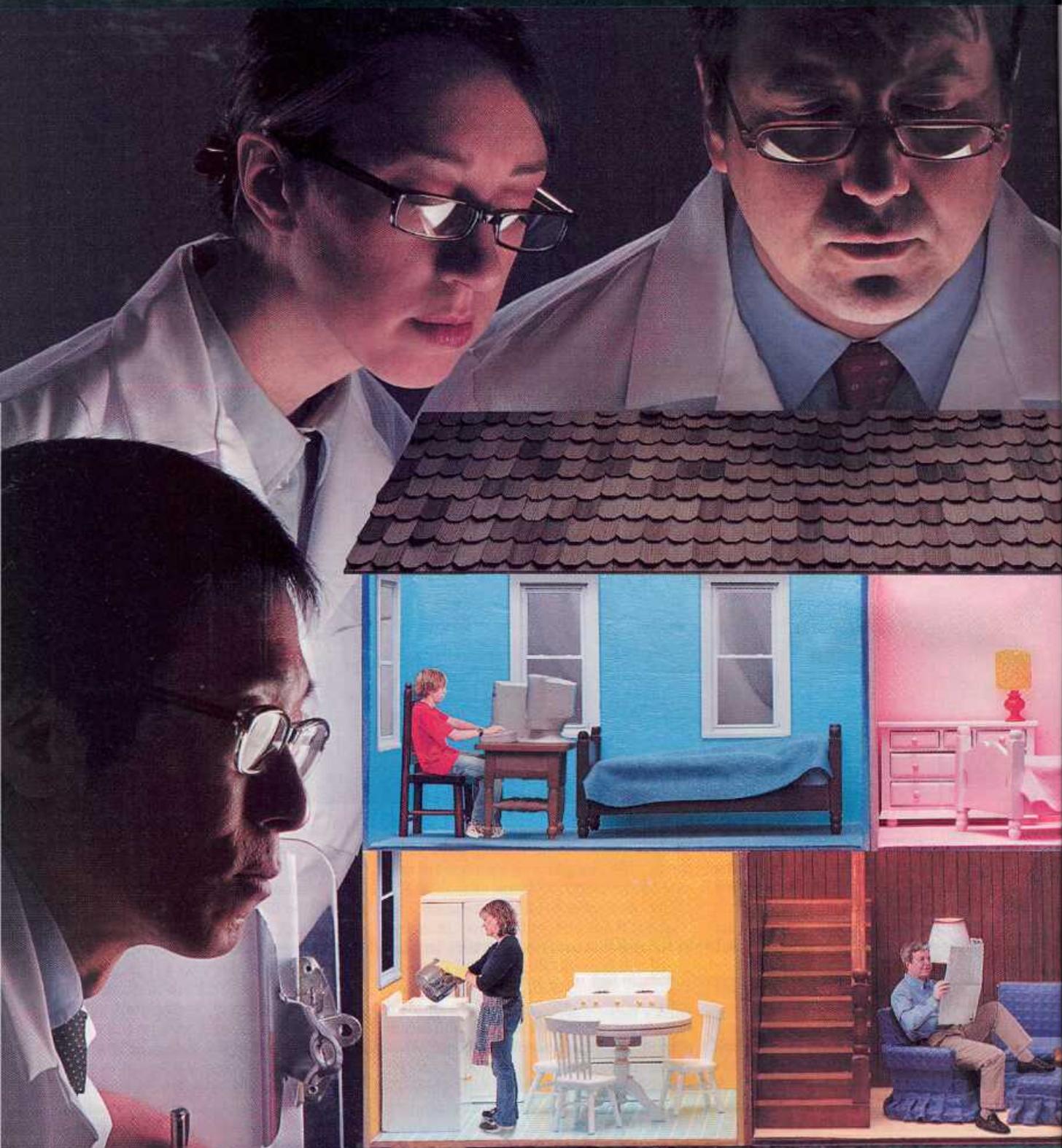
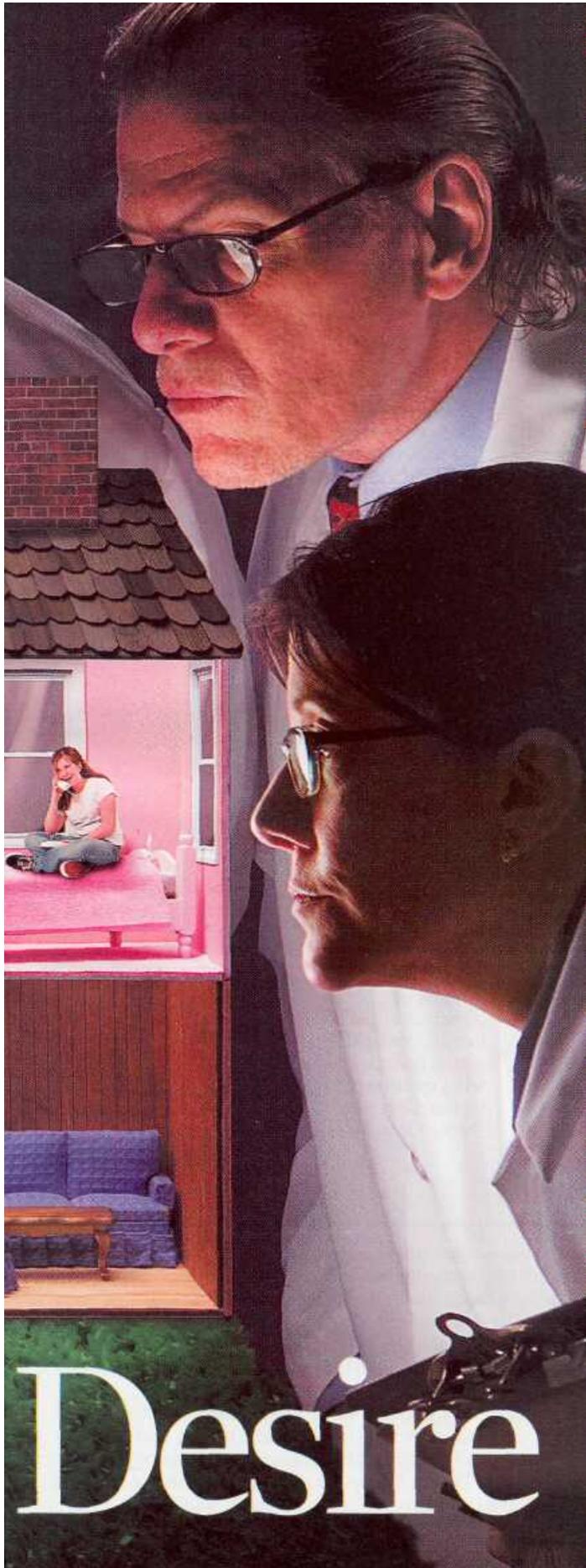


