MEASURE

Fasten your seatbelts: Internet ahead

There wasn't much to do in the small Southern Illinois town where I grew up. So my best friend, Tom, and I spent our Saturday afternoons in the local public library.

There we feasted on a smorgasbord of information: the very latest magazines and newspapers, sports trivia, maps, biographies, encyclopedias and literally thousands of books on every subject imaginable—and some we had never imagined.

In a matter of a few hours, we figuratively traveled all over the world, met fascinating people and experienced life well beyond the American Midwest.

The public library was the Internet of the 1960s.

I guess that's why I shake my head in disbelief today when I hear people say that they don't understand all the hoopla concerning the Internet and its graphics-laden offspring, the World Wide Web.

Where else can you get so much up-to-the-minute information and education 24 hours a day at a relatively small fee without leaving your home or office?

It's amazing when you consider that, for most of us, the word Internet wasn't even in our vocabulary two or three years ago. But if you want to thrive in the business world today, you'd better have your name between a www-dot-com Internet address.

One powerful example of the impact of the Internet—and intranets within companies—occurred in March when HP co-founder Dave Packard died. Within hours of his death, the Corporate Communications intranet site carried the complete press release announcing Dave's death, tributes to Dave from famous people, a collection of historical photos of Dave and Bill Hewlett, a chronology of Dave's accomplishments and an opportunity for employees to offer their comments about Dave.

The *San Jose Mercury News*, the hometown newspaper for Silicon Valley, took the Internet's real-time capabilities one step further. It broadcast Dave's memorial service live and transmitted digitized photos of the service to a worldwide audience via its Web site.

With all due respect to other forms of communication, between HP's intranet coverage and the *Mercury News'* Web story, you couldn't find a more accurate, timely or comprehensive account of Dave's life.

What's the Internet's future? Every day—every *hour* for that matter—there's more information, more entertainment, more commerce and more outright junk there than ever before.

Ultimately, the Internet's beauty also is its curse. You think you already suffer from information overload? Wait until you become a regular Internet user. If the library of the '60s was a smorgasbord, the Internet is an overeater's worst nightmare. Just like with all pleasures, you need to practice some moderation.

I still like visiting the public library today, but when I go there, I don't try to read every book.

—Jay Coleman

On the cover: The signposts are clear: The Internet is the busiest, craziest and most important highway on Earth —and HP is revving its engine to hit the Internet road in high gear. Illustration by Steve Barbaria.

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MEASURE

Fasten your seatbelts: Internet ahead

By Grace Razo

The sign-posts are clear: The Internet is the busiest, craziest and most important highway on Earth today—and Hewlett-Packard is revving up its engine to hit the Internet road in high gear.

Amidst all the Internet hype and hoopla, HP has reacted in classic HP fashion. Rather than honking its own horn about HP's Internet activity—and there's plenty—HP has waited to make its presence known.

"HP is moving into the Internet with the focus and speed of a much smaller, younger company," says Ezra Gottheil, senior analyst with Hurwitz Group, Inc. "It is incisive; it has identified the key growth areas and critical obstacles to success; and it is addressing them."

In fact, virtually every HP organization is working on some type of better, fancier, quicker Web gizmo or gadget that will enhance the Internet in some way and be commercially viable.

As the pioneer and undisputed leader in open client/server solutions, HP now is building on that position. Ironically, Joel Birnbaum, HP senior vice president-R&D and director of HP Labs, has been talking about the "information utility" for years, and now it's here—it's the Internet.

"I firmly believe we can deliver the industry's leading Internet solutions for businesses and consumers, based on network printing and scanning, security, manageability and scaleability," says Rick Belluzzo, HP executive vice president and general manager of the Computer Organization.
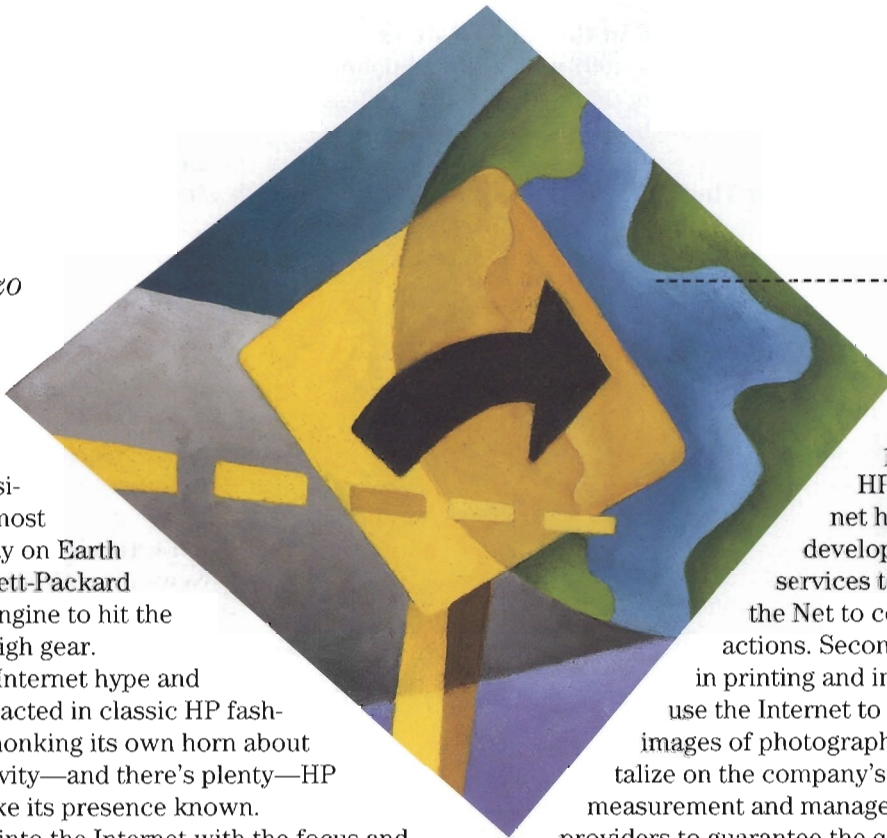
HP's approach to the Internet has three prongs. First, develop the technologies and services to enable businesses to use the Net to conduct commercial transactions. Second, extend HP's leadership in printing and imaging to allow people to use the Internet to transmit, store and print images of photographic quality. Third, capitalize on the company's expertise in network measurement and management to enable service providers to guarantee the quality and response of Internet-based services.

But with Web technology moving in the fast lane, how can HP keep pace with the Internet's 200-mile-per-minute rate of change? This is one of the biggest challenges HP faces today, admits Bill Murphy, director of HP's Internet marketing.

"The problem is that the Internet is a marathon running at sprint speeds," Bill says. "As a company, we have to move very quickly. But rest assured, this isn't like the CB radio or the hula hoop. The Internet is serious business."

On the following pages, *MEASURE* brings you a glimpse of HP's emerging Internet role. Look for HP Internet updates in future issues of *MEASURE* and on the Corporate Communications Web site at **http://hpweb.corp.hp.com/Publish/cc.**

For now, fasten your seat belts and take a passing glance at HP's Internet experience. It'll be quite a ride.

ROAD IMPROVEMENTS AHEAD

HPs Internet architecture

BRISTOL, England—Like a civil engineer constructing a grand thoroughfare, Dave Raggett keeps a detailed eye on Internet blueprints.

Dave, an engineer at HP Labs Bristol, is a visiting scientist with the World Wide Web Consortium (W3C), an organization that works with industry leaders to develop Internet standards. Without these agreed-upon industry standards—Internet protocols—computers could not "talk" to each other as they do now.

In addition, Dave is the author of "*HTML 3 - Electronic Publishing on the World Wide Web*," and lead architect of W3C's HTML activity. HTML—hypertext markup language—is the standard used to translate information into the nicely designed Web pages you view through your Web browser, such as Netscape Navigator 3.0.

Like everything else Internet, continued HTML developments will refine and enhance the existing standard set by W3C: HTML 3.2, based on Dave's work as editor. And when Dave isn't working on enhancements, he keeps busy with plenty more Internet-related activities—speeches, committees, publishing—which you can learn about at **http://www.w3.org/pub/WWW/People/Raggett**. Also, the W3C's ongoing Internet work can be found at **http://www.w3.org/pub/WWW**. ∎

NEXT EXIT

Bridge to the future

PALO ALTO, California—Chandra Venkatraman, an HP Labs engineer, doesn't allow the distance challenge—8,688 miles (13, 982 km)—to interfere with maintaining close ties with his family in Trichy, India. Chandra bridges this distance using the Internet in a particularly personal way. He has equipped his home with a real "home page": a home-based Web site implemented in an HP innovation dubbed the "information furnace."

