

Cort Van Rensselaer
501 Portola Rd. #8128
Portola Valley, CA 94028

A magazine for Hewlett-Packard and Agilent people

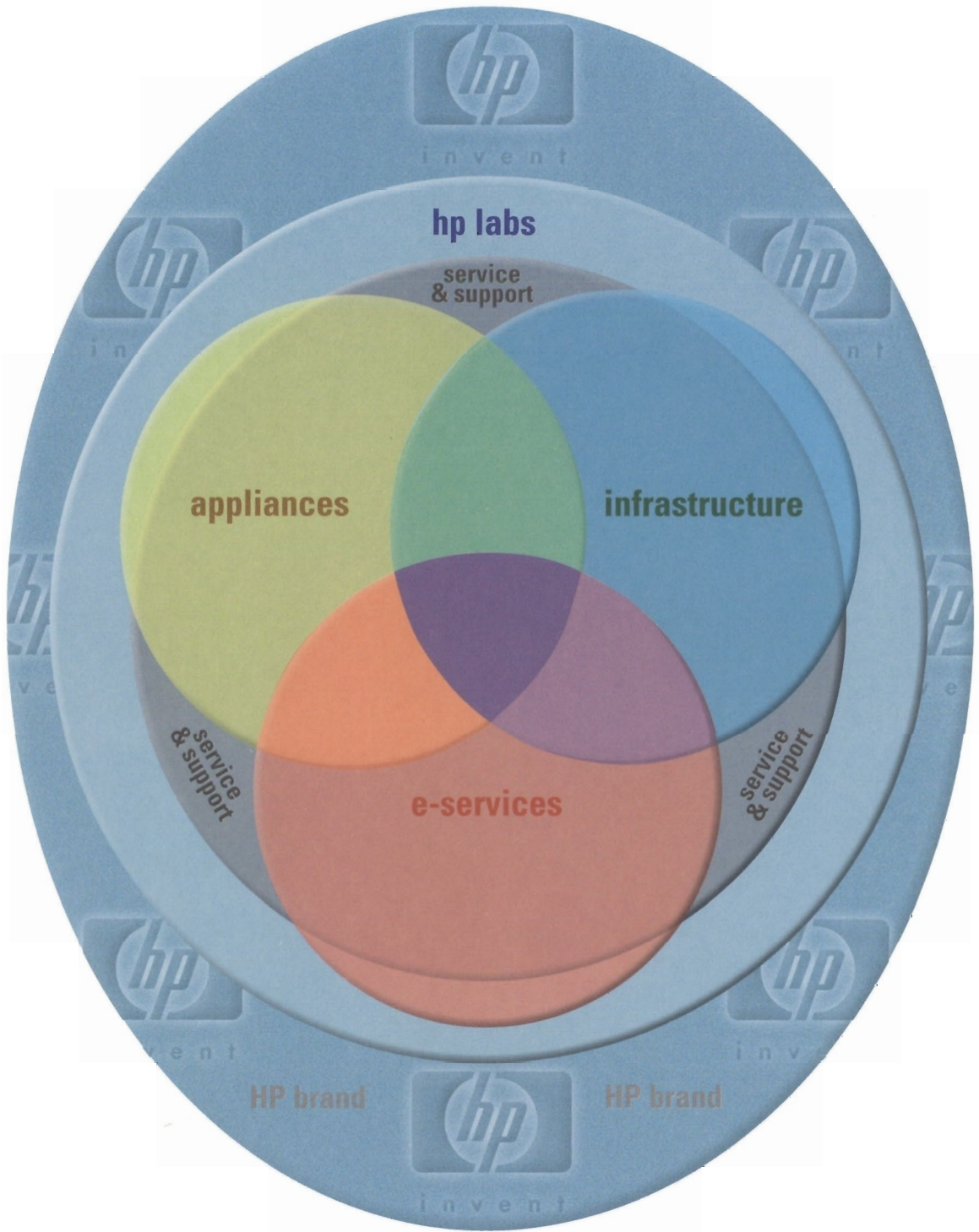
May-June 2000

MEASURE

MEASURE celebrates
61 years of HP history
and bids good-bye.



HP ARCHIVES



Agilent Technologies

Agilent Laboratories

Communications and Electronics

Test and Measurement



Some growth opportunities

Test and monitoring for next-generation communication networks

Semiconductor test for high-speed memory and systems-on-a-chip

Semiconductor Products



Some growth opportunities

Components for fiber-optic communications

Gigabit networking and cellular chipsets

Network/communications ASICs

Healthcare and Life Sciences

Healthcare Solutions



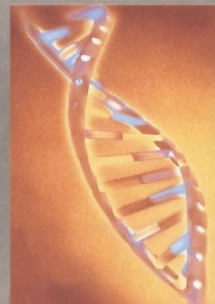
Some growth opportunities

Point-of-care diagnostics

Automatic external defibrillators

Chronic care and wellness

Chemical Analysis



Some growth opportunities

Disease identification

Drug discovery

Bio-instrumentation



Agilent Technologies

Innovating the HP Way

IN THE BEGINNING

Bill Hewlett built this audio oscillator for his Stanford University thesis project in 1938. When HP became a company in 1939, it was developed into the product known as the HP 200A audio oscillator.



FROM THE EDITOR

You're holding a piece of history—the final edition of *MEASURE* magazine. It represents a look back at 61 years of Hewlett-Packard and world history, and 37 years of *MEASURE* history.

Whether you're a long-time employee who now works for Agilent Technologies or a brand new HP employee just learning about this amazing company, we hope this edition of *MEASURE* gives you insights into our past and our future.

We live in an incredible time. Companies that have never made a profit—some that haven't even *produced* a product—are considered "hot." HP, which has made a profit in about 242 consecutive quarters, seemingly has to re-prove itself to financial experts every quarter.

Go figure.

This is a company of superlatives. Most admired. Best managed. Nicest people. Most generous. Finest products. It's been a model for the best and the brightest—and those who aspire to be. Now, as two separate organizations, we have the potential either to establish two new examples of creative excellence—or become just two more me-too companies.

Ever since the HP/Agilent split was announced in March 1999, both companies have produced volumes of words to position themselves. But as this edition of *MEASURE* demonstrates, actions ultimately determine how people judge us. You say you're agile? Inventive? Prove it.

One way we can demonstrate our successes is through storytelling. And that's why publications such as *MEASURE*—and its successor *invent* magazine—are so important. For 37 years, *MEASURE* has told HP stories about people, products and philosophy, such as HP values and the HP Way.

Every month or two (the frequency has changed over time), the magazine has attempted to carry out Dave Packard's mandate of being informative and entertaining. We've told stories that have been interesting to employees, their families, friends and customers. We've communicated company messages, but haven't been required just to parrot the company line.

I see a lot of publications from other companies and talk with my counterparts there, and I can tell you that *MEASURE* stacks up very well.

This May–June edition is the 309th—and my 75th—in *MEASURE* history. I'm proud to have been part of HP and *MEASURE* for the past 13 years, and I'm even more excited about the new HP and *invent* magazine, which begins in July. *invent* will be more business- and customer-focused and, at the same time, more fun. It will be more global, more strategic and, I believe, more useful for our readers.

It's been great to *MEASURE* HP for all these years. Now, it's time again to *invent*.

—Jay Coleman



On the cover: *MEASURE* marks the historic split of Agilent Technologies from HP with this souvenir edition, which traces 61 years of company and 37 years of magazine history. The publications on the cover represent a few milestone editions of *MEASURE* and *WATT'S CURRENT*, its predecessor.

Covers' photo illustrations by Tim Mitchell

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A chance encounter with Bill Hewlett reveals the real story behind an enduring HP myth.

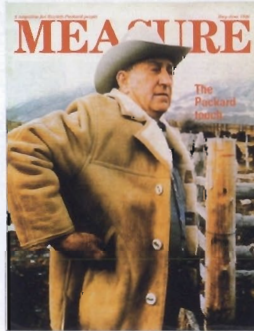


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Agilent Technologies

Innovating the HP Way



MEASURE

Editor:

Jay Coleman

Art director:

Tim Mitchell

Associate editors:

Shirley Gilbert

Kathy Mirtallo

David L. Price

HPNow intranet liaison:

Vicki Russell

Intern:

Desiree Sylvester

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HP's president and CEO discusses the company's rich heritage and outstanding future.

Parting shot

What would happen if the Hewlett-Packard Company never existed?

MEASURE has been published in mid-January, March, May, July, September and November for employees and associates of Hewlett-Packard Company and Agilent Technologies. It was produced by HP Communications, Employee Communications section, Shirley Gilbert, manager. Address correspondence to *MEASURE*, Hewlett-Packard Company, 3000 Hanover Street, 20BR, Palo Alto, California 94304-1185, U.S.A. The telephone number is (650) 857-4144; the fax number is (650) 857-7299; and the e-mail address is jay_coleman@hp.com.

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Wrapping up *MEASURE*

By Jean Burke Hoppe

The Hewlett-Packard Company story has been captured through the years in the pages of *MEASURE* and its predecessor, *WATT'S CURRENT*.

These published stories, dating back to September 1943, capture the moods, the triumphs, the travails, the brilliance, the energy and the personalities behind one of America's best-loved corporate success stories.

As the *MEASURE* era comes to an end, with the split of the company into HP and Agilent Technologies, it's a good time to look back over HP's 61 years as they were captured "for the record." As you'll see in these pages, these stories are too important to lose. In the future, Hewlett-Packard will continue recording company news with a new magazine called *invent*; Agilent will capture its ongoing story with its own publication.

But for a few minutes now, turn off your cell phone and pager, hide your palmtop and gather round the fabled hearth where families and friends once gathered to tell each other their stories. Enjoy a trip down HP's memory lane and see the true legacy of the company and its founders. If you work for Agilent or HP, it's your story, too. And it's a great one.

The editor's job, in essence, never changed through the years. It was to inform and to entertain.

In the 1940s, that meant explaining every new product HP introduced (20 a year by the end of the decade) and featuring the people who dreamt them up and made them. It meant writing about the daily lives of the 200 or so employees, with pictures and stories about each and every company picnic, Christmas party or beer bust. For a long time, Editor William Bigler knew everyone in the company and clearly understood HP's place in its tightly focused electronics instrument market.