MANAGING



The Science of



BY SPENCER E. ANTE

THE SATELLITE-RADIO WAR CAN'T be won by Howard Stern alone. So shortly after signing the shock jock to a \$500 million contract in 2004, Sirius Satellite Radio called on a small Portland (Ore.) consulting firm to envision a device that would help it catch up with bigger rival XM Satellite Radio Holdings. Ziba Design dispatched a team of social scientists, designers, and ethnographers on a road trip to Nashville and Boston. For four weeks they shadowed 45 people, studying how they listen to music, watch TV, and even peruse gossip magazines. Their conclusion: A portable satellite-radio player that was easy to use and load with music for later playback could be a killer app in the competition against XM.

Last November, Sirius began selling the Sirius S50, a device the size of a slim cigarette pack that stores up to 50 hours of digital music and commentary. It features a color screen and handy buttons that let you easily pick your favorite song to listen to. Slip it into a docking station and it automatically gathers and refreshes programming from your favorite Sirius channels. Techies praised the device, declaring it better than XM's competing player, the MyFi, launched in October, 2004. The S50 became one of the holiday season's hottest sellers. Sirius says it has helped the company sign up more subscribers than XM has since last fall. "[Ziba's] research capabilities and innovative approach to design concepts were most impressive," says Sirius President James E. Meyer.

As more companies refocus squarely on the consumer, ethnography and its proponents have become star players

A portable satellite radio from Sirius. Hipper, more user-friendly lobbies at hotels owned by Marriott International Inc. A cheap PC from Intel Corp. designed to run in rural Indian villages on a truck battery in 113-degree temperatures. All these brainstormings happened with the guidance of ethnographers, a species of anthropologist who can, among other things, identify what's missing in people's lives—the perfect cell phone, home appliance, or piece of furniture—and work with designers and engineers to help dream up products and services to fill those needs.

Companies have been harnessing the social sciences, including ethnography, since the 1930s. Back

PLAYBOOK: BEST-PRACTICE IDEAS

Ethnography: Do It Right...