The information furnace—a combination of an HP Web server and a residential gateway with a local high-speed connection to the Internet—is an idea generated for the home by HP Labs in Palo Alto, California. Chandra has hooked up a variety of home appliances to the information furnace, which delivers the Web pages and can be reached from the Internet.

Chandra explains, "The information furnace connects the home to the outside world by passage through the Internet. For example, from a browser at work (or anywhere else, for that matter), I can program my VCR, watch my children play or leave a note for my wife on the refrigerator door." (A computer screen is mounted to the refrigerator, which "posts" the message.)

Chandra further explains that the information furnace is an unseen utility like the heating furnace, but it emits information instead of heat. Moreover, because it is connected to the Internet as well as to communication networks within the home, its information can flow anywhere there is a Web browser. And because it's always on, it can be accessed by people in different (sometimes very different) time zones.

When Grandparents Venkatraman in Trichy use their Web browser to access Chandra's "home page," type a password and click on the camera icon, they see real-time pictures of their granddaughter in California because Chandra has hooked up a camera in her room to the information furnace.

Based on technologies being developed at HP Labs, Chandra predicts that HP one day will be able not only to bring the Internet to every home, but also to reach into every home and its appliances. The information furnace will become standard equipment, just like a heating furnace.

"Being an engineer, I find this fantastic development of technology thrilling," Chandra says. "Being an HP employee, I'm motivated by the prospects for HP to develop vast new businesses in the home. Being a son and a father, I have no greater enjoyment in life than sharing the joys of family life and traditions between generations, even halfway around the world." ∎

Cyber security

Money and the Internet: They're both hot. So what's taking them so long to get together? The answer is "security," and the solution just might be HP's Virtual Vault.

Launched in September, Virtual Vault gives banks and other financial institutions an unprecedented level of system security that could revolutionize the retail financial-services industry —and secure a sizeable sum of cash for HP.

Security First Network Bank, the first full-service United States government-insured bank to operate exclusively on the Internet, opened its virtual doors in October 1995. Last June, The Huntington National Bank also introduced a Web-based bank. Both use HP's Virtual Vault.

"Security is the banking industry's No. 1 problem," says Dennis Roman, director of banking and financial markets for HP's Financial Services Business Unit. "The security behind Virtual Vault provides the solution."

Existing security systems sit on top of an operating system—like AmiPro sits on top of Windows®. HP's Virtual Vault is the operating system and, through a complex array of software "guards," provides customers with an unprecedented level of carefully controlled and secured access to an institution's internal "intranet" of computers.

Virtual Vault is based on a product co-developed by HP and SecureWare, a small company whose products have helped preserve on-line security for the U.S. military since 1988. This year, HP bought the core technology behind Virtual Vault, and more than 40 SecureWare employees joined HP's new Internet and System Security Lab in Atlanta, Georgia. SecureWare continues to develop computer security software and is a software value-added reseller to HP. Virtual Vault also incorporates an on-line banking customer interface developed by Atlanta-based Five Paces, Inc.

While transaction technology has been available on the Web for years, security has been a larger problem. "People like banks because they see them as safe places for their money," Dennis says, "while the Internet appears to be a very unsafe place, especially for financial transactions." HP knew customers were hesitant to provide a full range of financial services on-line largely because of security concerns.

"Many institutions offer 'home-banking' services that require customers to use a fairly limited software product on their home PCs," Dennis says. "True 'Internet banking' lets customers use a World Wide Web browser with confidence to do their banking any time and anywhere in the world. And HP technology gives the financial-services industry an opportunity to offer a broader range of security-enhanced services on-line, including insurance, securities trading and other investments."

HP will integrate the Virtual Vault technology with other products and services, such as smart cards (credit-card-sized "electronic wallets" that can be loaded with funds from personal accounts and used such as debit cards), network-management products such as HP OpenView and e-mail technology such as HP OpenMail.

Dennis believes conventional banks with a large customer base have a significant opportunity to both cut their costs and offer customers an array of new, convenient and security-enhanced banking services. In addition to the United States, some of the hottest markets for Virtual Vault are Australia, Hong Kong, Spain, Scandinavia and Singapore. Regulatory barriers are dropping worldwide as well, as traditional banks and newer financial-services companies start to offer competing services.

"Right now there's a great deal of consolidation in the financial-services industry," says Dennis. "But every surviving bank will, probably in the next three years, offer its customers an Internet solution. We're showing Virtual Vault to banks all over the world. All of them care about security, and we have the pre-eminent security product in the world. Naturally, they're very interested in HP."

How safe is Virtual Vault? Secure-Ware tested the system on a team of computer-security experts before Security First began operations. Since the bank opened, the system has been tested again—this time by a small number of would-be on-line bank robbers. In every case, the vault stayed securely locked. ■
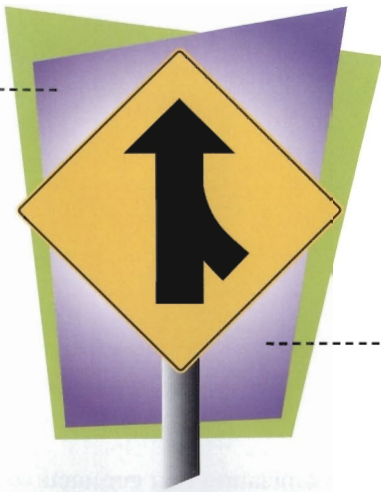
Merging lanes

NEW YORK—HP does more than produce and peddle Internet products. It also globally shares this information technology.

HP and the United Nations Development Programme (UNDP) have agreed to work together to help build an information and communication network in 16 developing countries around the world.

In the first phase of the multiphase, multiyear agreement, HP has donated a wide range of computing equipment, including HP Internet hardware, to the UNDP's Sustainable Development Networking Programme (SDNP), a non-profit, global communication initiative. Mexico and China will be the first countries to benefit from this agreement by receiving HP technology and support for their SDNP projects. ■

A speedy solution

AKRON, Ohio—Like any popular thoroughfare, the Internet has its problems with snarls and rush-hour traffic.

However, HP is one of the "drivers" in a high-speed solution called the Broadband Internet Delivery System (BIDS).

After a 500-home test run in Elmira, New York, in August 1995, BIDS set a land-speed record in September when HP, Time Warner, Motorola and Microsoft® introduced the new cable service to thousands of residents in the Akron, Ohio, area.

Time Warner, the second-largest U.S. cable company, calls it Road Runner—a high-speed, on-line subscription service for home PCs. Using HP technology, Road Runner lets users do many things on-line, such as access library books electronically, order flowers from a local florist, check out the local theater listings and participate in a local town-hall meeting.

The information—sound, video and multimedia data—is piped directly to PCs through a hybrid fiber-coaxial cable to a cable modem in the home. The link definitely is faster than standard dial-up telephone lines.

Just how fast? Downloading a 10-megabyte video clip using a 28.8-kilobyte-per-second modem takes about 46 minutes. With a cable modem, download time is 20 seconds! And with cable, users always are connected when they turn on their PCs. There are no dial tones or dial-up numbers.

HP's BIDS system, which can service up to 100,000 users, runs on a series of HP 9000 platforms. It enables cable operators, telephone companies and utilities to bring Internet access and interactive services to their subscribers. ■
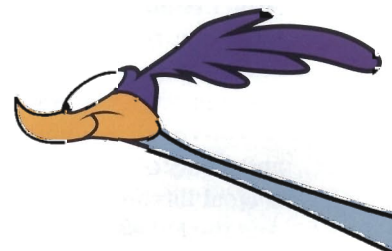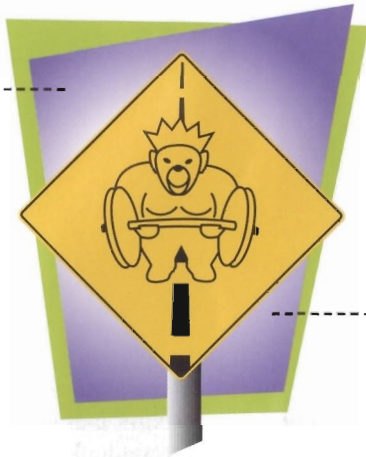
King of the road

Lately, pundits have been referring to Microsoft as the industry's "800-pound gorilla." Apparently, they haven't heard about HP's own great ape: the HP 9000 server platform.

Servers—computers dedicated to the role of serving data—can store, retrieve, process and deliver information. Whether it's for electronic commerce, marketing or on-line publishing, many of the world's largest companies—3M, Eastman Kodak, McDonnell Douglas, Pepsi Cola—are using some type of HP 9000 server as their Internet solution.

Browser-giant Netscape uses the HP 9000 Model D400 four-way Enterprise Web Server to service its home page, **http://www.netscape.com**. And wow—can this animal perform! In a five-day test performed by HP and Netscape in July, the HP 9000 server handled more than 15 million hits a day, making it one of the highest-performing single systems currently running on the Web site.