The early issues of *WATT'S CURRENT* were chatty, informal and full of inside jokes that absolutely everyone in the company understood. These were clearly the “good old days” HP old-timers still talk about, the days when Bill Hewlett and Dave Packard started naturally doing the business-wise and people-savvy, generous and respectful things that later made them so famous.

The newsletter got more business-focused during the '50s when business expanded by leaps and bounds, the product line mushroomed and the company took its first steps toward expansion outside of California.

By the '60s, the company had become downright complex. The product line became more diverse, adding medical, analytical and computer products to its already successful test-and-measurement line. Global expansion continued in Asia, Europe, Latin America and Canada. The company became more and more decentralized.

MEASURE entered the picture in 1963 for just these reasons. Divisions had grown so large they needed their own publications. The company needed one overall publication to, as Dave Packard put it in his first *MEASURE* “From the President’s Desk” column, “serve as a regular, effective medium of communication among all our people. The primary objective of *MEASURE* is to inform. But we also want the magazine to be interesting and entertaining. We want it to be the type of publication that you will take home and share with your family and friends.”

MEASURE's early editor and supervisors—Dave Kirby, Bill Bigler, Merle Mass and Gordon Brown—made it their job to make sense of innovative technologies and the company's goals. It surely must have helped if they liked writing about and shoot-

ing pictures of new buildings. That was the story then as HP grew into one of the largest and most-admired multinational companies in the world.

But the stories weren't just about square feet and building designs. From the very beginning, *MEASURE* editors tried to write about each country's people and culture and how HP fit into it. They sought out brilliant and enthusiastic engineers who could explain the mysteries of lab-on-a-chip technology and fused-silica capillary columns to the generalist. They looked for stories that were compelling and people who were zealous about a cause or assignment. They looked for the big picture and tried to remember you can often see it most clearly in the small details like a quirky smile on a company veteran's face.

It could be a daunting task, taming this culturally diverse, geographical octopus of a company into 24 to 32 pages of copy and photos every other month. Every issue was a balancing act. Is there enough worldwide news? Are the stories balanced across product lines? Does the diversity of the workforce shine through? Are we helping employees understand the company's objectives, Hoshins and/or business fundamentals? Will the artwork and design invite the readers into the story? Are the stories accurate? Maybe entertaining even? No disastrous typos? Do the stories ring true? Is it the whole story?

Turned out there was always room for improvement and our readers gladly told us so (see "Your Last Turn," pages 52 to 55).

That feedback kept us humble through the years, despite the fact that *MEASURE* won awards every year, sometimes lots of them, for design, writing and the magazine itself. It routinely was chosen as one of the best examples of corporate employee communications around. Brad Whitworth, editor of *MEASURE* from

1982 to '86, has won three *MEASURE*-related Gold Quill awards, the highest honor from the International Association of Business Communicators.

MEASURE was named one of the best seven company magazines in "The 100 Best Companies to Work for in America." *The Editor's Workshop* newsletter (June 1989) called it "one of the pacesetters for organizational journalism." Of HP's special 50th anniversary issue, *The Maranto Memo* said, "Major league stuff here; better than many consumer magazines." Sam Riley's book, "Corporate Magazines of the United States," stated, "*MEASURE* stands as an example for employee publications throughout the United States."

In 1997, *The Ragan Report* profiled *MEASURE*, saying, "The glossy bimonthly has endured since 1963 by staying true to the journalistic values of directness, relevance and visual impact. It does not apologize to readers for its polished writing, four-color graphics and elegant if simple design: It assumes they would accept nothing less."

But the kudos that counted most were the personal notes every *MEASURE* editor received now and then from company co-founders Bill and Dave. A scribbled "Good job on this—Bill" or "This issue was excellent—Dave" (they never needed to use their last names) were treasured more than any other awards or honors.

Whether you are an HP or an Agilent employee, it's been a really fun run. Indulge us while we look back one last time at 61 years of HP history as *MEASURE* saw it—and then get on with it and go forth and invent. **M**

(Jean Burke Hoppe, a freelance writer based in Lincoln, Nebraska, was MEASURE editor from 1986 to '87.—Editor)

Around the world

1930

- Sliced bread introduced.
- Tuition at Stanford University is \$114/quarter.
- Clyde Tombaugh discovers Pluto.
- 3M introduces transparent tape.
- Artist Grant Wood exhibits "American Gothic."

1931

- The Empire State Building completed.
- Ernest O. Lawrence introduces the cyclotron, a particle accelerator.

1932

- The neutron and positron discovered.



During the 1930s, the world struggled to recover from the Great Depression, which followed the stock market crash of 1929. The news became even grimmer later in the decade as the stage was being set for World War II with Adolf Hitler coming to power in Germany and Japanese attacks on China. These were uneasy times.

Dave Packard and Bill Hewlett met as electrical engineering students at Stanford University. They became close friends by their junior year (brought together by mutual friend Ed Porter, who would go on to become an HP vice president for 40 years).

Bill and Dave graduated from Stanford in 1934 and cemented their friendship with a two-week camping trip in the Colorado mountains.

Classmates Bill, Dave, Ed Porter and Barney Oliver (who would later become the head of HP's Research & Development group) discussed plans to start a business. But it was still the Great Depression, and when Dave got a job offer with General Electric in Schenectady, New York, he accepted. Bill went on to graduate work at Stanford and MIT. They remained determined to start the company they had talked so much about.

Though investment capital was scarce in the '30s, and it was difficult for new businesses to survive, Stanford professor and mentor Fred Terman urged the two to start a business. In 1938, with \$538 in working capital (including the value of Dave's drill press), Bill and Dave went to work in the garage behind the first-floor flat at the house that Dave and Lucile Packard rented at 367 Addison Avenue in Palo Alto, California. Bill lived in a one-room cottage out back.

The company's first product, the HP 200A resistance-capacity audio oscillator, was a breakthrough because of improvements in size, performance and price. Walt Disney ordered eight of them for the production of the movie "Fantasia."

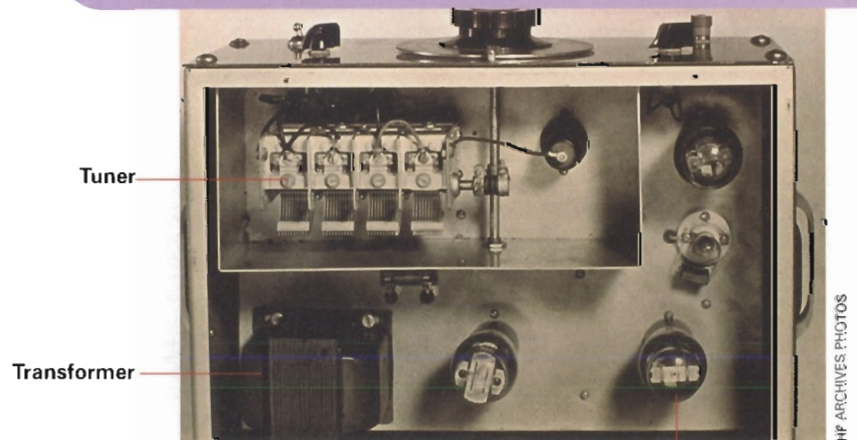
Bill and Dave learned versatility and flexibility in those days. They dreamed, designed, fabricated, packaged, priced, sold, kept the books, wrote the ads and swept the floors.

On January 1, 1939, they tossed a coin to decide the company name of their new partnership. Later that year, Bill married Flora Lamson and left his rented cottage behind Dave's home.

By the end of 1939, HP's first full year of business, sales totaled \$5,369 and the books showed \$1,563 in profits.

In their first year of business, Bill and Dave considered many different products, including a harmonica tuner and an exercise machine that used electrical pulses to activate the muscles. They designed and built a variable-frequency motor controller for the Lick Observatory atop nearby Mount Hamilton and invented a signaling device to indicate a foul-line violation for a local bowling alley.

At HP



1939—This is a top view of the inside of the HP 200A audio oscillator, Hewlett-Packard Company's first product based on Bill Hewlett's graduate thesis project at Stanford University.

Vacuum tube (predecessor to the transistor)

HP ARCHIVES PHOTOS



1933
 • Hitler becomes Chancellor of Germany.



1934
 • Guerrilla fighter Mao Tse-tung leads Chinese on a 6,000-mile Long March.

1935
 • Chiang Kai-shek named president of China.
 • Alcoholics Anonymous

organized in New York City; and the first canned beer hits the market.
 • Radar developed.
 • The prefrontal lobotomy introduced as a therapy for mental illness.

1936
 • Penguin Books introduces the paperback.

1937
 • Japan invades China, captures Shanghai and Peking.
 • John V. Atanasoff starts work on the first electrical computer.

1938
 • Nuclear fission discovered in uranium, which would lead to the first atomic bomb.
 • Kristallnacht, when Nazis destroy German Jewish property and attack Jews in late-night rampage.
 • The ballpoint pen invented.
 • A DuPont chemist accidentally discovers Teflon.

1939
 • German and Soviet forces begin occupying Poland, precipitating World War II.
 • Sigmund Freud dies.
 • Pan American starts regular commercial flights across the Atlantic and the modern helicopter developed.

The Great Depression brought long bread lines.

They hit the jackpot with the HP 200A (so named, Dave said, "because we thought the name would make us look like we'd been around for awhile") audio oscillator. The price was originally set at \$54.40 because it represented "54°40' or Fight!" (the 1844 slogan used in the campaign to establish the U.S. northern border of the Pacific Northwest).

In his book, "The HP Way," Dave said: "There is no question that a shared love of the outdoors strengthened our friendship and helped build a mutual understanding and respect that is at the core of our successful business relationship lasting more than half a century."



Bill and Dave hired Harvey Zieber, HP's first full-time employee.