Anthropological research can be a potent tool—or a waste of time and money. Here's how to get the most bang for your buck:

Think Big Thoughts

Ethnography is **most effective when it's used to spot breakthrough innovations**. Don't use it for incremental improvements or to solve small problems. Ethnography works best when the questions are big and broad. "The good time to use it is with futuristic research," says Natalie Hanson, SAP's director for business operations.

Due Diligence

Many companies do not have the resources to hire their own anthropologists or social scientists. So **picking the right consultants can make or break a project**. With many poseurs jumping on the bandwagon, it's important to hire a firm with a track record, client references, and a staff with a mix of skills in social science, design, and business.

Start Early

Using ethnography at the beginning of the product development process is key because **it helps identify consumers' unmet needs**. It's those findings that can inspire a hit product or service. One danger of waiting too long to bring in social scientists is that you might end up with "feature creep," simply adding unnecessary bells and whistles.

Sell, Sell, Sell

Let's face it: Many executives think ethnography is bunk. So **managers must constantly educate others about its value**. Be clear that ethnography is not a cure-all but can spark innovation. "To get people to think about a softer approach is a challenge," says GE's marketing operations manager, Dominic McMahon.

Build a Culture

Organizations that have used ethnography to the greatest effect have usually made such research an integral part of their culture. "I don't believe it is one person's job to figure out user problems," says Alex Lee, president of OXO, a long-time user of ethnography. "What's important is the mindset of the people. Ideas come from every which way."

...and Reap the Rewards

Motorola A732

After observing how popular Chinese-character text messaging was in Shanghai, Motorola researchers developed a cell phone that lets you send messages by writing



directly on the keypad using your finger.



TownePlace Suites

A team of ethnographers and designers from IDEO found that TownePlace guests often turn their bedrooms into work spaces. So it came up with a flexible modular wall unit where there had been only a dining table. Guests can use the unit either as an office or a place to eat.

OXO Hammer

To develop a line of professional-grade tools for consumers, OXO and Smart Design visited contractors and home renovators. One result: A hammer with a fiberglass core to cut vibration and a rubber bumper on top to avoid leaving marks when removing nails.



Citigroup PayPass

Citigroup teamed up with Doblin Group to brainstorm new payment services for consumers. This summer, Citi will launch a pilot project called PayPass that lets New York City subway riders pay with a special key chain tag that debits their checking accounts.

Sirius S50

Sirius and Ziba Design studied how people listen to music, read magazines, and watch TV. That led them to develop a portable satellite-radio player that is easily loaded with up to 50 hours of digital music for later playback.



then executives were mostly interested in figuring out how to make their employees more productive. But since the 1960s, when management gurus crowned the consumer king, companies have been tapping ethnographers to get a better handle on their customers. Now, as more and more businesses re-orient themselves to serve the consumer, ethnography has entered prime time.

The beauty of ethnography, say its proponents, is that it provides a richer understanding of consumers than does traditional research. Yes, companies are still using focus groups, surveys, and demographic data to glean insights into the consumer's mind. But closely observing people where they live

and work, say executives, allows companies to zero in on their customers' unarticulated desires. "It used be that design features were tacked on to the end of a marketing strategy," says Timothy deWaal Malefy, an anthropologist who runs "cultural discovery" at ad firm BBDO Worldwide. "Now what differentiates products has to be baked in from the beginning. This makes anthropology far more valuable."

Ethnography's rising prominence is creating unlikely stars within companies in retailing, manufacturing, and financial services, as well as at consulting firms such as IDEO, Jump Associates, and Doblin Group. Three years ago, IBM's research group had a handful of anthropologists on staff. Today it has a

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dozen. Furniture maker Steelcase Inc. relies heavily on in-house ethnographers to devise new products. Intel, in the midst of a wrenching transition from chipmaker to consumer-products company, has moved several of its senior social scientists out of the research lab and into leadership positions. "Technology is increasingly being designed from the outside in, putting the needs of people first and foremost," says Intel CEO Paul S. Otellini. "Intel's researchers are giving our designers a deeper understanding of what real people want to do with computers."

With more companies putting ethnographers front and center, schools around the country are ramping up social science programs or steering anthropology students toward jobs in the corporate world.

In recent years, New York's Parsons School for Design and Illinois Institute of Technology's Institute of Design have put anthropologists on the faculty. Ditto for many business schools. And going to work for The Man is no longer considered selling out. Says Marietta L. Baba, Michigan State University's dean of social sciences: "Ethnography [has] escaped from academia, where it had been held hostage."