The HP 9000 family is full of brawn, and plenty of brains—high-performance, scaleability, reliability and availability. And the HP 9000 K 460 one-way server is the industry's fastest Webserver in its category, performing 801 connections per second. In other words, the HP 9000 performs like the King Kong of servers. Learn more about HP's high-powered anthropoid at **http://www.hp.com/go/internet**. ■

A sense of direction

Often, there's no escaping a "fatal error" when travelling on the Internet. (But don't worry, you'll survive.) You've probably experienced some of the common ones yourself: Error, Error 500 or Error 404, depending on your server. These errors—displayed as a message on your computer screen —indicate some kind of network glitch. It could be as simple as typing the wrong URL (universal resource locator) or as complex as a connectivity problem somewhere out in server land. Until the problem is solved, it means computer downtime and human frustration. But if HP's Internet Advisor comes to the rescue, you'll be back burning the Internet blacktop in no time.

The Internet Advisor—a portable and flexible device "bristling with connectors"—is a protocol analyzer developed by the Test and Measurement Organization that connects to all types of networks—LAN, WAN, fast Ethernet and ATM. A protocol is an industry agreement to use a consistent standard, especially for computer-to-computer communications.

"A protocol analyzer," explains Mike Cunningham, marketing manager in the Communications Test Solutions Group, "checks to see that everyone is behaving according to protocol. If someone doesn't follow the rules, or if computers aren't speaking the same language, a communication problem occurs. Anything the size of the Internet is bound to have misunderstandings and failures to communicate, but a protocol analyzer enables a technician to trouble-shoot the problem a lot quicker and easier."

You might say that without the Internet Advisor, many of your future Internet road trips could end in your driveway. ■

Park your business here

BRISTOL, England—You didn't see a traditional ribbon-cutting ceremony or hear the pop of a champagne cork. Nonetheless, it was an exciting day for HP Labs Bristol engineers who celebrated the opening of the Avon Internet Business Park by watching the first credit-card transaction "fly by" their screens.

The Avon Internet Business Park is an experimental virtual business complex with more than 32 tenants from the district of Avon, England, located at **http://www.avonibp.co.uk/**.

Like concrete and steel business structures you'd find on Wall or High Street, Avon comes equipped with an administration office and site security. This park, however, is monitored by engineers in Bristol from an HP 9000/710 HP-UX workstation linked to a main server inside Labs. By working with the business community, HP has experienced firsthand the demands of an electronic commercial environment. Jian Azari, an engineer

working on the Avon project, says, "We wanted to gain an understanding of what our customers value and give them what they want."

And HP customers want to give potential shoppers a convenient way to purchase their products. Avon's first shopper wanted to buy a picture postcard from a company that had been open only 40 minutes! Jian admits, "We knew the Internet business park concept was big, yet we were still surprised by its magnitude as it unfolded."

Be on the lookout for future openings of more business parks—currently under construction—in the United Kingdom to be managed by HP's Worldwide Customer Support Operations. ■

What you see...

BOISE, Idaho—When Johannes Gutenberg invented the printing press in 1428, he concentrated on punch-cutting and stamping metal to make moveable type. Today's printing issues have nothing to do with metal-working and manual presses, but everything to do with HP LaserJet printers and Web printing.

Although printing has been an afterthought to the initial Web craze, HP has been actively pursuing Web printing improvements. One of the greatest complaints of Internet users is WYSIWYG (What You See Is What You Get) when printing from the Internet, a problem HP has vowed to solve.

In a printing partnership with Microsoft, HP has developed an extension to HTML (hypertext markup language) that will allow users to have more control of Web printing. Much like the Internet itself, Web printing has a mind of its own. Haven't you ever had a subhead appear in the middle of a page when printed—the last place you ever expected or wanted it? This new HTML extension ends this problem

by allowing the Web document to be formatted with page breaks.

In addition, HP and Microsoft submitted a proposal in September to the World Wide Web Consortium (W3C) —a standards body for the Internet— to standardize the extension for industrywide usage.

HP's continuous efforts to develop Web printing solutions, such as the ability to print one page of a multi-page document, also include a partnership with Netscape, one of the biggest players on the Web today.

As printing improvements evolve and the Internet continues to gain girth—more than 35 million users to date and growing—there are ongoing opportunities for HP to remain the leader in the printer market.

E-mail and the electronic world seem to generate more things to print, which means hardcopy and paper are not going away. Contrary to what some people may think, it doesn't appear that this will ever be a paperless society. Roberta MacMillan, software development engineer in the Connectivity Lab of the Business LaserJet Division, agrees. "As HP continues to make improvements in Web printing, more people will want to print from the Internet. And the more people print, the more they'll use HP printers." ■

Say "cheese"

If a picture's worth a thousand words, today's Web photo is barely an advertising slogan on a billboard. HP's Imaging for Internet project aims to change that.

"While there are literally millions of photos available on the World Wide Web, users can view and print them only at very low resolution," says Antonio Perez, HP vice president and general manager of the Inkjet Products Group (IPG).

In September, HP and Live Picture announced the Imaging for Internet project, which will allow Internet users to easily and quickly view, print and save photo-quality images on the Web. The project is one of the first implementations of FlashPix, an award-winning photo-imaging format co-developed by HP, Eastman Kodak, Live Picture and Microsoft.

"HP is giving away a piece of software, called a browser 'plug-in,' that allows users to interact with FlashPix images stored on Web servers," says Blake Miller, Internet hardcopy manager for IPG. "FlashPix and the Imaging for Internet solution let a user quickly zoom in on an image to see details. They can then save or print a high-resolution image, even up to

photo-quality depending on their printer's capabilities."

IPG expects that the Imaging for Internet project and the FlashPix standard will lead the next generation of Internet-based printing. "Professional publishers and consumers have been waiting for the Internet standards to get even close to print photography," Blake says. "The Imaging for Internet project will make that happen."

And with the ever-improving quality of HP's printers, images worth more than a thousand words are on the way. **M**

(MEASURE *intern Grace Razo is majoring in communication at Santa Clara (California) University. Kevin O'Connor, managing editor of HP's Corporate Communications Web site and Financial Online on HP's external Web site, also contributed to this section.—Editor)*

Limited office space means Fernando Mollon (center), telecom field manager, and Victor Derbapyan often meet customers at a cafe.

Finding gold in the land of silver

For HP Argentina, 1991 was a turning point, with a new government that is cordial to business and fewer trade barriers.

By Betty Gerard

BUENOS AIRES, Argentina—Silver is the word for Argentina (from the Latin *argentum*) and the great river Rio de la Plata (from the Spanish *plata*) that borders Buenos Aires. But HP Argentina (HPA) has been mining gold for the past five years—enjoying a tenfold growth in sales and added visibility in the country.

The turning point came in 1991, says country manager Hugo Strachan. A change in government that year brought a dramatic change in business opportunity, with privatization of many state-owned industries, opening of borders and an end to devastating inflation.

The tumultuous days of 10,000 percent inflation, changing daily, left a mark. "Everybody's an expert on financing," Hugo says.

"The environment for us has been absolutely different since 1991," Hugo says. Privatization meant new customers for HPA in the electricity, telephone, railroad, gas and oil industries. The down side of moving to more efficient private companies is 17 percent unemployment in the country.

And 1991 also marked the formal start of the Mercosur, a regional pact that toppled most of the trade barriers between Argentina, Brazil, Paraguay and Uruguay. (Chile and Bolivia have since joined.) The Mercosur brought in new factories and businesses that invested in technology.

HP has raised its profile by Hugo's active involvement in high-level business groups.

Buenos Aires, where HPA is located, is the most European and sophisticated of cities. *La pampa*, the immense land of the *gauchos*, produces the beef and other agricultural exports that are a

mainstay of the country's income, but Buenos Aires is the center of population and business activity. Located on the Rio de la Plata, the world's widest river, it is a major port, and residents call themselves "*portenos.*"

In 1984, HPA built a handsome six-floor building (the maximum height permitted on the site) in the Belgrano section. It had more space than needed at that time, so two floors were rented to other firms.

Today, the building is at near capacity, with an employee count headed toward 200 as the Computer Systems Organization makes a major investment in personnel. HPA began occupying the entire building on November 1, and even that won't be enough room.

To the North American visitor, the atmosphere at HPA is an engaging mix of cordiality and brisk professionalism. Argentina has attracted a large Spanish and Italian populace, and an easy Mediterranean warmth is apparent. Both men and women greet a friend with a light kiss on the cheek. But business is serious. Sales teams put in long, intense hours at their desks, and a cellular phone and portable computer connect them to the office when on a sales call. In Latin America, the selling process means taking time to establish a friendly relationship—and a long negotiation period.