Resistance Tuned
AUDIO OSCILLATORS

COMPACT — NO ZERO SETTING — ACCURATE
A New Principle of Operation
 MODEL 200B
 20-20,000 cps with Logarithmic Coverage
 Distortion less than 1% above 25 cps
 Output 1 Watt into 500 Ohms
 Amplitude ± 1 db from 20 — 15,000 cps
\$71.50 net FOB Palo Alto
 Write Dept. A for complete information about this and other models.
HEWLETT-PACKARD CO.
 367 ADDISON AVENUE
 PALO ALTO, CALIFORNIA



Currently starring in HP's "invent" advertising campaign, and preserved forever as a California Historical Landmark and "the birthplace of Silicon Valley," the one-car garage at 367 Addison Avenue is where Hewlett-Packard began. Dave and Lucile lived on the first floor of the two-story house; Bill lived in a one-room cottage out back.

1940s

Around the world

- 1940**
 - First color TV broadcast.
- 1941**
 - United States declares war on Axis Powers after Japanese attacks on Pearl Harbor, Guam and the Philippines.
 - Penicillin used for the first time as an injectable antibiotic.
 - Inspired by cockleburs in his socks, Swiss engineer George de Mestral invents Velcro.

The 1940s were dominated by the Second World War, a total global conflict encompassing three continents and tens of millions of people. An estimated 60 million people died during the war.

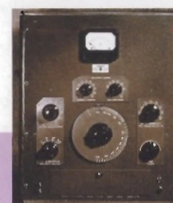
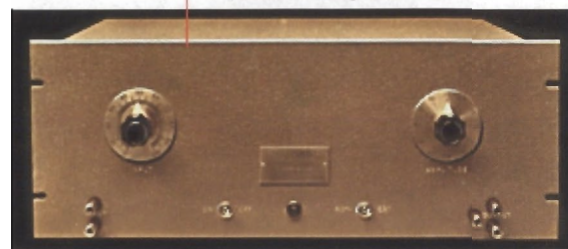
In the spring of 1941, Bill Hewlett, who had a commission in the army reserves, was called briefly to active duty. After the Japanese attack on Pearl Harbor on December 7, 1941, Bill served as an officer in the Army Signal Corps. Dave stayed behind to run the business.

World War II was a time of great sacrifice made in the name of democracy and freedom against Fascism. While the war caused devastation, personal heartbreak, suffering and tragedy for people around the world, HP—like many other companies—

grew rapidly in wartime, due to a boom in radio, radar, sonar, and aviation and nautical instrumentation. HP oscillators and voltmeters were used to manufacture the proximity fuser. HP's microwave products and oscilloscopes were used in radar-jamming systems. By 1943, nearly 100 HP people worked two shifts a day.

Annual sales grew quickly to a million dollars, and by the end of the war, HP employed 200 people. As expected, business dropped off after the war, but not for long. By the end of the decade, HP was bringing new instruments to the market at the rate of 20 per year.

The HP 210AR Square Wave Generator was useful in both production testing and development work where it readily detected peaks in amplification.



The HP 300A harmonic Wave Analyzer was one of HP's first test-and-measurement products used to make rapid measurement of individual components of a complex wave.



In 1942, HP produced eight test-and-measurement instruments, including the voltmeter Dave designed that year. HP entered the microwave field in 1943 with signal generators developed

for the Naval Research Laboratory and a radar-jamming device. A complete line of microwave test products followed World War II and HP became the acknowledged leader in signal generators. In 1947, the year HP incorporated, the HP catalog featured 39 products and Dave told participants at a New York trade show, "HP's future appears very promising."



At HP

September 24, 1943—The first Hewlett-Packard Company employee newsletter, edited by Nancy Burbank, is published with question marks across the masthead. The person who submits the winning name will get a \$5 war bond from Dave, who sets the tone for future employee communications when he writes in the premier issue: "I hope your paper will help to make the HP Co. a better place to work. You are free to use it in whatever way you wish. Do not hesitate to criticize anything you feel is wrong. Your criticism will be accepted in good spirit and your suggestions will be given fair valuation."

There was no news from the Welding Department in the first issue because reporter Nell Cady was home with a cold.



With HP's magazine

October 1, 1943—Cliff Atkins wins the paper-naming contest with his *WATT'S CURRENT* entry. Honorable mentions go to *Hi Frequency*, *Hewlett-Packard Amplifier*, *The Friday Binding Post*, *News Meter* and *Conquest*. In the Classified Ads, Mildred Wallace seeks a "nice, good-looking, rich, old bachelor...but will settle for a million dollars."



1942

- Enrico Fermi's team obtains the first controlled nuclear chain reaction.

1943

- The film "Casablanca" released.
- Colossus, an electronic digital computer, cracks German war codes.



U.S. NATIONAL ARCHIVES

1944

- American-led Allies land in Normandy on D-Day and sweep through Europe, liberating Paris from the Nazis.

1945

- WWII ends with the suicide of Hitler and the surrender of Germany. Japan surrenders after the U.S. drops atomic bombs on Hiroshima and Nagasaki.



HP quickly outgrew the Addison Avenue garage and rented a small building in 1940 at Page Mill Road and El Camino Real behind John "Tinker" Bell's workshop in Palo Alto. Construction began in 1942 of the first company-owned building, the Redwood Building, a 10,000-square foot office/laboratory/factory at 395 Page Mill Road. Today the site is the headquarters for Agilent Technologies. By 1948, Building 7B was completed alongside the Redwood

Building. Dave Packard waves next to Bill Hewlett near HP's first company car with its wood paneling and whitewall tires.



Bill Hewlett hits a homer during a 1942 company picnic at Monta Vista's Blackberry Farm.

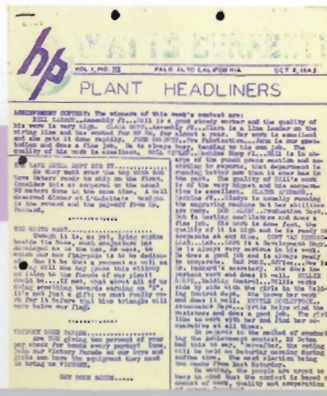
Bill and Dave sold eight Model 200B audio oscillators for \$71.50 each to Walt Disney Studios in 1939; the equipment was used to develop the soundtrack for Disney's innovative "Fantasia," which was released in 1940. Disney used the HP equipment to test the various channels, recording equipment and speaker systems in the theaters that showed "Fantasia." The original release may have been too innovative and bombed in theaters, but has since achieved cult-film status.

Columnist Freddy Stanton waxes poetic about the Old Fashioned cocktail: "It is not sensitive like a martini but rich and full like a magnolia blossom in midsummer, like orange trees blossoming under a full moon."

Employees are asked to "be fair" and take only one pack per day from the cigarette machine.



August 1945—With the war over, WATT'S CURRENT warns about the problems ahead due to reconversion and moving to a peace-time economy. Stories begin to focus more on commercial applications for HP instruments.



October 8, 1943—The paper reports that HP's 129 employees are consuming 54 bottles of milk and 9 dozen doughnuts a day, along with 6 to 7 pounds of coffee per week.



First WATT'S CURRENT photo of Major Charles Watson.

1940s

Around the world

1946
• The first general-purpose, room-sized computer, ENIAC, is used to calculate missile trajectories.



1946—Ed Porter and Cecil Woods (rear center) view HP's "pass on" type of line assembly pioneered in the early years. It is HP's first manufacturing line at the Redwood Building, 395 Page Mill Road, Palo Alto, California, with audio oscillators and HP 300A wave analyzers.

At HP

The seeds of the HP Way were planted in the 1940s as HP gives employees a \$5 Christmas bonus, which later became a production bonus, which later became the companywide profit-sharing plan. HP was first to develop and implement cash profit-sharing.

Bill and Dave made some other important management decisions in the '40s: adopting a "pay-as-you-go" method to finance growth; deciding, for the sake of employment stability, not to take on large contracts that could lead to a "hire-and-fire" operation; providing catastrophic medical insurance; using first names; and throwing regular employee parties and picnics.

With HP's magazine

1947

- Dead Sea Scrolls discovered.
- The first microwave sold.
- First meeting of the United Nations.
- The silicon chip invented, paving the way for microprocessors and today's personal computers.

- Marshall Plan sends billions in aid to stabilize post-war Europe.

1948

- Mahatma Gandhi assassinated by a Hindu extremist.

- Atomic clock introduced.
- Transistor invented.

1949

- South Africa adopts apartheid.
- NATO created.
- Britain recognizes Ireland's independence.



1947—Bill Hewlett (center) and Dave Packard (right) hold chest with goodies at an HP Company Christmas get-together.

The company—incorporated on August 18, 1947—continued to grow.

1946—WATT'S CURRENT is cut back to six pages due to the "economic pressures of reconversion." The look is sparser, product photos are featured regularly on the cover.



May 1947—Newsletter announces new pay policies with bonuses for production and salaried workers, six paid holidays and two weeks of paid sick leave.



A New Amplifier For Milli-Microsecond Pulses

RECENT developments in nuclear radioisotope measurements have created a need for amplifiers having extremely wide bandwidth or speed compared to conventional video amplifiers. For example, certain photo-multiplier type radiation detectors have output pulses as short as 0.01 microsecond.

The new Model 600A amplifier shown in Figure 1 will amplify such pulses with very little distortion and provide suitable output for operating oscilloscopes, coincidence devices, or for direct viewing on a cathode ray tube. Although this amplifier was developed primarily to meet these requirements, other more general applications suggest themselves for amplifying signals anywhere in the range from audio frequencies to 200 megacycles. The amplifier can readily be used for extending by tenfold the sensitivity of a peak-reading diode voltmeter or for amplifying the output of a low-level signal generator.

The distributed amplifier circuit provides a means for connecting conventional amplifiers whose bandwidth is less than their plate currents add but their capacities do not. Thus, the bandwidth can be increased beyond the point where the individual tubes have a gain of one, which is the limiting point in conventional cascaded stages.



1949—The first issue of the HP Journal published.

1950s

Around the world

1950

• Korean War begins.

1951

• Chrysler introduces power steering.
• J.D. Salinger publishes the classic "The Catcher in the Rye."

One of the most prosperous eras in U.S. history began with the election of President Dwight Eisenhower in 1952. The economy had adjusted from wartime to post-war; rationing at home and sacrifices for the boys on the front were becoming a dim memory. Soldiers came home from the war, took advantage of the GI bill, married their sweethearts, became company men and fathered the most marketed-to generation ever born—the Baby Boomers. They spent their money on cars, homes and modern appliances. They moved to the suburbs, planted elm trees and bought avocado-green refrigerators, which they filled with new, improved convenience foods like frozen TV dinners.



