

THE MADE-TO-ORDER OPERATOR

by JAN BROUGHTON

AT Home Shopping Network's headquarters near Clearwater, Florida, in a room roughly the size of a football field, employees are "now taking orders for the five-carat ladies' pear-shaped cubic zirconia ring." The phone lines are heating up, and the sale is on.

The sale is, in fact, nearly always on. Twenty-four hours a day, 364 days a year (pausing only for Christmas), *The Home Shopping Club* invites viewers to call in and "shop" for everything from commemorative plates to video camcorders and fur coats. From two studios, the show is beamed to more than 52 million homes across the country.

Home Shopping Network (HSN) has been a skyrocketing success since its serendipitous beginnings in 1977. President Lowell "Bud" Paxson, who was then running a sleepy AM radio station in Clearwater, found himself with a cash-flow problem. An attempt to collect advertising arrears from an appliance-store owner provided him with a trunkful of \$30 electric can openers and a plan: "If you want to get paid," Paxson told his diskjockeys, "sell 'em over the air, 10 bucks apiece—cash."

The can openers were a fast sell-out, and Paxson and his partner—Roy M. Speer, now chairman and CEO of HSN—took their "phone-in-to-order" phenomenon to local cable TV in 1982. Three years later, they went national, and the company has enjoyed almost unprecedented growth ever since. In 1987, HSN posted net sales of some \$582 million, a 363% gain over the previous year. Today, it is the acknowledged front-runner in the TV home-shopping craze it pioneered.

But success hasn't spoiled the show's original "no frills" format, or its slightly wacky air. At the moment, the show's host is on camera,



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exuding good-natured, hambone charm. He takes a caller's testimonial over the air—"I've bought 15 different things from you folks and I've always been *real* satisfied"—and rewards her with a cheerful, off-key "toot" from the horn which has become a hallmark of the show.

Behind the homespun persona of HSN is a razor-sharp management team and a great deal of computer

F.W. "Woody" Boyd helped to create HSN's electronic employees, who cheerfully takes orders for everything from rowing machines to dinner rings.

technology. With a system based on several Unisys computers—including two A 15 mainframes, two A 10s and two A 3s—the company has automated its order-entry process, maintains a real-time inventory of stocked items and controls shipping and invoicing at four warehousing and distribution centers around the country.

Without that technological under-

pinning, HSN could not hope to handle the tremendous volume of calls and orders it receives—often some 200,000 to 300,000 per day. And at times, that number can jump astronomically: HSN's all-time record for largest number of call attempts in a single day is a staggering 1.6 million.

"At peak hours, hundreds of operators are handling calls," says F.W. "Woody" Boyd, president of Precision Software Incorporated (PSI), the wholly owned subsidiary that oversees HSN's computer wizardry. "But those calls represent only a part of the total wave," Boyd adds. "Those are just the calls not handled

growth," says Boyd. "It seemed like HSN had hired half of Clearwater, but they couldn't locate and train people fast enough to keep up with the increasing number of calls and orders."

While a computerized voice-response order-taking system seemed like the obvious solution, the company's managers worried that a nonhuman order-entry system, no matter how proficient, would clash violently with the warm, "just-us-folks" ambience that had propelled *The Home Shopping Club* to success.

"We weren't selling to 'techie' kids here," notes HSN President Bud Paxson. "Our regular customers are older people—mostly women, average age 55 or so. We just didn't know how those people would respond to a computerized system. In fact, we didn't know whether they'd talk to it at all."

When HSN finally gave PSI the go-ahead to design the revolutionary voice-response system, it had a formidable list of requirements: The system had to be powerful enough to handle HSN's huge phone volumes, and flexible enough to grow even more. It had to provide a warm, personable human voice to which "low-tech" buyers could relate. And in order to accurately gauge how long to offer a given item on the air, it had to provide a running total of every call and order to the show's host.

Finally, because *The Home Shopping Club* allows an item to be ordered only while it appears on the TV screen, the system had to be real-time and on-line—to the mainframe as well as to the telephone-switching network—so that callers would have as much time as possible to get their calls in and buy.

"It was what you'd call your very tall order," says Boyd with a laugh. "This was something on a scale no one had ever attempted before."

The problem took them exactly two months to solve. PSI's success in developing the system—and Home Shopping's growing realization of the potential of such technology—prompted HSN to buy the company outright. Today, PSI markets a popular telephone banking system, a voice mailbox for truckers and a raft of other custom software packages.

Boyd and his staff were charged with putting Tootie together on Unisys hardware, and with integrating the system into existing applications. "We had a goal of going live with a very complicated system within a very short time," Boyd explains. "But we worked together with Unisys and we got it done quickly—well before our deadline of March 1987."

by Tootie." Named for the sound of *The Home Shopping Club's* horn, Tootie is the largest computerized voice-response system in the world. Developed by PSI and installed at Home Shopping Network in 1987, Tootie can handle the phone-in-order process, from beginning to end, without human intervention.

"In the past few years, HSN has gone through a period of explosive

Behind the hambone, homespun style of Home Shopping Network is savvy marketing—and lots of computers.

A contest was held to select the friendliest, "bubbliest" operator in the HSN pool, and Tootie acquired a voice—from Maggie Putitz, who continues to record new comments and questions for Tootie for each new piece of merchandise offered.

Today, Tootie tirelessly processes nearly 50% of the millions of orders coming into HSN each month.

For Scott B. Campbell, senior vice president of marketing at HSN, the acceptance of the system has been a pleasant surprise. "We predicted that only about 15% of our customers would opt for using Tootie—that all the rest of them would bypass her by signaling the system to give them a live operator. But they don't. We believe that's largely due to the fact that customers aren't intimidated—there's no 'Darth Vader' style voice."

From the customer's point of view, Tootie is deceptively simple. When members call, Tootie greets them, identifies herself and explains that they can talk with her by using the buttons of their touch-tone phone to respond to questions. Tootie efficiently processes the order and gives her customer a warm good-bye. It all takes less than a minute.

What actually goes on at HSN's end of things is a bit more complex. "In the course of taking an order," says Boyd, "Tootie first communicates to the A 15 mainframe with the member number. That gives her a name, an address, a credit card number—all of that is on record. She then communicates to the A 15 after each answer she gets, reserving the item as it is described to her, in stages—the color is black, the size is 12, and so on. In the course of the complete process, Tootie is going back and forth to the mainframe several times in a matter of seconds," Boyd smiles.

"Now, that's real real-time," he says. As though answering the telephone 1,600 times simultaneously all day long weren't enough, there may be still more work in store for Tootie at HSN. "We're far from done working with this technology," says Boyd. "We can sell it to a lot of other people, and we can do a lot more with it ourselves."

Any reservations HSN had about letting a computer talk to their customers are apparently long gone—and the people responsible are *The Home Shopping Club* members themselves. "Tootie has absolutely, indisputably gained their acceptance," says Boyd.

"As a matter of fact," he adds with a grin, "she gets fan mail."