The coffee room is a central gathering place for camaraderie and Hugo Strachan's all-employee meetings. In 1991, he unveiled a mission statement that seemed ambitious: "By 1995, reach the second position in the Argentine computer-equipment market." (By 1994, it was a reality.) In 1992, the goal was to "achieve $20 million." (By 1995, orders were more than $100 million. Note: The Argentine peso is pegged 1:1 to the U.S. dollar.)

And the 1996 mission? "Lead the Argentine computer market in the

year 2000." With IBM still a formidable presence in the country, with annual sales of around $550 million, it's admittedly a stretch goal.

Leading the way in HPA's healthy sales growth are hard-copy and personal information products (formerly the Computer Products Organization, and the CPO designation still lingers). They make up about five-sixths of total HPA sales, with PCs and DeskJet printer sales growing explosively. HP moved up to No. 1 in PCs in Argentina this year, topping IBM and Compaq.

Analia Remedi has served as CPO manager since the seminal year of 1991, when HPA formed a new CPO team. When she was asked to shift from import-export to sales, she hesitated. Former HPA country manager Rui da Costa, now general manager of the Latin America Region, told her, "It's a mistake not to take it. You're going to get as far as you want to go."

His prophecy proved right. Analia has focused on building strong channel relationships, with training and advertising to support them.

"For a consumer market, you need to be close to the market," Analia says. "For your channels, you must have clean, clear policies for doing business: no surprises, absolutely honest."

She recognizes that she's unusual in Latin America as a woman sales executive, but would like to shift the attention "to results, not to my being a woman." She developed PC ads that appealed to parents who wanted the best for their children through education. One featured HP products with "another famous HP family": the quintuplets born to HPA engineer Martin Ryberg and his wife, Victoria.

In 1993, PCs made up only 5 percent of HPA's total sales; today they are more than one-third—even without the Pavilion PC line, which is not sold in Latin America.

Professional Services Organization (PSO) manager Ricardo Rodriquez

About Argentina

- Second-largest country in South America in size and population. 1.1 million square miles (3.8 million square kilometers) in area—about one-third the size of the United States.

- Capital: Buenos Aires

- Long and narrow: barely 900 miles (1,450 km) from east to west at widest point; about 2,300 miles (3,700 km) in length.

- Ushuaia, capital of Tierra del Fuego province, is the farthest point south in the world.

says Analia "helped buy mind-share for all of us."

Ricardo has worked for HP in two other countries and characterizes Argentina as more formal than the Caribbean in dress but with close interpersonal relationships.

"Most of our customers like us as friends," he says. "They trust us and they'll often ask us to validate what some other company is doing for them—the way you might ask a friend to go with you to buy a car."

In Argentina, PSO is completely integrated into sales teams. It concentrates on such technologies as networking, UNIX® system architecture and the Internet, and cooperates with partners in other areas. "In most of the big deals we won last year, we teamed up with someone else. Customers like this," he says.

Support also leverages its efforts through third parties. When the Banco Rio wanted Windows NT installed in its 180 branches and customized to each user, PSO worked with other

> **"The environment for us has been absolutely different since 1991."**

vendors to complete four to six branches each day. Jose Di Fabrizio, support manager, says, "We have to provide the brain." A response center also is on-line to provide remote support to anxious customers.

One challenge for HP's Computer Organization was that Argentina had the biggest mainframe penetration in the world; UNIX systems and client/servers were unfamiliar. That is changing.

Analia Remedi, CPO manager in Argentina, works in her home office while daughter Carolina, 2, observes. Analia has led the drive that made HP No. 1 in PC sales in Argentina.

Telecom and banking are important industries that HPA has penetrated, along with other big deals with such companies as the giant utility Edesur and Acindar, a metallurgical manufacturer.

Test and Measurement also has profited from the privatization of telecom, says TMO manager Ariel Speratti. The proliferation of cellular phones—a common sight on the streets of Buenos Aires—has provided new opportunities. HPA also is uniquely positioned to supply the calibration services that customers need for ISO 9000 certification.

In Medical Products, "HP's biggest competitor is HP: used HP equipment sold out of Miami by a vendor," says sales rep Javier Libre. Competing with used equipment is a unique Latin American problem, he says. "Our economy looks for good things at a cheap price, and HP's equipment can be very old but still continue to work."

Daniel Escati, Chemical Analysis support manager, covers all of Latin America. In Argentina alone, that means a territory that in North America would stretch from Cuba to Hudson Bay. It's a 5 1/2-hour flight from Buenos Aires to service natural-gas analyzers in oil fields in Tierra del Fuego at Argentina's southern tip.

HP has a strong position in the chemical-analysis market, ranking No. 1 in Argentina. Agriculture is an important market, since Argentine meat processors need high-end systems to adhere to strict export regulations for the country's famous beef.

CEO Lew Platt, visiting in March for his second trip to the country but his first as CEO, was impressed with what he saw.

"Argentina has such energetic, enthusiastic and well-educated people," he said. "I've always felt that with a stable economy it would really take off and emerge as one of the powerful countries of the world."

In HP's book, the land of silver is proving to be pure gold these days. **M**

STEVE CASTILLO

In an HP career of nearly 30 years, Lee Ting has excelled at breaking down international barriers and establishing new business relationships, particularly in the Far East.

Lee Ting: a spirit of adventure

HP's "quiet leader" begins a new international chapter in his career as managing director of Geographic Operations.

By Jean Burke Hoppe

Ask anyone at HP about Lee Ting and one of the first words they will use to describe him is "international."

In his nearly 30 years with Hewlett-Packard, the vice president and new managing director of Geographic Operations has made a career of breaking down international barriers, helping to make HP and the HP Way recognized and valued throughout the world.

"I think of him as a quiet leader," says Alan Bickell, who retired in

October as senior vice president and managing director of Geographic Operations after 32 years with HP. "He's not a high-profile, in-your-face manager. He's thoughtful and sophisticated. That style has fit in particularly well in the international business setting, where HP has always tried to delegate a lot of business responsibility to local people and managers. A more directive style just doesn't work internationally."

Jennifer Lam, Lee's executive assistant in his previous assignment as vice

president and managing director of Asia Pacific, also sees Lee's delegating ability as one of his biggest strengths. "He spends plenty of time giving you background and spelling out his expectations—and not always because you've asked him to! He makes himself available for consultation and advice."

"He's a great team player," Alan says. "He's demonstrated his leadership working with HP's businesses in Asia Pacific, especially in China, the past few years."

In his new job, Lee will continue to pursue international opportunities for HP, protecting the company's investments in its existing markets and looking for opportunities in emerging markets in Latin America, Central Europe and parts of Asia. Geographic Operations also provides a unified infrastructure for the businesses in the Americas, Asia Pacific and Europe, contributing to the company's overall financial success. In short, he'll represent the international perspective on the management team, carrying on the struggle to make HP a company that thinks and acts globally. He is well suited for the challenge, with a lifetime of global experience and a broad view of the world.

His very roots are international; by age 8, Lee had called four countries home. He was born in 1942 in Chungking, China, during the Japanese War. His father was managing an ordnance factory there for the government. After the war, the family moved back to Shanghai and then to Guam, where his father was in charge of the transfer of war surplus materials in the Pacific. By then, the People's Republic of China had been established in Beijing, and his father chose to retire his rank as general and move the family to Hong Kong instead of Taiwan.

Lee "makes himself available for consultation and advice," says Jennifer Lam, his former executive assistant, with whom he strolls through a Hong Kong business district.

The Tings then moved to Brazil in the early '50s, where land, work and resources were plentiful. After a 70-day voyage on a freighter, the family settled in Sao Paulo, where Lee attended school through his first year of college. He then received a scholarship to study electrical engineering at Oregon State University. He is fluent in Chinese, Portuguese and English—and has used them all in his long and colorful HP career.

He joined the company in 1965, fresh from Oregon State, as a development engineer in what was then HP's Frequency and Time Division in Palo Alto. It took only a short time for him to make a move into marketing. "Designing circuits," he says, "was clearly not my thing."

In 1970, at age 27, HP asked Lee to set up a subsidiary in Taiwan. "I said, 'What?! I've never even been to Taiwan.' But my wife and I were young, adventurous and maybe a little naive. Even though we had a six-

Lee Ting

month-old daughter, we decided to go."

He remembers it now as a highlight of his career. Taiwan, in those days, was still under martial law. "Taipei," says Lee, "was a very provincial city. Everything was tightly controlled. It was much more restrictive than China is today."

Lee has since set up many other businesses and operations for HP, but never "one so much from scratch. It was me, one sales manager who was really a factory guy, one service manager and a telex machine. We didn't get any house-hunting trips or orientation sessions like today's foreign-service employees do. We literally packed our bags and jumped. It was a good experience and a lot of fun."