Spurred by World War II-funded research, electronic technology, such as the transistor and television, evolved rapidly—both in sophisti-

cation and in demand. The great space race began with the USSR's launch of Sputnik I on October 4, 1957. The launch made Americans fear they were falling behind in technology and that the Soviets would launch nuclear weapons into space. The National Aeronautics and Space Administration (NASA) was born in 1958, embarking on a quest for the moon that captured the fancies of Americans young and old. Meanwhile, the Cold War grew in intensity while children learned "Duck and Cover" songs in school and their parents built bomb shelters.

HP went through a growing and maturing process in the '50s. "How" the company grew was as hotly debated as how much the company should grow. The thoughtful and much emulated

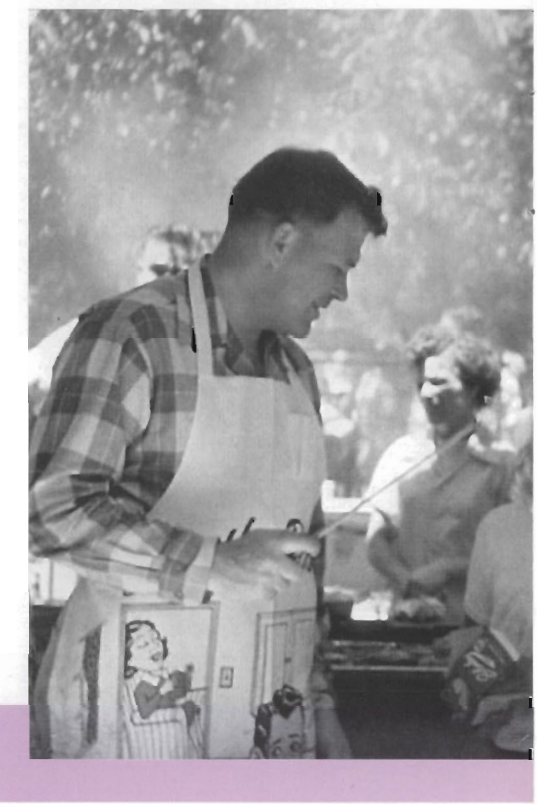
Corporate Objectives were pre-

At HP

sented at the first offsite management meeting, held in early '57 at the Sonoma Mission Inn, 70 miles north of San Francisco. About 20 people attended.

The product line rapidly expanded with the introduction of the high-speed frequency counter and the low-frequency function generator early in the decade, followed by other landmark HP inventions, such as the sampling oscilloscope, introduced in 1958.

After the Treaty of Rome was signed in 1957, the company took its first steps toward globalization that year, opening a manufacturing facility in Böblingen, Germany, and a European marketing organization in Geneva, Switzerland.



1951

• Bill and Dave report that production in '51 increased three times over '50. Net sales are \$5.5 million; the year starts with 215 employees and ends with 519.
• New HP products unveiled: a new line of waveguide test equipment, the frequency counter, the low-frequency function generator, a signal generator and a UHF bridge.

PACKARD REPORT ON EASTERN TRIP
Bill Hewlett, Dave Packard, Bill Miller and I spent the first week of March in New York attending the National Radio Engineers Convention. A trade show is held at the same time at the Grand Central Palace in the center of New York City. Our lunch was held on the main floor and thousands of our friends stopped by to see the instruments we had on display.

It is always a great satisfaction to talk to people who are using our instruments because it demonstrates very clearly that we have not made a substantial contribution to the Electronic Industry and, also, at the same time, in the Instrument Production Program. You would all have been glad to hear the things people say about the instruments. You can't build up a reputation in a number of one of the electronic instrument lines in the entire country.

The reaction to our new equipment lines was quite different. Customers were very excited about the new equipment. They were more than ready to purchase. They were more than ready to purchase. They were more than ready to purchase.

HP WINS AGAIN!
Recently a survey of outstanding performance of members of the Institute of Radio Engineers was conducted and the Hewlett-Packard Company was named recipient of an award. In fact, no award is given until the next year or so, but the fact that the award was given to us is a great honor.

FOREMEN'S MEETING HELD AT RICKETS'
A meeting of the foremen of the instrument department was held at Rickets' on March 21st. The foremen discussed the company's progress and the future of the company.

Bowlett Development Discontinued at Snow
The Snow Development Program was discontinued at Snow on March 21st. The program was discontinued because it was not profitable.

With HP's magazine

WATT'S CURRENT?

PLOTTERS HAVE 'HEARTY' TUNE AT PARTY
The Plotters had a very successful party at the home of Bill and Dave Packard on March 21st. The party was very successful and the Plotters had a very good time.

HEWLETT BITES THE DUST
Bill Hewlett was bitten by a dog on March 21st. The dog was very friendly and Bill was not hurt.

FROM OUR PRESIDENT'S DESK
Dear friends, I am pleased to announce that we have a new product line that will be available in the next few months.

PORTER: LOCAL CITY COUNCILMAN
Bill Porter has been elected to the local city council. He will represent the interests of the community.

1950s

Around the world

- 1956 Elvis Presley records "Heartbreak Hotel."
- The first practical videotape recorder developed.
- Nobel Prize in Physics awarded to William Shockley, Walter



1957—production work in Palo Alto, California.

HP's Corporate Objectives (1957)

- Profit
- Customers
- Fields of interest
- Growth
- Our people
- Management
- Citizenship

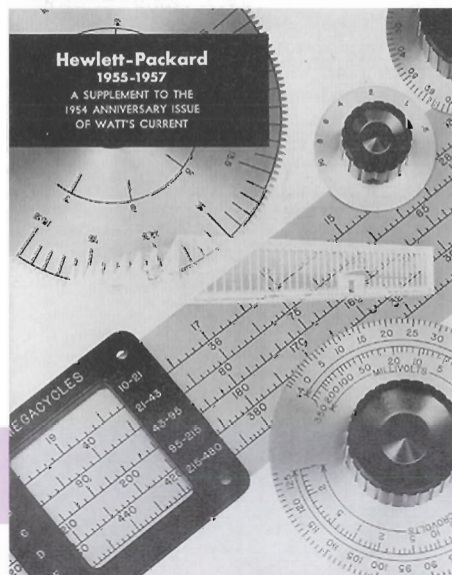
About 20 HP managers sat down in 1957 to discuss what would become HP's Corporate Objectives. The objectives distilled the wisdom of 18 successful years of

operations—and especially Bill and Dave's thoughts about what it would take to manage such a rapidly growing business and remain focused, honorable and good to their people who made it all happen. These management philosophies, radically different from the top-down management style of many companies, were the basis of the management style that became known as the HP Way.

At HP



HP stock was first offered to the public November 6, 1957. Ten percent of the common stock owned by Bill and Dave became available at \$16 per share. Along with later offerings, this broadened the base of HP ownership and enabled employees to become shareowners. In his book, "The HP Way," Dave reveals that he was late to the New York Stock Exchange building the day of their first public listing—because he made a wrong connection on the subway. "It never occurred to me to take a taxi."

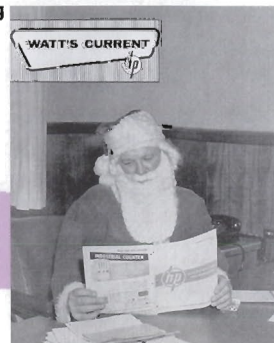


- 1956 Dynac, Inc., is organized as an HP subsidiary to handle instrument-systems business.
- First HP oscilloscopes produced: Models 130A/150A.
- Dave Packard retires from Palo Alto School Board after nine years of service.

- 1957 First HP building in the newly established Stanford Industrial Park opens at 1501 Page Mill Road.
- First public stock offering on November 6. All employees at all levels with six months of service receive an automatic stock grant and become eligible for a stock-option program.

- 1958 HP completes first acquisition, the F. L. Moseley Company in Pasadena, California.

- 1959 HPSA established in Geneva, Switzerland, to handle marketing responsibilities in Europe.
- Manufacturing plant opens in Böblingen, Germany.



With HP's magazine

Brattain and John Bardeen for developing the electronic transistor.

- IBM introduces FORTRAN, the first programming language.



1957

- Russia launches Sputnik I.