UP CLOSE AND PERSONAL

WE KNOW WHAT YOU'RE THINKING: Corporate ethnography can sound a little flaky. And a certain amount of skepticism is in order whenever consultants hype trendy new ways to reach the masses. Ethnographers' findings often don't lead to a product or service, only a generalized sense of what people want. Their research can also take a long time to bear fruit. Intel's India

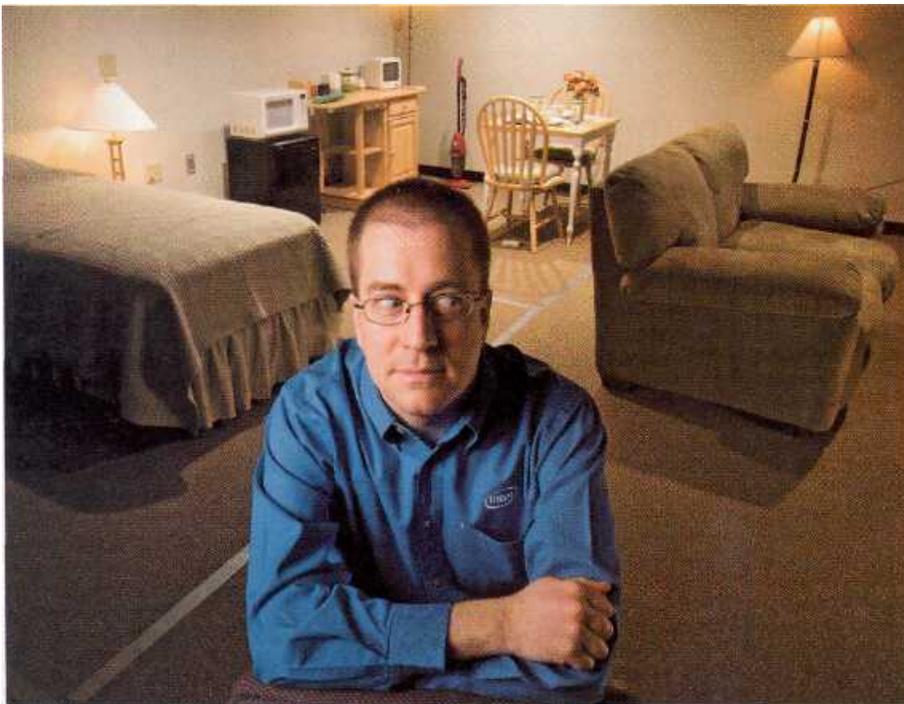
Community PC emerged only after ethnographer Tony Salvador spent two years traipsing around the developing world, including a memorable evening in the Ecuadorean Andes when the town healer conducted a ceremony that included spitting the local hooch on him.

Practitioners caution that all the attention ethnography is getting could lead to a backlash. Many ethnographers already complain about poseurs flooding the field. Others gripe that corporations are hiring anthropologists to rubber-stamp bone-headed business plans. Norman Stolzoff, founder of Ethno-

TRUE, ethnography can sound a bit flaky and take a while to bear fruit. But one B-school dean says "it could become a core competence" for executives

graphic Insight Inc., a Bellingham (Wash.) consulting firm, says he has worked with several companies that insist on changing the line of questioning when they're not getting the answers they need to justify a decision. "There's a lot of pressure to ratify decisions that are already being made," says Stolzoff, who holds a PhD from the University of California at Davis in cultural anthropology.

Still, in an accelerated global society where consumers are inundated with choices, markets are sliced into ever-thinner pieces, product cycles are measured not in years but in months or weeks, and new ideas zip around the planet at the speed of light, getting up close and personal with Joe and Jane Consumer is increasingly important. Ethnography may be no silver bullet, says Roger Martin, dean of the University of Toronto's Rotman School of Business, but "it could become a core competence" in the executive tool kit. Here are three case



Eric Dishman

TITLE General Manager & Global Director, Intel Health Research & Innovation Group

EDUCATION Masters in communications from Southern Illinois University; PhD candidate in anthropology, University of Utah

RESEARCH Dishman (left, in a home-environment lab) and his team are working with medical and engineering schools to help discover new technologies to improve health care for seniors. One innovation: A special PC that flashes the photo of a person calling, along with personal details, to help Alzheimer's sufferers remember whom they're talking to.