He went on from there to manage what was then called the Far East Region (FER), first from Singapore and then from Palo Alto. "In those days, because of the cost of travel and the problematic logistics, you would travel for three to four weeks at a time. That's when we started setting up HP sales subsidiaries in Singapore, Malaysia and Hong Kong, and working out distributor relationships with Samsung in Korea, Berca in Indonesia and Blue Star in India. Those are still important relationships to HP."

After stints as general manager in the Southeast Asia manufacturing operation and G.M. of what was then Systems Remarketing (the precursor of today's Direct Marketing Operation), Lee eventually settled in as business development manager for Intercontinental Operations, which managed HP's business in Canada, Asia Pacific and Latin America. There he continued to make his mark in "internationalizing" Hewlett-Packard, appointing distributors and joint-venture partners in China, Korea,

Indonesia, Australia and the Philippines. He negotiated a complex joint venture with Iochpe in Brazil and helped negotiate HP's first manufacturing plant in Mexico.

Another career highlight for him was accompanying Bill Doolittle, then senior vice president-International, to China in 1972.

"I wasn't sure what they would make of me as a native of China with

a U.S. passport," Lee says. "There were no diplomatic relations then.

"China was still in the midst of the Cultural Revolution. The men and women looked the same, all dressed in their blue and gray Mao uniforms. There were no cars on those wide avenues. People were afraid to talk to us. We were some of the first people from the West to get into Beijing."

It was those early trips, along with Dave Packard's strong relationship there, that gave HP the contacts it needed to set up a presence in China in 1981, and eventually form the first high-tech joint venture in China in '85.

Lee left HP twice, once to work as a manufacturing manager for a small disk-memory start-up company, and later to join San Francisco-based Hambrecht & Quist, a high-tech venture-capital firm, as senior vice president for Asia. "I wasn't unhappy —just a little bit restless. It was my way of broadening my experience, filling in what I thought I needed."

Alan Bickell, who jokes that he spent half his life getting Lee back, says that everything Lee learned outside of HP about manufacturing, finances and investments—"truly the equivalent of an MBA in the school of hard knocks"—has been useful to HP in the long run.

Now, at age 54, Lee is starting a new adventure that will take him to even more parts of the world. He and his wife, Helen, are happy to resettle in their Hillsborough home. Their daughter, Christina, "who proved she's got a little of my adventurous spirit in her," works for a start-up company in nearby San Carlos. Son Michael works in investments for Barclays Group in San Francisco. Lee's and Helen's mothers, both near 80, also live in the Bay Area.

Lee's looking forward to new challenges and to taking HP even further internationally. "In setting up HP businesses around the world, I have found again and again that the HP Way is so fundamental to human behavior that it doesn't clash with any culture," he says. "People everywhere find it acceptable. Next, they begin to admire it. Finally, they become interested in emulating it. When you achieve that kind of recognition, you are successful." **M**

(Jean Burke Hoppe is a Lincoln, Nebraska-based freelance writer.—Editor)

Location, location, location

Thank you for highlighting remote work arrangements in the July-August *MEASURE* (Finding work/life balance: the portable job). More than 800 HP employees choose to live and work in one location but report to another location many miles away. In addition, there are thousands of employees who report to managers based in other locations or who are mobile a significant percentage of the time.

Many tools have been developed for these kinds of situations. A good place to start is the Future At Work library Web site at **http://danton. grenoble.hp.com/fawlib/**.

People considering a "portable" job arrangement also should check with their manager and personnel contact for guidance.

JERRY CASHMAN
HP Work Options
Palo Alto, California

Unnecessary panic?

I read with great interest the story about Amy Mott and her bout with a tumor of the kidney. My mother had a kidney removed due to a tumor, and so the story touched me personally.

However, I'm concerned that the article may have overstated the risks of the disease. My mother found she had it in the usual way—she noticed bleeding and went to a urologist. However, the urologist and two surgeons all told us that kidney cancer typically is not fatal. It does not metasticize very fast, and the urinary-tract bleeding usually happens long before the cancer spreads. My mother's urologist said that her condition was serious but not life threatening.

While I do know that every case is different, I am concerned that your article may unnecessarily panic an employee who experiences those sort of symptoms.

ABBY GROSSMAN
Mountain View, California

Grace Razo, MEASURE intern and writer of the Amy Mott story, replies: MEASURE's reliable sources agree that every kidney cancer is unique; therefore, it's unwise to make generalizations. However, there are some prevailing facts and opinions.

Just as every case is different, so are the types of kidney cancers. One type—renal-cell carcinoma—comprises 80 percent of kidney-cancer cases. It's called "curable" with kidney removal, as in Amy's case.

But this doesn't mean she or other patients are home free. Experts told us of a case where a patient's kidney cancer returned 17 years after kidney removal and of an extreme case in which a patient died within six months of diagnosis.

As Carl Dixon, executive director of the U.S.'s National Kidney Cancer Association, says, "You would do your readers a tremendous disservice if you say kidney cancer is 'typically not fatal.' "

Taking a beating

This weekend I read the September-October *MEASURE*, and by the time I was through, I had several pages clipped out for direct applicability to my job! "Leading the climb" and the "Letter from Lew Platt" were exactly what I was looking for in terms of working on FY97 plans.

Given the "beating" that this publication took in the Your Turn section, I thought it would be appropriate to

give some praise. Also, I would suggest keeping *MEASURE* in a hard-copy format.

Thanks for your great work!

JIM HECKEL
Greeley, Colorado

Thank you, HP

I appreciated the article "One day at a time" by Carl Dawson in the July-August *MEASURE*. I agree that HP plays an important role in the health-care process.

I have been battling metastatic cancer for the past five years. During that time, I have been on and off medical disability several times with operations, radiation and chemotherapy treatments. The benefits that HP provides are wonderful, and the people at the Disability Service Center have been very helpful.

Thank you, HP.

DONALD HUISMAN
Cupertino, California

Please send mail

Do you have comments about something in *MEASURE*? Send us your thoughts. If we publish your letter, you'll receive a *MEASURE* T-shirt (one size fits most).

Send your comments to Editor Jay Coleman (the fax number and address are on page 3). Please limit your letter to about 150 words, sign your name and give your location. We reserve the right to edit letters.

Wonder world of medicine

HARTFORD, Connecticut—It has been described as a scene from The Jetsons—a popular TV cartoon show in the United States—plunked down in the middle of Connecticut. But for many children, the Connecticut Children's Medical Center is a place of hope—a place that could mean the difference between life and death.

The new 8-story, 138-bed medical center, opened April 2, combines the former Newington Children's Hospital and the pediatric departments of Hartford Hospital and the University of Connecticut Health Center under one roof to form a comprehensive, state-of-the-art medical facility devoted solely to children.

Walking into the building is like entering a colossal toy box. A luminous sphere looms above the main entrance like a crystal ball. What looks like an upside-down ice-cream cone sits at the emergency entrance. Young patients puzzle over the unique design of the facility as they go inside and forget about being afraid.

Inside it's a miniaturized world. Patient rooms have child-height sinks and counters. Anesthesia comes in bubble gum and pizza scratch-and-sniff scents.

Wandering the halls, you see bright, radiant yellows, reds and purples on walls, chairs and signs.

Throughout the medical center, HP equipment is on the job. HP patient-monitoring systems collect patients' vital signs, such as heart rate and blood pressure. HP Netserver system and Vectra PCs run the medical center's entire computer infrastructure, visible in the nurses' stations and admitting area.

On the following pages, peek into this wonder world of medicine. **M**

—*Tena Lessor*

above

The Connecticut Children's Medical Center was creatively designed to provide a soothing, child-friendly environment.

left

Above the admitting area, colorful figures called "puppets" welcome young patients. The University of Connecticut's fine arts department created the display, titled "Making a Smile."

right

Manny Story, 7, carries his hockey gear everywhere, even to receive treatment from registered nurse Caryl Donovan. To the right is an HP OmniCare component patient-monitoring system.

Wonder

above

HP Medical sales rep Sherry Page explains the functions of the patient-monitoring system to Thomas Mooney, a patient-care assistant.

right

Instead of using a gurney, young patients can drive themselves to the operating room in toy cars.

above

A mother uses a quiet corner of the medical center atrium to read her children a book about what it's like when you go to the medical center.

above

Visitors can see bright and colorful artwork for and by children throughout the facility. These "puppets" help brighten the admitting area.

top

Amy Sherwill (left), corporate account rep, talks with nurses in the pediatric intensive-care unit.

left

"Bob," the medical center teddy bear, rides the halls in a little red wagon, hoping to get hugs from young patients.

A former semi-professional basketball player, Aysel Ozal now hones her teamwork skills at HP.