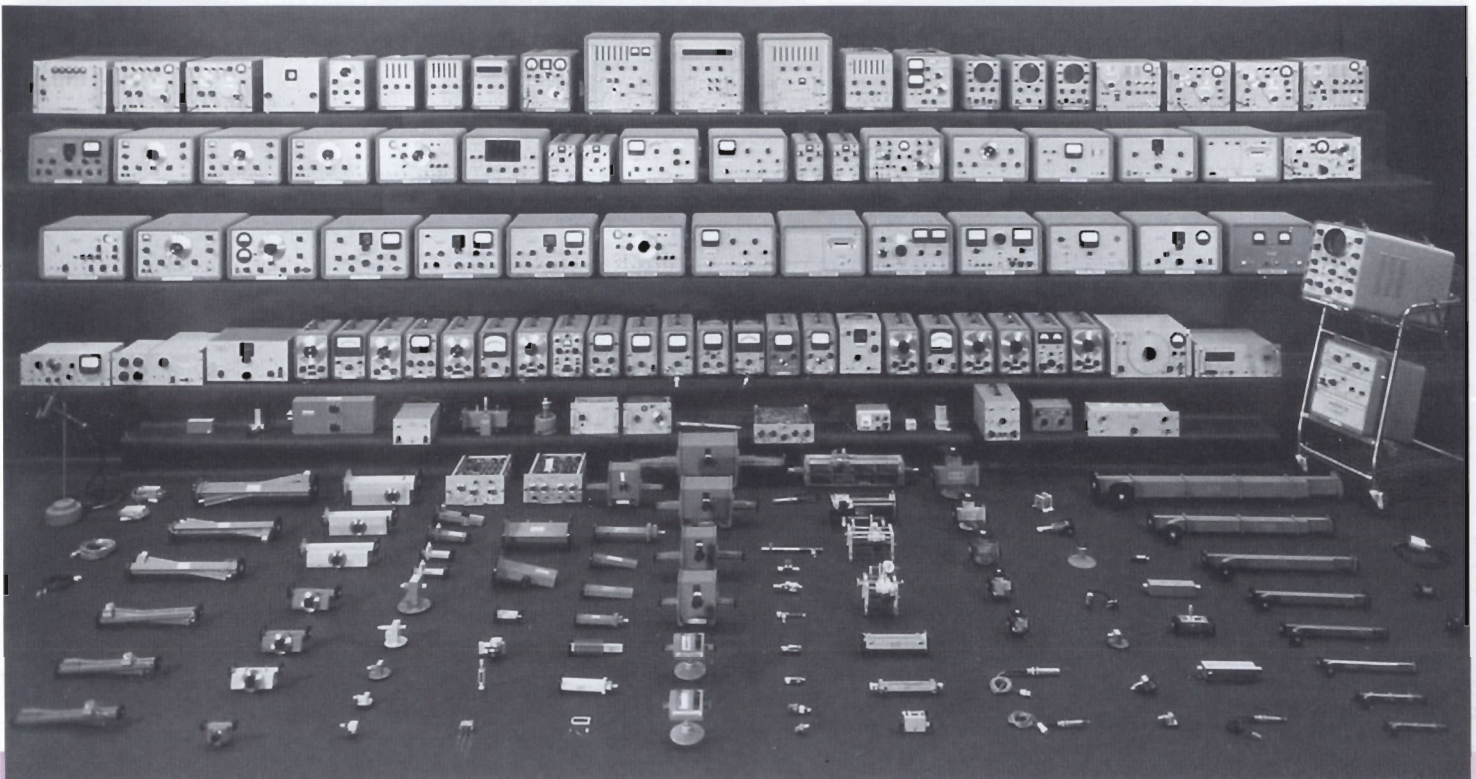
- European Common Market begins.
- Treaty of Rome ushers in EEC.

1958

- China Communist Chairman Mao Tse-tung initiates the Great Leap Forward, a grassroots economic program that causes widespread chaos.

1959

- Barbie doll and Hula Hoops introduced.
- Computers get integrated circuits.
- First commercial Xerox copier introduced.
- Chinese crush Tibetan uprising; 80,000 Tibetans die.



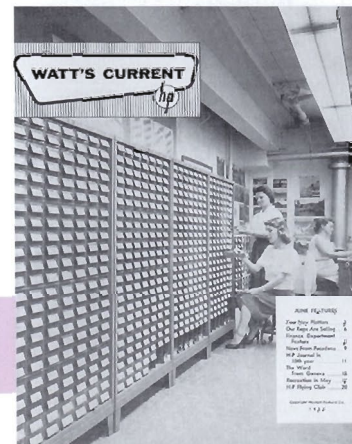
1959—HP's entire product line includes high-speed frequency counters, low-frequency function generators and oscilloscopes.



1957—(From left) Bill Hewlett, Barney Oliver—first director of HP Labs—and Lee de Forest, inventor of the vacuum tube.

"When I first joined HP in 1952 it was immediately apparent that nearly all its 400 employees were enthusiastic about, loyal to, and proud of their company to an unusual degree...As one employee put it, 'I have the impression that Bill and Dave are working for me, rather than the other way around.' What surprises visitors today is that this same spirit has survived HP's growth. It is unusual to find such spirit in a company with over 17,000 employees, but it is not surprising. For in a deeper sense, what was going on in those early days was a process of education in management. ...Most of the early employees became extensions of Bill and Dave's personalities and philosophies, and put these philosophies and techniques to good use when they took their place as line leaders, supervisors or division heads. ...We all believe in [these philosophies] and practice them. They are part of our way of life."—Barney Oliver

HP widened its horizons in 1959, establishing a presence outside of California with a European marketing organization in Geneva, Switzerland, and its first manufacturing plant outside of Palo Alto in a converted knitting mill in Böblingen, Germany. In 1958, the company also made its first acquisition, the F. L. Moseley Company of Pasadena, California, producer of high-quality graphic recorders (marking HP's entry into the plotter business).



1960s

Around the world

- 1960**
- United States launches first weather satellite.
- FDA approves birth-control pill.
- Scientists develop first laser device.

- 1961**
- The Berlin Wall built.
- A Russian, Yuri Gagarin, becomes the first man in space and Alan Shepard makes first U.S. space flight.



This decade started out on a hopeful note with the election of the charismatic and energetic John F. Kennedy as U.S. president. Idealism quickly became turbulence with the Cuban Missile Crisis, Kennedy's assassination, the controversial U.S. involvement in the Vietnam War and the Civil Rights movement, which brought to the front leaders as diverse as Martin Luther King (assassinated in 1968), Malcolm X and the Black Panthers. A counter-culture movement of hippies and flower children spread their mantra of peace, love and rock 'n' roll, often living communally and turning their parents' hairs grayer.

The Soviet Union and the United States made great strides in the space race, and the decade closed with Neil Armstrong stepping onto the moon's surface in 1969, saying, "That's one small step for a man, one giant leap for mankind."

For HP, it was a decade of steady growth in the test and measurement field and expansion into the medical and analytical fields. Popular products included the microwave spectrum analyzer, a non-invasive fetal heart monitor, HP's first computer (HP 2116A) and the world's first programmable scientific desktop calculator (HP 9100A). As the company grew, it became more and more decentralized. By 1968, HP adopted a group structure that combined, organizationally, divisions with related product lines and markets into a group headed by a group manager with a small staff.

HP began to attract notice as a progressive, well-run company and a great place to work. In 1962, HP made its first appearance, at No. 460, on the Fortune 500 list.

The highly accurate HP 5060A cesium-beam atomic clocks, developed by Al Bagley's Frequency and Time Division, were nicknamed "the flying clocks" when they were flown from Palo Alto to Switzerland to compare time as maintained by the U.S. Naval Observatory in Washington, D.C., to time at the Swiss Observatory in Neuchâtel. In time, so to speak, the cesium-beam standard became the standard for international time.



At HP

- 1960**
- Net sales are \$60.2 million. Employment is 3,500.
- HP's first distinct product division is formed—named Microwave Division—and headed by Bruce Wholey.

• Former U.S. President Herbert Hoover and French President Charles de Gaulle visit HP.

- 1961**
- A January *WATT'S CURRENT* feature states, accurately: "A tour through the Tabulating Department

any day of the week will vividly reveal that the day of the computer has certainly arrived here at -hp-." • HP Associates established as a subsidiary dedicated to advanced research in solid-state electronics.

- July 1963**
- First issue of *MEASURE* (right) published July 1; Dave Packard asks Editorial Director Dave Kirby if it's always going to have that "damn pink cover." (*WATT'S CURRENT* will be published for Bay Area employees through August 1971.) Bill Bigler is first editor; Byrd Beh is production assistant.
- Dave Packard writes in first issue: "The goal of *MEASURE* is to serve as a regular, effective medium of communication among all our people. The primary objective of *MEASURE* is

to inform. But we also want the magazine to be interesting and entertaining. We want it to be the type of publication that you will take home and share with your family and friends."

- September 1963**
- *MEASURE* tries from the start to be an international publication with an informative and colorful story about the groundbreaking ceremony for Yokogawa-Hewlett-Packard. Overseas sales were already 18 percent of total HP business; the largest foreign markets were Western Europe, Canada and Japan.
- HP breaks ground in Colorado Springs, Colorado, for a \$2 million facility to house the Oscilloscope Division.



With HP's magazine



1962

- Rachel Carson publishes "Silent Spring," a call to the world to stop using dangerous and deadly pesticides.
- Telstar, the first active communications satellite, begins operation.
- People's Republic of China replaces Taiwan in the United Nations.
- Intel announces the first microprocessor, the Intel 4004.

1963

- U.S. President J.F. Kennedy assassinated.
- Murray Gell-Mann and Georg Zweig propose the quark theory of subatomic physics.
- Valium introduced.
- Betty Friedan writes "The Feminine Mystique," which inspires a new generation of women activists.

1965

- CBS broadcasts the first football games on television.
- John Kemeny and Thomas Kurtz develop BASIC, a computer language for beginners.
- U.S. troops land in Vietnam.



1964

- Muhammad Ali wins the world heavy-weight boxing championship.
- The Beatles gain international fame.
- Tokyo Olympic Games held; a first in Asia.
- Military leaders seize power in Brazil.

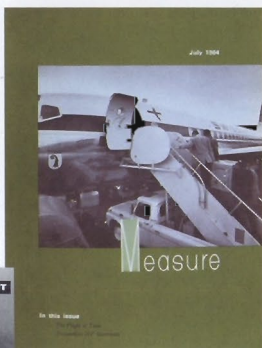
It began in the late '50s and has never let up. Expansion boomed for HP in the '60s with the first U.S. manufacturing plants outside of Palo Alto opening in Loveland and Colorado Springs, Colorado; the purchase of Sanborn Company in Waltham, Massachusetts, which brought HP into the medical field; and the purchase of F&M Scientific Corporation in Avondale, Pennsylvania, which brought HP into the analytical-instrumentation field. In 1967 alone, HP started subsidiary companies in Denmark, Finland, Norway, Argentina, Brazil, Venezuela and Australia. HP also entered the Asian market in the '60s, forming its first joint venture with Yokogawa Electric Works, Yokogawa Hewlett-Packard, in 1963.



1961—HP common stock first listed on the "big board" on March 17. Dave Packard (left) and New York Stock Exchange President G. Keith Funston talk with a stock specialist.

July 1964

- Editorial Director Dave Kirby says Dave Packard always wrote his own column for employees, even calling it in from the road at times.



October/November 1964

- 25th anniversary issue; Dave Kirby says Lucile Packard called it "the best publication she'd ever seen."