Jane Fulton Suri

TITLE IDEO's Director for Human Factors Design & Research

EDUCATION Masters in architecture from the University of Strathclyde, Glasgow

RESEARCH Her 40 researchers help the likes of Procter & Gamble and Marriott detect unmet consumer needs and divine products to serve them. Suri's team came up with the idea for P&G's Magic Reach tool after watching people struggle to clean their bathrooms. The device's long handle and swivel head gets into those hard-to-reach places.

papers spread out on a desk. "There are very few hotel services that address [such] problems," says Cho.

Having studied IDEO's findings, Marriott in January announced plans to reinvent the lobbies of its Marriott and Renaissance Hotels, creating for each a social zone, with small tables, brighter lights, and wireless Web access, that is better suited to meetings. Another area will allow solo travelers to work or unwind in larger, quiet, semiprivate spaces where they won't have to worry about spilling coffee on their laptops or papers. Guests would also like the option of checking themselves in, so Marriott is considering a new kiosk where they can swipe a credit card to do just that. Says Jannini: "We wanted something new but not gimmicky."

CRACKING MARKETS

BREAKING INTO A NEW market is a classic path to growth. But how do you infiltrate an industry about which you know next to nothing? For General Electric Co., ethnography was the answer. GE was already sell-

studies that demonstrate how businesses are using it to spark innovation:

REFRESHING A PRODUCT

WHILE MANY COMPANIES EMBRACE ethnography to create something new, others are using it to revitalize an existing product or service. In 2004, Marriott hired IDEO Inc. to rethink the hotel experience for an increasingly important customer: the young, tech-savvy road warrior. "This is all about looking freshly at business travel and how people behave and what they need," explains Michael E. Jannini, Marriott's executive vice-president for brand management.

To better understand Marriott's customers, IDEO dispatched a team of seven consultants, including a designer, anthropologist, writer, and architect, on a six-week trip. Covering 12 cities, the group hung out in hotel lobbies, cafes, and bars, and asked guests to graph what they were doing hour by hour.

What they learned: Hotels are generally good at serving large parties but not small groups of business travelers. Researchers noted that hotel lobbies tend to be dark and better suited to killing time than conducting casual business. Marriott lacked places where guests could comfortably combine work with pleasure outside their rooms. IDEO consultant and Marriott project manager Dana Cho recalls watching a female business traveler drinking wine in the lobby while trying not to spill it on

ing plastic materials to makers of cell phones and car parts. But executives wanted to get into the plastic-fiber business, which provides material for higher-value, higher-margin products such as fire-retardant jackets and bulletproof vests. So two years ago, GE Plastics Marketing Operations Manager Dominic McMahon hired Jump Associates. Says McMahon: "We couldn't go to someone in the fiber world and say: 'Please tell us how to take your business.'"

In fact, it took many months to persuade a few manufacturers to participate in the study. They cooperated only because they figured GE would someday provide them with materials that would help their businesses. "The idea that GE could become a supplier to the industry was hugely exciting," says Jump

GE discovered it was approaching its bid to break into the fibers biz all wrong; Instead of cheap commodities, customers want help developing advanced materials

researcher Lauren Osofsky. Customers refused to be videotaped, but they agreed to be tape-recorded. For a few months, GE execs and researchers from Jump interviewed presidents, managers, and engineers at textile makers, touring their offices and photographing their plants. An engineer told Jump he pulled off the highway one day to collect a bunch of milkweed so he could take it home and run it through a fiber-processing machine he keeps in his garage just to see what would happen. "It told us these people like to get their hands dirty," says Osofsky.

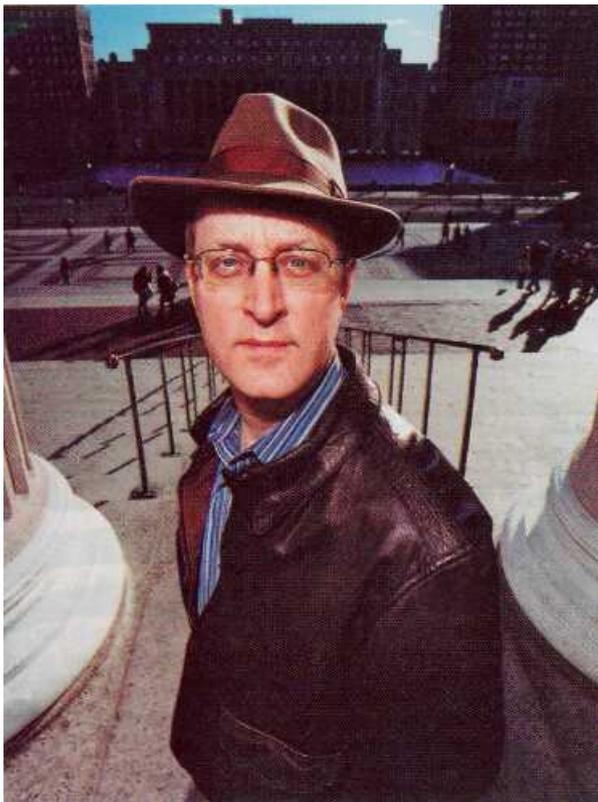
The yearlong study produced one profound insight that led