A competitive spirit propels HP Turkey G.M. Aysel Ozal in business and life.

Taking her best shot

By Jay Coleman

A few years ago, while working as an applications engineer for HP Turkey, Aysel Ozal approached her manager with a complaint.

"You're overpaying me," she said. "Fifty percent of my time is not being used. Either give me extra responsibility or I'll have to leave."

Aysel's manager responded by having her set up a response center and Professional Services Organization for Turkey. She excelled in those jobs, as well as subsequent jobs in project management and support. Today she's HP Turkey's general manager for field operations—and the first woman HP country G.M. in the world.

Hard work and a competitive spirit are nothing new for Aysel (pronounced EYE-sel). In fact, they're traits she learned at a young age.

"I started playing basketball in school when I was 15," she says, "and that taught me a great deal about time management, teamwork and the joy of success."

Aysel continued her basketball career at the Middle-East Technical University in Ankara, where she studied nuclear physics and computer science, then as a semi-professional player for a Turkish team. It never was as lucrative a job as it was for her brother, who played professional basketball for several years, but it expanded her horizons.

"Basketball gave me the opportunity to play in tournaments throughout Turkey, Germany and Italy," she says.

"I got to see new countries, meet new people and experience independence.

"I learned not to be afraid of a challenge or of change. In many ways, basketball prepared me for my career in business."

Aysel has had a wide-ranging career since graduating from college 13 years ago. She was a computer programmer for a PC sales company, an engineer for a distributor of HP 3000 systems and a systems analyst for Nixdorf Computers before joining HP in 1989 as an applications engineer.

Her rise to G.M. of HP Turkey still surprises her at times.

"I didn't have a vision or an objective to become a general manager," says Aysel, whose responsibilities also include support manager for HP Turkey. "I'm not a title-oriented person.

"I grew up in Antakya, a small town on the coast of Turkey. My mother was a housewife, but she was always very keen on studying. My father was a Turkish government worker and not highly educated. He said, 'The only gift I can leave you is your diplomas.' They always supported my decisions and gave me the confidence to succeed."

Today, she leads a 100-person HP Turkey workforce that in 7 1/2 years has grown to be the No. 3 computer company—behind IBM and Unisys—in her native country. In 1995 alone, HP Turkey's sales grew 188 percent.

"In the beginning, it was very difficult," Aysel says. "It took a lot of effort to make the deal. Now we're the technology leader in Turkey."

As HP's first woman country general manager, Aysel also has become a role model of sorts for other women. It's a position with which she's not entirely comfortable.

"I've never had difficulties in my life because I'm female," she says. "A lot of women study physics and computer science in Turkey. I believe in hard work and I want to be measured by my success."

Nimet Boratav, who works with Aysel, says that Aysel's strength was evident when she first headed the support organization. "The first thing Aysel did in support was to give respect and courtesy to every employee," Nimet said.

Aysel talks with Rui da Costa, left, general manager of HP's Latin America Region, and Franz Nawratil, V.P. and managing director for Europe, Middle East and Africa, during a recent Geographic Operations G.M.s' meeting in Palo Alto.

"After seeing the great motivation, other people from other departments were jealous they were not working in support."

Aysel says that HP Turkey's biggest challenge is to overtake IBM and Unisys as the preferred vendor and partner in that country. Both companies have had a presence in Turkey for 50 years, while HP has been there for less than eight years.

Still, Aysel and her team never have been ones to back down from a challenge.

"We owe the majority of our success to the quality of the indirect channels and to our customers," Aysel says. "People who know computers know HP." **M**

ASK Dr. Cyberspace

E-MAIL

In past columns, we've toured exciting Web sites and marveled at the amazing speed with which the new information superhighway has been built. Today we're going to take a detour and cruise on down a parallel freeway: E-mail Street. The streets are pretty crowded there. And if you're not careful, you'll definitely get stuck in traffic.

How many messages did you get today? HP Fort Collins' Don Herman tells readers of United Airlines' *Hemispheres* magazine that each business day brings him at least 25 new e-mail messages. I've talked to others in HP who get close to 100 new messages a

day. How many hours does it take you to tidy the in-tray and get on to your "real" business for the day? All morning?

In the past year, I've started getting increasing numbers of e-mails from outside the company. Maybe you were one of the thousands of HP employees who got that ugly electronic junk mail this summer? The non-HP sender, while talking about employee background checks in his message, was, in fact, promoting a commercial Web

site. In the biz, that's called *spammin'* (from the root word "Spam"—an inexpensive canned-meat product of uncertain origin and questionable quality).

So, what's a mere mortal to do in this brave new electronic world? I can tell you there's no miracle cure for e-mail problems, but I've got some tips that should relieve some of the suffering.

• Get off distribution lists where you feel you don't belong. Send the list owner a message explaining that
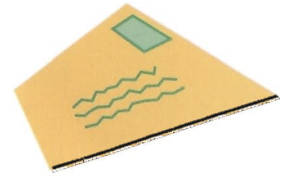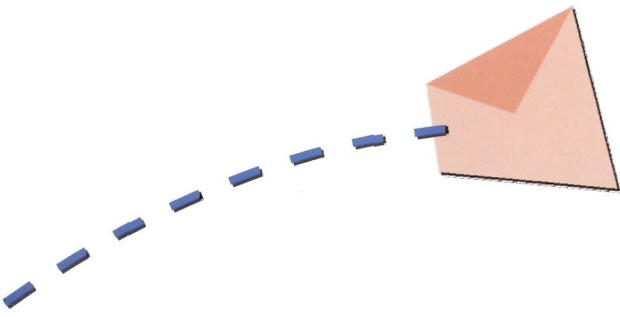
you really don't have a business need to receive their valuable information any longer. Be polite, but firm.

• Be extra cautious when you Reply to All Addressees. If you're not careful, you can be talking unintentionally to hundreds or thousands of people. Most of them will not appreciate your note, no matter how clever it may be.

• Use the message-filtering capabilities of cc:Mail (under **Rules**) to help you weed through the daily mess a bit more efficiently. You can automatically forward, file or even delete messages from certain people or mail that contains certain words in the title.

• Write your message subject to let the recipients know why they're on the receiving end: **Action item: December statement** or **FYI only/ trip report**. Makes the morning pile much easier to navigate.

• Be careful of messages that might contain viruses. There may be some nasty bugs hiding in infected documents attached to e-mail messages. Download one of these and you may end up destroying valuable data on your PC. If you get a message with an attached executable or word-processing file from someone you don't know, you should send it on to your systems administrator for a virus scan before executing or reading it.

What does HP have to say about e-mail and the ways it's most effectively used? Lots. There's a team in Palo Alto (Corporate Network Services' Electronic Messaging Group), and they have a great Web site, natch. Drop by http://www.cns.hp.com/ messaging to learn the best way to send a message from cc:Mail to an Internet address. And much, much more.
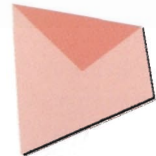
Despite my protestations, I do like to hear from you, so please send me your ideas, questions and concerns about electronic matters. You can find me at my Web site (see box on this page) or by sending an e-mail message to me at doctorc@corp.hp.com.

Doctor C's Top Picks

You're scheduled to meet an important HP customer at Adolfo's restaurant for lunch. You know it's at the corner of Pine and George streets, but you don't know exactly where that is, and you don't have a city map. What do you do?

Print your very own map from http://www.mapblast.com that will lead you to the spot. Fill in a couple of fields and you'll see a personalized map (for most towns and cities in the United States, so far) showing you where you need to go. On the screen, you can easily zoom in or zoom out; move east, north, west or south and then print the results. Super cool! Closely related to mapblast is a second stop for maps and phone numbers (Argentina's residential listings) and more from a crowd called WorldPages, at http://www.worldpages.com.

HP's network of employee credit unions in the United States is putting its services and interest rates on the Web. From inside the company (intranet), start at http://hpweb.corp. hp.com/publish/hpcu and from the rest of the world it's http:// www.corp.hp.com/publish/ hpefcu. Check 'em out.

And if you want to see the winner of the first Gold Clio award for Web sites, take a peek at the women's in.site pages at http:// www.leggs.com. Well-done sections on home and family, style and fashion, and health and finance. Sharp editing with a wide variety of ideas from the people who make pantyhose.

HP's chairman, president and CEO explains the reasons for the company's new profit-sharing formula.

Four months ago, in the July-August *MEASURE*, I explained the reasons that we needed to change HP's profit-sharing formula.

I'm pleased to say that we now have a new formula that truly reflects the company's performance and—over the last 34 years—produces a profit-sharing percentage that is the same or higher than the one we had two-thirds of the time. You can see how the new formula works on the chart on page 27.