November 1964

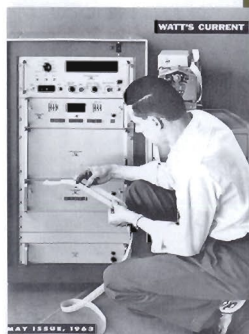
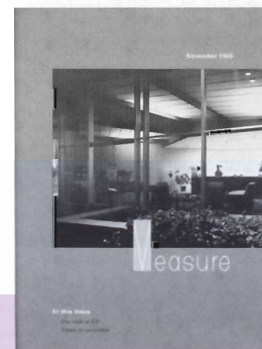
- First "Corporate Identity Program," establishes the HP brand and logo as "progressive yet rather conservative and unflamboyant."

March 1965

- Feature on HP operations in Germany notes that HP GmbH stands for Hewlett-Packard Gesellschaft mit beschränkter Haftung.

November 1965

- MEASURE readership survey: 86 percent of employees say they read every issue; 37 percent read the whole thing.



1960s

Around the world

- 1966**
- The Soviet Union lands spacecraft on the moon.
 - Cultural Revolution begins in China.
 - Texas Instruments introduces first solid-state handheld calculator.
 - Indira Gandhi becomes prime minister of India.



At HP

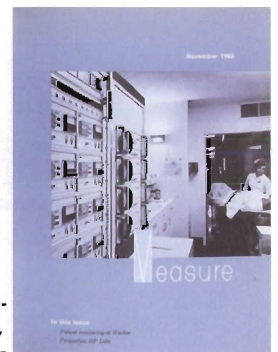
1968—Bill Hewlett (left) with Dave Packard operate the HP 9100A desktop calculator, developed by HP Labs.



1966—HP entered the computer market with the invention of the HP 2116A, designed as a controller for the company's test-and-measurement instruments.

October 1966

- Four HP products appear on *Industrial Research* magazine's 100 Most Significant Products of 1966 list: the 141A variable persistence oscilloscope, the 12.4 GHz delayed-sweep sampling scope, the 8405A vector voltmeter and standard resistors.



With HP's magazine

1967

- First heart transplant.
- Scientists issue first warning about the greenhouse effect.
- Six Day War between Israel and neighboring Arab states.

1968

- Paris has student riots and a general strike.

1969

- Neil Armstrong and Buzz Aldrin walk on the moon.
- U.S. Department of Defense sets up ARPANET, a precursor to the Internet.



HP marketed its first computer in 1966, the HP 2116A, the first system tailored for use with measuring instruments. Marketing Vice President Noel Eldred said, "What is really different about the HP computer is that it will save thousands of dollars and months of time for the user who wants to computerize his instrument system. We have done this by solving his interface problems for him, in advance."

The HP 9100A scientific desktop calculator, the forerunner of today's line of powerful HP high-performance workstations, was introduced in 1968. It was really a desktop computer that combined reverse Polish notation with a special algorithm that could handle trigonometric and logarithmic functions.



1968—The HP 9100A (the world's first programmable scientific desktop calculator) was 10 times faster than most machines at solving science and engineering problems.

HP was the first U.S. company to institute flexible work hours. The program, which allows employees to arrive early or late to work as long as they work a standard number of hours, was initiated at the Böblingen, Germany, plant in 1967 and now is in wide use throughout the company and the industry.

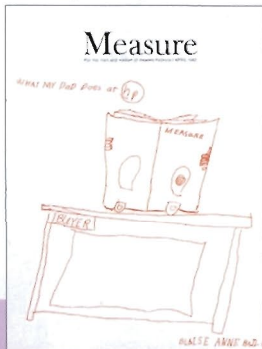
Dave Packard wrote in "The HP Way," "To my mind, flextime is the essence of respect for and trust in people. It says that we both appreciate that our people have busy personal lives and that we trust them to devise, with their supervisor and work group, a schedule that is personally convenient yet fair to others."



HP Laboratories was formed in 1966 under the direction of Barney Oliver. Its portion of that year's total research and development budget of \$19 million was \$2.5 million, allocated among the four major business sections: solid state physics, physical electronics, electronics research, and medical and chemical electronics instruments research. By late 1967, HP Labs had 207 employees working on 75 different projects with 18 percent of HP's total R&D budget.

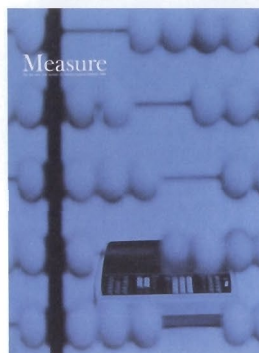
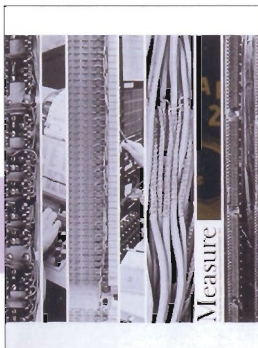
December 1966

- Feature on HP housemothers, a unique HP job present in nine divisions. Their role is defined as part "personnel counselor, observer, psychologist, nurse, arranger of babysitting service, soother of ruffled feelings, insurance claims adviser, mender of broken seams, patient listener, administrator."



- **January 1967**
• HP Mexicana is established and Vice President for International

Operations Bill Doolittle (who became known as HP's "Mr. International") talks about HP in Latin America, noting that the 1966 order rate there was up 96 percent over 1965. The Showboat, a traveling HP trade show, was very popular when it dropped anchor in major Latin American cities.



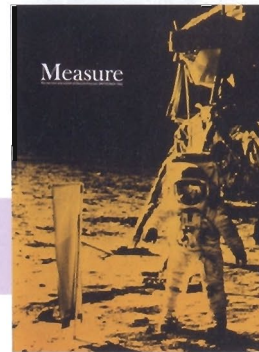
February 1969

- Bill Hewlett writes about Dave Packard's departure from day-to-day HP operations after

being appointed Deputy Secretary of Defense. Dave returned to the company in 1972.

- Readers met "Moderately Modern Millie" in a feature story on "girls" on the production line.

(Millie's wearing a fabulous polka dot dress.)



1970s

Around the world



1970

- Array technology developed, making it possible to put many integrated circuits together on a single silicon chip.
- Lasers designed for industrial use developed.
- Compact discs developed.
- Rock stars Janis Joplin and Jimi Hendrix die of drug overdoses.
- Communist Khmer Rouge forces take over Cambodia.

It's been called the "Decade of Disillusion." Americans dealt with continuing protests against involvement in the Vietnam War, a growing counterculture that brought illegal drugs into the mainstream, and cynicism about politicians and the presidency with the Watergate scandal and Richard Nixon's eventual resignation from the U.S. presidency.

The early '70s gave HP a few challenges, too, with a U.S. recession that created a significant drop in U.S. orders and tested HP's long-standing "pay-as-you-go" philosophy for financing the company. In spite of record international sales, HP inventories mounted and rumors of layoffs circulated. An HP Way-compatible "nine-day fortnight" went into effect for about a year until normal workforce attrition and some extra unpaid holidays got HP back in balance. The innovative program meant a 10 percent work-and-pay reduction in most of HP's U.S. plants and for all management, but there were no mass layoffs. HP decided that belt-tightening, conservative hiring and better cost controls were the ways to solve financial problems for the long term.

As the recession eased, HP continued its tradition of innovation, and significant growth in earnings, employment and innovation, passing the \$1 billion sales mark in 1976 and approaching \$2 billion in '78.

There were many technological triumphs in the '70s—automatic microwave network analyzers, laser interferometers, logic analyzers, the first minicomputer built on 4K dynamic random-access memory (DRAM) chips instead of magnetic cores, diode-array detectors and the HP-IB interface, which became the industry standard—but none surpassed the introduction of the HP-35 handheld calculator. It was the world's first handheld scientific calculator.

In 1977, it was an historic moment when the HP board named John Young president (and chief executive officer the following year), and Bill and Dave officially handed off day-to-day operating management of the company.



1973— Hewlett-Packard Company founders, David Packard (left) and William Hewlett made HP the world's leader in electronic test and measurement instruments.

At HP

1972—

In 1972, HP introduced the world's first pocket scientific calculator, the HP-35, which soon made the engineer's slide rule obsolete.



April 1970

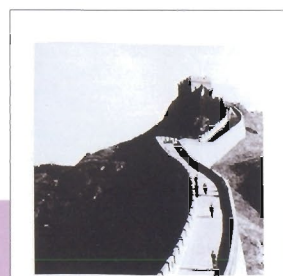
• When science fiction writer and author of "2001—A Space Odyssey," Arthur C. Clarke, publicly admired the HP 9100 desktop calculator, his HP fans conspired to send him one for Christmas. Clark named it HAL Junior after the computer in 2001.

February 1972

• Dave retires as Deputy Secretary of Defense, returns to HP and is elected chairman of the board. Bill retains title of president and CEO.

March 1972

• Feature on how HP atomic clocks were used to affirm certain aspects of Albert



Measure



Measure

With HP's magazine

1971

- Mainframe computers get floppy disk drives.
- East Pakistan declared independent as Bangladesh.

1972

- First SALT (Strategic Arms Limitation Treaty) signing.
- CT scan introduced for medical imaging.

1973

- United States withdraws troops from Vietnam.
- Arab oil embargo triggers worldwide fuel shortage and energy crisis.
- Skylab launched.
- Billie Jean King beats tennis pro Bobby Riggs, shattering misconceptions about female athletes.
- Dungeons & Dragons game invented.
- Pablo Picasso dies.
- Elected Chilean President Allende killed in a military coup led by General Pinochet.

1974

- Nixon resigns in aftermath of Watergate scandal.

1975

- Vietnam War ends.
- Altair, the first personal computer, introduced in United States.
- Lyme disease first reported in Lyme, Connecticut.
- Papua New Guinea gains independence from Australia.



1972—
The HP 3000, introduced in 1972 by Hewlett-Packard Company, was a powerful and versatile computer system for its day. It served high-technology engineering and research needs at the same time it handled day-to-day administrative data processing operations.

Einstein's Theory of Relativity. Turned out Einstein's theoretic calculations were on target.

August 1972

- Feature on HP gas chromatographs being used for first time to test athletes for drugs at the Olympic Games in Munich, Germany.