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GE to pull a strategic U-turn. GE thought the fibers industry was a commodity business focused on quickly obtaining the cheapest materials. What it found instead was an artisanal industry with customers who want to collaborate from the earliest stages to develop high-performance materials. As a result, GE now shares prototypes with customers. And instead of currying favor with executives, it works closely with engineers to solve technical problems. "That was a breakthrough and a huge opportunity," says McMahon. Before, GE was having a hard time even getting meetings. Now, says McMahon, "we were suddenly welcomed wherever we went."

TRANSFORMING A CULTURE

FOR BIG CORPORATIONS that don't market directly to consumers, ethnography has a singular appeal. This is especially true of Intel, which is facing tough competition from rival Advanced Micro Devices Inc. and believes it badly needs to branch out beyond its core chipmaking business. Since taking over a year ago, CEO Otellini has started to turn Intel into a company that is much more focused on consumer products: entertainment systems for the home; handheld computers for doctors; cheap, rugged PCs for emerging markets. Getting those gadgets right, Intel has concluded, requires closer relationships with customers. That means bringing in ethnographers at the highest levels of management.



INTEL has an ethnographer heading research for its new emerging-markets unit, with development centers in Bangalore, Cairo, Sao Paulo, and Shanghai

Intel has used them since the early 1990s. But it wasn't until the late '90s that their work began to influence the company's direction. One of the first breakthroughs came in 1997 when two Intel anthropologists, Tony Salvador and John Sherry, launched a project called "Anywhere at Work." The study took them to Alaska's Bristol Bay, where they realized that fishermen could use wireless technology to transmit the tally of their daily catch directly to the Alaska Fish & Game Dept. That observation, and others like it, helped persuade Intel to put its brainpower behind mobile computing and, eventually, into its popular wireless Centrino mobile technology.

Now, Salvador & Co. are studying the elderly to see how Intel can provide medical technology for the coming wave of retiring boomers, including a device to track and help ensure that patients take their meds. And, of course, Intel ethnographers helped devise the \$500 Community India PC, which could turn into a big seller as hundreds of millions of rural Indians access the Web.

J. Wilton L. Agatstein Jr., who runs Intel's new emerging-markets unit, knows it's crucial to figure out the unique needs and aspirations of different cultures. That's why he hired Salvador to head research for the whole group. The pair have created a network of "platform-definition centers" in Bangalore, Cairo, Sao Paulo, and Shanghai.

Agatstein describes the facilities—staffed by local engineers, designers, and marketers—as highly tuned antennae to help define and develop products for local markets. Agatstein is such a fervent believer in ethnography that he often tags along with Salvador on field trips: "He has taught me to look in ways I've never looked before."

Not everyone at Intel shares their enthusiasm. This, after all, is a company that was founded and long run by data-driven engineers. Recently, Genevieve Bell, an ethnographer at Intel's Digital Home unit, asked engineers to identify experiences to categorize various technologies. Movies, music, and games were placed under the Escape rubric. Health and wellness were put in the Life & Spirituality basket.

The exercise elicited grumbles from a few Intel traditionalists. Says division chief Don McDonald: "We've had people say: 'Life and spirituality? What the !@#& are you talking about?'" But with anthropologists in ascendance, engineers—and everyone else—had better get used to it. ■

-With Cliff Edwards in San Mateo, Calif.

Timothy deWaal Malefyt

TITLE BBDO's Director for Cultural Discovery

EDUCATION PhD in anthropology from Brown University

RESEARCH Drawing on a network of anthropologists, Malefyt discovered that teens use e-mail for serious communication, instant messaging for informal chats, and text messaging to reach people they don't want to talk to. BBDO is talking with Frito-Lay and Campbell Soup about using this research to help them craft new marketing campaigns.