I'll explain the formula in more detail later in this letter, but I want to reiterate some of the reasons we believed we needed to make a change. By the way, when I say "we," I'm referring to Bill Hewlett, the board of directors and the entire management staff.

• In 1962, we were primarily a test-and-measurement company. Today, we're primarily a computer company.

• In 1962, our end customers were mostly engineers, who bought our products directly from HP sales reps. Today, our customers increasingly are resellers who sell our products to consumers.

• In 1962, we did everything ourselves, from R&D through manufacturing and distribution. Today, we rely on a number of other companies to produce a large portion of our products —such as Canon engines for our laser

Al Wilson, a retired quality-assurance manager with HP's Components Group in San Jose, California, talks with Lew after a recent HP Retirees' Club meeting in Palo Alto.

printers. Vendors, distributors, value-added resellers, temporary employees and others do much of the work that used to be done by HP employees.

These are some of the changes I've referred to when talking about our changing business model. And these changes require us to adapt how we measure our performance.

For example, you may remember the graph in the July-August *MEASURE* that tracked HP's net profits and our profit-sharing percentage since 1962. The two lines followed logically until 1994; in 1996, net profit grew from 6.4 percent to 7.9 percent while profit-sharing rose from 8.45 percent to an all-time high of 12.83 percent.

Some employees have questioned why we became concerned about the profit-sharing formula when the per-

centage was at a record high and not when it was on the low end. Actually, former CEO John Young raised the issue of the profit-sharing formula in 1992—when the percentage dropped below 4 percent in the second half— but, frankly, we were more concerned with other critical business issues. Believe me, I wish we had dealt with the disconnect between net profits and profit-sharing then.

Now, back to the new formula, which was determined with the help of a task force of general managers and input from many employees. It looks like a good solution to me. And, you should know, it's the most generous of the five final formulas the task force considered.

You calculate the new percentage by dividing our return-on-assets (ROA) by 2.5, then adding the percentage of revenue growth compared to a year ago divided by 5.

Let me explain the two major components of the formula and why they're important for you to understand.

Revenue growth. We're all used to looking at revenue growth because we've always used it to judge our performance and because it's something we report publicly every quarter. It's an indication of how sales of our products and services have increased from year to year. Our revenue growth has climbed steadily at an average rate of about 17 percent a year during the past decade.

ROA is a broader measure of our profitability than just net profit. It's calculated by dividing our net profit by our assets, both of which we report publicly. It requires us to think carefully about how we use all of our

assets, which are, after all, expensive. Assets include such things as land and buildings, and all of our equipment, as well as our cash, inventories and accounts receivable.

ROA is affected by how we use space in our offices, manufacturing and distribution facilities. It's affected by how accuractely we forecast sales of products, and how efficiently we manage deliveries and shelf space at our dealers. And it's affected by how promptly we bill our customers and turn our accounts receivable into cash.

In short, revenue growth and ROA are major drivers of the market value of companies like HP. And, as you know, growth and profitability are two of HP's Corporate Objectives.

That's another thing I like about the new formula: It gives relatively even emphasis to HP's growth and profitability. The old formula (12 percent of HP's pre-tax profits divided by eligible earnings) focused only on profitability.

The new formula goes into effect in May at the mid-year point of fiscal year 1997. I hope that you're familiar with the new formula by then and agree that it provides a logical link between HP's performance and your profit-sharing check.

We never intended to eliminate profit-sharing or to confine it to some artificially low amount—we simply intended to make it consistent with HP's true revenue growth and profitability. The new formula does that.

I hope you share my confidence that this is the right solution at the right time.
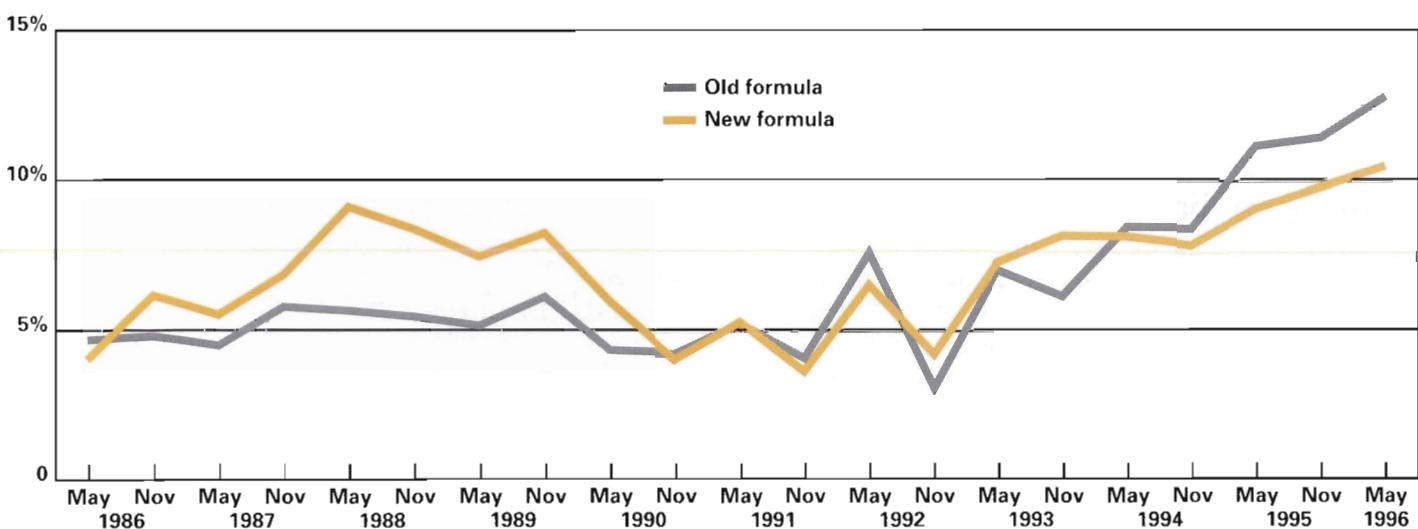
In 23 out of the last 34 years, the new formula would've produced higher profit-sharing percentages. This chart focuses on how actual profit-sharing percentages during the past 10 years compare with the percentages computed using the new formula.

HP hits the big screen

Across the brightly lit movie screen, HP equipment can be seen, and in stereo Surround Sound, the Hewlett-Packard name can be heard throughout *The Associate*, a new comedy released in October starring Academy Award winner and actress-commedienne Whoopi Goldberg.

Whoopi portrays Laurel Ayres, a brilliant investment analyst on Wall Street.

The game of corporate America is one of hardball and tough maneuvering, and Laurel is ready to play. Realizing it's a dog-eat-dog world for a woman on male-dominated Wall Street, Laurel decides to establish her own rules. She creates a fictional male associate, the business wizard Robert Cutty, and blazes through Wall Street like a fireball.

In the guise of Robert Cutty, Laurel negotiates a business deal in which Hewlett-Packard helps a poorly managed, near-bankrupt business get back on its feet, remain independent and become stable and profitable.

This successful deal and several others turn the business world upside-down, and Robert Cutty becomes the talk of Wall Street.

Whoopi Goldberg and Dianne Wiest star in Hollywood Pictures' new movie, *The Associate*, which features HP and displays HP equipment throughout.

But speculation mounts as to who this anonymous Cutty is. Laurel begins a round of quick shuffling to keep her scheme intact. In the end, she proves to be a genius.

The performance of HP equipment in the film shows genius as well. An HP LaserJet 5P printer debuts as part of Laurel's home office and gets its moment when a close-up shot shows it printing off a flyer.

An HP OmniBook 600CT PC is the hit of a party, impressing partygoers with its capabilities.

And HP Vectra PCs sit on office desktops throughout the movie.

Look out, Hollywood—HP's in the movies!

Go to the flick on MEASURE

Win free admission for two to the movies in your home town by sending this entry form with your full name, mailstop and telnet number to *MEASURE* no later than January 1, 1997. (Address on page 3.) Ten names will be pulled in a drawing held on January 15. Winners will be notified by telephone.

Name _____

Mailstop _____

Telnet number _____

Golden moments with Bill

HP employees in several European cities got a rare treat in September, when co-founder Bill Hewlett stopped by their site.

The trip took Bill and his wife, Rosemary, to England, Switzerland, Germany, France and the Czech Republic.

Kicking things off, Bill and Rosemary were honored as new fellows at Oxford's Harris-Manchester College.

Other trip highlights included a ground-breaking ceremony for a third building on the site of HP Labs Bristol and a tour of the Semiconductor Test and Systems Management divisions in Böblingen, Germany.

In France, Bill probed engineers in the demo center with questions as they demonstrated new telecom, PC and security products developed in Grenoble.

He also inaugurated the first page of the HP France Web site.

At each site, Bill took the chance to mingle and chat with employees.

For both Bill and HP employees, the moments shared will be remembered.