August 1973

• A special issue of *MEASURE* tries to pin down the elusive HP Way by looking at the past, present and future of the HP Experience. Says Bill Hewlett in his column: "What is the HP Way? I feel that in general terms it is the policies and actions that flow from the belief that men and women want to do a good job, a creative job, and that if they are provided the proper environment they will do so. But that's only part of it. Closely

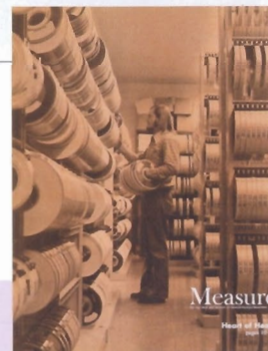
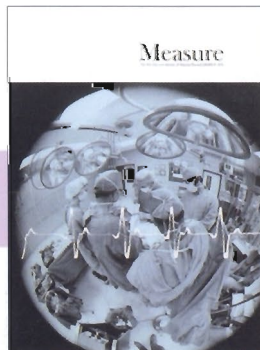
coupled with this is the HP tradition of treating each individual with consideration and respect..."

July 1974

• In his column, Bill Hewlett notes the 15th anniversary of HP operations in Europe by reminiscing about the early days—in English, French, German and Italian. An interview with Dick Alberding, director of European Operations, was also translated into four languages. But the back cover showed the trouble people in Germany had with the company's name.



HP recycling articles ran in the '70s.



1970s

Around the world

- 1976**
- Viking I and II land on Mars.
- Seymour Cray designs first commercial model of a supercomputer.



- 1977**
- Voyagers I and II head into the solar system.
- "Star Wars" released.



1976—
The HP Instrument Group, run by Bill Terry (right), with 40 percent of total HP sales, was still the largest of the company's six product groups. Some new offerings from the group that represents HP's roots included the selective-level measuring set, the fully automated digital multimeter, a very sophisticated new network analyzer and a compact, portable, 8-channel instrumentation data recorder.

At HP

1978—
When Bill Hewlett (center) retired May 19, 1978, HP President John Young (right) added the CEO title. For the first time, a team of professional managers who were not founder-owners headed the company. Bill and Dave (left) didn't go far away, though; Dave was still chairman of the board and Bill became chairman of the Executive Committee.

August/September 1976

- The Disaster Issue: Reports on the devastating Big Thompson River flood July 31, the day of the Loveland site annual picnic, and the horrors suffered by HP people who lingered in the canyon too late that day—and a report on increasing security after a bomb explodes earlier in the year, destroying part of HP Labs in Palo Alto.

October 1976

- "They Came Back" features people who left HP for a variety of reasons and then were rehired by the company. Dave Packard led the list.

November 1976

- Special issue devoted to the wide world of Intercontinental Operations, which then

With HP's magazine

- Apple Computer founded by Steve Jobs (right) and Steve Wozniak, who is said to have financed part of his venture by selling his HP calculator.
- Fiber-optics used for large-scale trials of a telephone system.



1978

- First test-tube baby, Louise Brown, born in Great Britain.
- Mickey Mouse turns 50.



1979

- Meltdown at Three Mile Island, Pennsylvania, nuclear reactor.
- Sony Walkman hits the market.
- Ayatollah Khomeini adopts Islamic constitution for Iran.
- Britain elects its first female prime minister, Margaret Thatcher.
- Sandanistas seize power in Nicaragua.

The groundwork for today's very successful China Hewlett-Packard joint venture was laid in the '70s. In 1972, HP was the first U.S. electronics firm to be invited to China for trade discussions. Vice President-International Bill Doolittle and Lee Ting, then Far East area manager from Singapore, jumped at the opportunity. Dave Packard visited China the first time in 1977, beginning a long love for the country, deep respect for its people and a sincere commitment to help China's modernization efforts. He returned to China in 1979. Before he left, his hosts told him they wanted to set up a joint venture with HP. CHP was established in 1985 and was China's first high-tech joint venture.



HP's Bill Doolittle (upper left when he joined the company in 1947) poses between his two hosts (left) from the China Machinery Import-Export Corporation at the entrance of Peking's summer Palace.



HP's Lee Ting (left) brought fluency in Mandarin and Cantonese as well as technical expertise to the negotiations.



1977— Bill Hewlett (left) and Dave Packard enjoy the humor at an off-site meeting.

covered 101 countries on five continents with 4,500 employees.

February 1977

- "We're in the best shape ever," Dave Packard tells his managers at their annual meeting in Silverado, California.

June 1977

- Ross Snyder, head of technical publicity for HP Corporate public relations, muses about "Your Electronic Future," saying, "Our sights should be raised much higher [about computers], eventually to 'interactive' interconnection of computers in business, government, education and home."



• Analyzing performance with a line graph (page 23)
 • Manufacturing Executive and CEO (page 17)
 • HP's new Super Page 13 (13)
 • The HP 41C calculator (page 15)
 • The Super Page 13 (13)

Measure

- COMSYS, HP's internal communication system, goes to market. *MEASURE* says it's probably the first brainchild of Corporate to end up in a division for outside sale.

October 1977

- John Young writes his first "From the President" column as a just-about-to-be-president because of *MEASURE*'s lead time.

March 1978

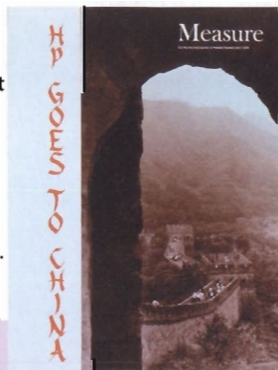
- Bill and Dave reflect on the difficulties of becoming legends in their own time while John Young takes the reins at the HP management meeting in Silverado, California.

January 1979

- HP turns 40 and *MEASURE* celebrates by telling HP's favorite story—how it all began.

May 1979

- Measuring *MEASURE*: A readership survey reveals that 12 percent of employees read every article in every issue and that 2 percent never read it at all. Forty-six percent read most of it. Readers asked for more variety, shorter articles and a more dramatic presentation.



1980s

Around the world



The 1980s were packed with vivid events, some hopeful, some heartbreaking. The fall of the Berlin Wall at a time when communism was losing its grip all over Eastern Europe and the Soviet Union. The mysteries and devastation of acquired immune deficiency syndrome (AIDS). The explosion of the space shuttle Challenger in mid-decade. The dark day in '87 when the world's stock markets crashed.

For HP, the big issues of the decade were growing global competition, rapid economic changes and work force rebalancing as the company got serious about the computer business. Many people encountered their first desktop computers in the '80s and HP supplied them in a steady stream: the HP 150 Touchscreen in '83, the Vectra personal computer in '85, the Asian Vectra in '86 and the Portable Vectra in '87. The company also unveiled the powerful HP Precision Architecture family of computers in '86.

Computers had a massive impact on all HP product lines in the '80s, teaming up with electronic instruments, components, medical and analytical technology. HP's first microprocessor-based analyzer, for example, enabled fast and convenient magnitude or phase-response measurements in near-real time across previously unheard of frequency ranges. Analytical products were spurred by rapid leaps in bioscience and biotechnology.



The decade also marked the start of HP's successful entry into the printer market with the launch of inkjet and laser printers that work with personal computers. HP's printers, more than any other product made in the history of the company, helped make HP a household word, a recognizable brand in the consumer market.

Japan and Yokogawa-Hewlett-Packard (now HP Japan) soared in the '80s despite fierce competition, largely due to a strong focus on Total Quality Control. YHP's quality efforts and procedures spread throughout the company and HP President John Young challenged employees to reduce hardware failures tenfold in 10 years.

At HP

January 1980

- Corvallis Division unveils HP's first PC, the HP-85 personal computer for professionals.

April 1980

- *MEASURE* writes about "The case of the disappearing jobs" when the Manufacturing Division's Palo Alto transformer shop was decentralized and 170 people had to find new jobs within HP.
- *MEASURE* solicits input for a regular letters-to-the-editor feature. The first respondents received a shiny new penny for their thoughts.

May-June 1980

- *MEASURE* gets a makeover, going from a monthly 16-page publication to a 24-page bimonthly. The issue features a story on HP publications around the world.
- First letter to the editor: "I've wondered if the president's message in *MEASURE* is actually written by the president." The answer: "Yes, just as it was in the times of Dave Packard and Bill Hewlett," though the Public Relations department provides "a bit of help."

1980

- Beatle John Lennon murdered.
- Border hostilities erupt into war when Iraq invades Iran.
- Ronald Reagan becomes 40th U.S. president.
- A gene successfully transferred from one mouse to another and functions.
- The United States, Canada, Japan and West Germany boycott the Summer Olympic Games in Moscow in response to Soviet invasion of Afghanistan.
- Independent trade union, Solidarity, formed in Poland.

1981

- IBM introduces its personal computer, licensing the disk operating system from Bill Gates.
- Prince Charles and Lady Diana Spencer are married.

1983—

Syndicated columnist and longtime HP fan Milton Moskowitz wrote in 1983, "If you work for HP—and 67,000 people do—you could be excused these days for going around with a swelled head. This California electronics company has won so many accolades in recent years that it may now lay claim to the title, 'Best Company in America.'"

July-August 1980

- Feature on growing pains of Silicon Valley, where HP is the second-largest employer.
- Short feature on many ways HP's name is misspelled throughout the world, including Juliet Peckert, Hewlett-Bagger, Julius Hewlett Pakard, Hewlett & Packard and Hevvumtt-Pacuard.

September-October 1980

- Feature on profound changes during past 10 years in Southeast Asia and HP's part in that story.

November-December 1980

- Photo feature on Lucile Packard and the role she and Flora Hewlett played in the company's early days and later in their commitment to community service.

May-June 1981

- Story on first live HP TV satellite broadcast to more than 1,200 employees in 38 U.S. cities.



- Acquired immune deficiency syndrome (AIDS) recognized for first time.
- The first reusable space shuttle, Columbia, makes its maiden voyage.
- First prenatal surgery performed.
- PacMan leads the video game craze.

1982

- Human insulin produced by bacteria is the first commercial product of genetic engineering approved by the U.S. Food and Drug Administration.
- Polish labor union, headed by Lech Walesa, outlawed.
- Sun Microsystems is founded.
- Falkland War between Argentina and Britain.
- Mexico fails to repay foreign loans, provoking international financial crisis.

