and make sure it's exploiting the Web to the fullest.

*By David Rocks*