Christiane Francke, a financial analyst for Medical Products Group-Europe, met co-founder Bill Hewlett during his visit to the European Headquarters in Geneva, Switzerland.

Anke Kier and Harald Rohowsky (standing behind ironing board) of HP Germany gave T-shirts to visitors who stopped by HP's booth at the CeBit Home 1996 trade show this past fall.

Color me yellow

BÖBLINGEN, Germany— "Welcome in the World of Coulour" was the theme of HP's booth at this year's CeBit Home 1996 trade show, held for the first time in Böblingen, Germany, August 28 to September 1.

Targeted at consumers, especially teenagers and their parents, the trade show attracted 210,000 visitors.

Consumer information technology is a growing sector in Germany. Only 25 percent of German households have a PC, compared to 45 percent of U.S. households. HP Germany wants to reach this market.

HP displayed its new DeskJet printers, SureStore CD-Writer reader/recorder system and Palmtop computers in colorful fashion. Garnished in mustard yellow, with blue, yellow and green highlights, HP's booth was shaped like an HP DeskJet printer—a sight you hardly could miss.

IBM and Siemens-Nixdorf were among the other computer companies demonstrating their consumer products.

A Junior Achievement participant uses a laptop computer to write his managerial decisions about his fictional business during the Hewlett-Packard Global Business Challenge as a judge looks on.

Battle of the brains

PALO ALTO, California—High school entrepreneurs from around the world tested their business skills at the Hewlett-Packard Global Business Challenge, an international Junior Achievement business-management competition sponsored by HP, held in August at HP's Corporate Offices.

This battle of the brains began in January with 370 teams from 36 countries. Students made managerial decisions regarding their computer-simulated busi-nesses. Decisions then were sent via e-mail to Harvard Associates, a processing center in Cambridge, Massachusetts, and the teams with the most profit advanced to the next round.

The field narrowed to eight team finalists from Russia, Argentina, Belarus, Czech Republic and Ukraine.

A team from Russia won the competition and was awarded $3,000 by HP CEO Lew Platt.

BOTTOM LINE

For the FY96 third quarter ended July 31, Hewlett-Packard reported a 26 percent decrease in net earnings, including the effect of exiting disk-mechanism manufactur-ing. Net revenue for the quarter rose 18 percent, while orders grew 8 per-cent over the year-ago third quarter.

CEO **Lew Platt** said, "This was a difficult quarter, especially com-pared with the third quarter last year, which was unusually strong."

For the third quarter, net earnings were $425 million or 40 cents per share on some 1.05 bil-lion shares of common stock and common-stock equivalents outstanding (compared with $576 million or 55 cents per share in 3QFY95), adjusted to reflect the 2-for-1 stock split in July. Net revenue was $8.7 billion (compared with $7.7 billion a year ago). Orders were $8.7 billion (compared with $8.0 billion in 3QFY95).

MDD BECOMES SUBSIDIARY

The Mechanical Design Division, which has been part of HP's Enterprise Middleware Business Unit (EMBU), was con-verted in November from an HP division to a sub-sidiary software com-pany providing software solutions for mechanical design and product-data management.
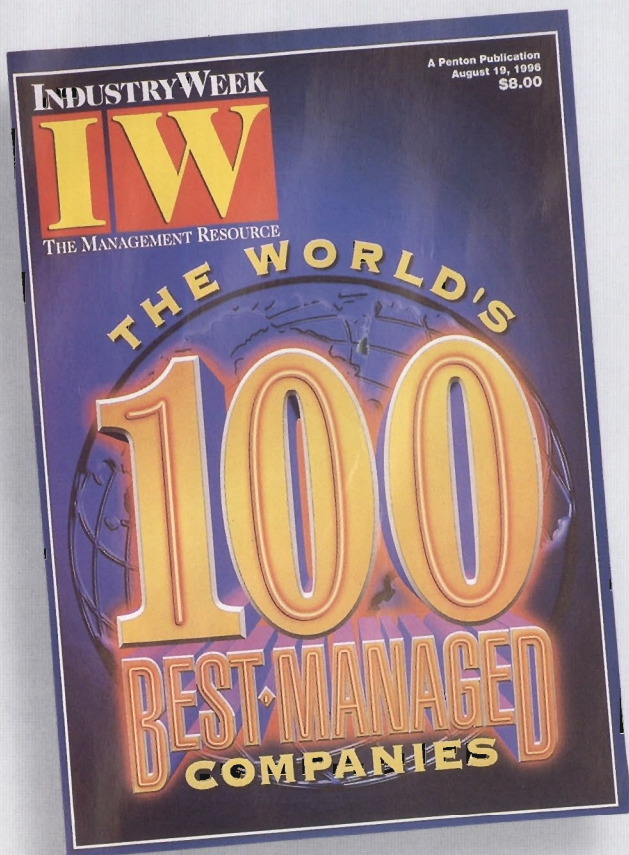
It began operations in November as CoCreate, with European head-quarters in Sindelfingen, Germany, and North American headquarters in Fort Collins, Colorado. **Tilman Schad,** formerly general manager of EMBU, is the president.

Most of MDD's former employees have joined the new subsidiary.

GEOGRAPHIC OPERATIONS

Lee Ting has been named vice president and managing director, Geographic Operations (see page 14)...**Dick Warmington** to general manager, Asia Pacific.

Changes effective in Europe November 1: **Yves Couillard** to managing director, HP France, succeeding **Kleber Beauvillain,** who will retire in April 1997...**Bernard de Valence** to G.M, Inter-national Sales Europe... **Didier Hirsch** to finance and administration man-ager (F&A), Europe.

Muan Lim to Asia Pacific F&A manager.

A Penton Publication
August 19, 1996
$8.00

INDUSTRYWEEK
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THE MANAGEMENT RESOURCE

THE WORLD'S
100
BEST-MANAGED
COMPANIES

HP—one in a thousand

HP is one of the 100 best-managed companies in the world, according to *IndustryWeek* magazine. A few of the top companies listed in the August 19, 1996, edition include Ford Motor Company, Intel, Texas Instruments, Siemens and Sun Microsystems.

One thousand of the world's largest publicly owned manufacturing companies vied for the top 100 spots.

IndustryWeek editors and 40 outside experts picked the 100, based on 12 factors, including financial results, research and development, corporate citizenship and global strategy.

OFFICER CHANGES

Officers of the company who have retired in recent months: **Jim Arthur** and **Alan Bickell,** senior vice presidents; **Dieter Hoehn, Mike Leavell** and **Bill Richion,** vice presidents.

Duane Zitzner, general manager of the Personal Information Products Group, has been elected a vice president.

CHART CHANGES

In the Measurement Systems Organization, the Integrated Circuit Business Division (ICBD) has become part of the Components Group...The Chemical Analysis Group has formed a new Chemical Analysis Solutions Division under G.M. **Bob Emerson.**

In Test and Measurement Worldwide Sales and Marketing's TMO Field Operations, a new Solutions Delivery Organization headed by V.P. **Larry Potter** comprises two renamed operations —the Instrument Support Solutions Division (formerly Test and Measurement Support Division) and the Solution Services Division (formerly Consulting and Solution Services Division) —and the Test and Measurement Remarketing Operation.

The Direct Marketing Operation now reports into the Channel Products Worldwide Support Organization (within the Computer Organization's Worldwide Sales and Marketing).

HP has acquired Trellis Software and Control, Inc. of Rochester Hills, Michigan, a motion-control software company. It has become a subsidiary of HP and retains its name. It reports to the Santa Clara Division.

NEW HATS

Mike Matson to G.M., Information Storage Group...**Alan Marty** to G.M., ICBD.

In the Extended Desktop Business Unit, **Jean-Charles Miard** to G.M., Performance Desktop Computer Operation and **John Gannon** to G.M., Commercial Desktop Computing Division... **Tom White** to G.M., Computer Peripherals Bristol Division.

Roger Nalepa to G.M., HP Shanghai Analytical Products Co.

A moment in time

YOSEMITE VALLEY, California—In the spring of 1995, at the brink of sunset, the sun's rays brilliantly reflected off the 8,842-foot granite peak of Half Dome in Yosemite National Park.

Lon Overacker, customer engineer from HP's Pleasanton, California, sales office, clicked that splendid moment for eternity.

"That day the sky was filled with wonderful white clouds, and I knew sunset on Half Dome would be beautiful," Lon recalls.

"Pools of water had gathered in Yosemite's meadows, providing a great photographic opportunity."

To capture the shot, Lon used a large-format 4x5 wood field camera with a 90mm lens, Fuji Velvia slide film, a lens aperture of f/32 and approximately a two-second exposure.

"I know that every time I press the shutter release, that photograph will be completely unique, and that moment in time is gone forever."

LON OVERACKER