1983

- Compact discs hit the market.
- Apple's Lisa brings the mouse and pull-down menus to the personal computer.
- Peters and Waterman publish "In Search of Excellence."
- The Nintendo Entertainment System hits the U.S. market, along with its popular Super Mario and Legend of Zelda games.

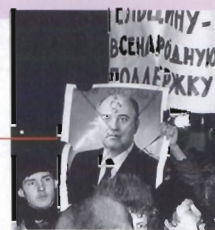
1984

- French and U.S. teams discover the AIDS virus.
- Optical disks for the storage of computer data introduced.
- Apple introduces the Macintosh.
- American astronauts walk untethered in space for the first time, while repairing orbiting satellites during shuttle missions.

- The United States re-establishes diplomatic relations with the Vatican. They had been suspended in 1867.
- Donald Duck turns 50.
- New Zealand declared a nuclear-free zone.

1985

- Mikhail Gorbachev named chairman of Soviet Communist Party and embarks on reforms that will lead to the breakup of the Soviet Union.
- An ozone hole detected over Antarctica.
- Cyclone and tidal wave hit Bangladesh, killing 10,000 and leaving 250,000 homeless.
- Earthquake causes severe damage in Mexico City.



1984—

HP entered the printer business in 1984 with its own line of inkjet and laser printers. The HP ThinkJet printer brought quiet and dependable 96-dots-per-inch printing to desktop and portable PCs. The HP LaserJet also debuts, becoming the world's most popular personal desktop laser printer and HP's most successful product ever.



ThinkJet, the first inkjet printer for personal computers from HP. With 96 dpi, it operated quietly. Its name came from the thermal inkjet cartridge that sprayed ink onto paper.



HP first introduced its first laserjet printer—HP's most successful single product ever, in 1984, capable of printing at 300 dpi (dots per inch).



HP printers proliferated in businesses and homes. HP also introduced a touchscreen computer—the HP-150.

November–December 1981

- Grand opening of China Hewlett-Packard representative office in Beijing.
- Employees move into the new 478,000-square-foot Corporate offices in Palo Alto.

March–April 1982

- Feature on 15 HP jobs that didn't exist 15 years ago, including clean room operator, group manager, television lighting and set director and affirmative action coordinator.
- Feature on 16 HP "firsts" includes first patent (to Bill Hewlett); first loan (\$1,000 from Palo Alto National Bank); first HP scholarship (to Ralph Bender, who used his \$500 to go to Yale); first TV ad (ABC-TV, fall 1981); and first HP products on the moon (high-power PIN diodes, microwave detector, hot-carrier diodes and solid-state switches in 1968).

July–August 1982

- HP in South Africa feature takes a close look at a difficult subject.

March–April 1983

- Feature on some of HP's "biggests," including the HP McMinnville division's 1975 Febetron 705 used to produce X-ray photographs.



July–August 1983

- Photo feature celebrating 20 years of MEASURE.

May–June 1984

- Feature on HP Singapore's first 14 years of operation.

July–August 1984

- Feature on HP's entrepreneurial alumni, those who once worked at HP and then went off to start their own company. List includes Steve Wozniak (Apple Computer).

September–October 1984

- MEASURE begins to bribe readers, offering a free T-shirt reading, "There's more to MEASURE" for every printed letter to the editor.

January–February 1985

- Peek inside the Monterey Bay Aquarium, funded by the Packard family foundation, and directed by Dave's daughter, Julie.

March–April 1985

- Feature on women managers at HP shows that the number of female professionals in HP grew from 15.6 percent in 1978 to 28.4 percent in 1984. Conclusion: "We're changing at HP, but we still have a way to go."

May–June 1985

- MEASURE is redesigned and new features, including "Extraordinary People" and "ExtraMeasure" are added. Phil Frank begins drawing HP editorial cartoons. MEASURE stories carry bylines for the first time.

July–August 1985

- MEASURE revisits South Africa as more and more multinational companies pull out to protest apartheid.
- Interactive video begins to surface around HP as a sales and training tool.

November–December 1985

- Upon release of the HP Vectra personal computer, and the second anniversary of the HP 150 Touchscreen PC, MEASURE takes a look at the past, present and future of personal computers.



1980s

Around the world



- 1986
 - Nuclear reactor explosion at Chernobyl spews radioactive waste all over Europe.
 - The Challenger shuttle explodes 73 seconds after liftoff, killing all seven crewmembers, including schoolteacher Christa McAuliffe.
- 1987
 - Ferdinand and Imelda Marcos flee from Philippines.
 - The world's stock markets crash on October 19.
 - Compact disc players introduced.
 - For the first time, a crime suspect is convicted on the basis of genetic fingerprinting in the United Kingdom.



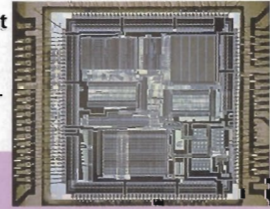
1986—
The sales headquarters for Yokogawa-Hewlett-Packard Ltd. in Tokyo Japan. YHP's quest for total quality in the late '70s and 1980s gave them a competitive edge and made them the company experts on TQC and productivity. YHP won the coveted Deming Prize in 1982 for best planning practices.

At HP

- May-June 1986**
 - *MEASURE* uses four-color printing process for first time for photo feature on company recreation areas around the world.
- July-August 1986**
 - News feature on workforce balancing efforts and ongoing efforts to attract and train employees with the right job skills for the company.
- November-December 1986**
 - Feature on the early days of China Hewlett-Packard as China shook off the final remnants of the Cultural Revolution and embraced modernization and a market economy.

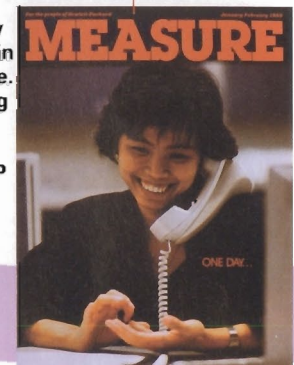
July-August 1987
• Farewell to HP's first lady, Lucile Packard, who died May 30 at age 72.

1986—
HP jumped deeper into the computer business, introducing the HP Precision Architecture family of computer systems in 1986. Code-named Spectrum, the development effort cost more than \$250 million over five years, HP's most expensive R&D effort ever. The Spectrum systems marked the world's first commercial application of RISC (reduced instruction-set computing) architecture. The RISC CPU chip (right) is the size of a baby's fingernail.



- May-June 1988**
 - Feature shows how two years of balancing programs, including voluntary severance incentives and enhanced early retirement, paid off, even though the changes weren't easy.
- July-August 1988**
 - Feature on the Summer Olympic games in Seoul, South Korea; HP's continued presence as the behind-the-scenes drug tester; and former HP Olympians.

January-February 1989
• *MEASURE* kicks off HP's 50th anniversary year with a splashy 52-page "One day in the life of HP" issue. This award-winning effort managed to capture the look, feel and spirit of HP people in 78 countries around the world. Talented



To view PDF files of this issue, see the internal Web site: <http://hpnow.corp.hp.com/archives/measure/jf89/index.htm>.



With HP's magazine

1988

- First well-known computer virus hits 6,000 computers.
- Mikhail Gorbachev becomes USSR president.
- George Bush elected U.S. president.
- South Korea hosts the Olympics in Seoul.

1989

- To stop a budding movement for democracy, Chinese troops kill hundreds of people in Tiananmen Square.
- The Berlin Wall falls, reuniting East and West Germany.

- Earthquake in Northern California injures 3,980 and kills 66 from San Francisco and Oakland south through Santa Cruz. The quake struck as the third World Series Game between the San Francisco Giants and the Oakland A's was about to begin at Candlestick Park.
- Nintendo releases GameBoy, a battery-powered, handheld video game system.



1987— Bill Hewlett retired as a director and vice chairman of the HP board in 1987 at age 73. When asked at his retirement press conference

which achievement meant the most to him, Bill said it was HP's management style.



Dave Packard went on as chairman of the board to retire from HP in 1993. (Photos from 1988.)

JIM KERAGEORGE PHOTOS



photojournalism students handled the photography for the October 18 shoot, which began at 12:01 a.m. and continued until 11:50 p.m. MEASURE's staff received more than 300 rolls of film and examined more than 10,000 images, thus beginning the long elimination process to get down to the best 60 photos.

March–April 1989

- The anniversary theme continues with a special feature called, "The test of time," which looks back through 50 years of constant change and challenge.

May–June 1989

- Features HP's "Book of Lists," including 10 famous people who visited HP, 10 experiments or products that never quite made it, 10 out-of-the-way HP locations and 10 noteworthy HP grants.

September–October 1989

- More than you ever wanted to know about Bill and Dave's first audio oscillator sale to Walt Disney Company.

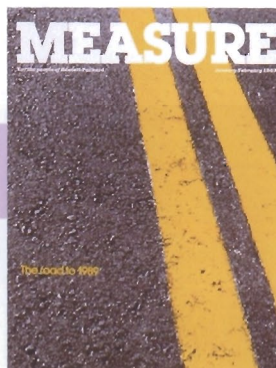
1989—

The year was full of company celebrations as Hewlett-Packard turned 50. One of the best brought 109 employees from all over the HP world to Palo Alto for a three-day "global celebration" in May. The "ambassadors" toured HP and Stanford sites, had dinner with Bill (waving, left, above) and Dave and the HP board, and were some of the 300 people who got to witness the dedication of "the garage" as a California historic landmark. The garage is located at 367 Addison Avenue, Palo Alto, California. The photo on the right, with the globe added inside the garage, was made into posters.



November–December 1989

- HP employees, executives and a few celebrities (including Dan Rather, Tom Peters, Malcolm Forbes, Jr., James Michener and Katharine Graham) make predictions about what work and the world will be like in the next 50 years.



1990s

Around the world

- 1990
- Iraq invades Kuwait.
- Mikhail Gorbachev wins the Nobel Peace Prize.
- Nelson Mandela freed after 27 years in South African prison.
- Voyager I flies out of the solar system and snaps a portrait of the planets.
- Solidarity's Lech Walesa is elected president of Poland.



- 1991
- 100th anniversary of American Express Travelers Cheques.

It's tempting to sum up the '90s with two things: the Internet and the World Wide Web.

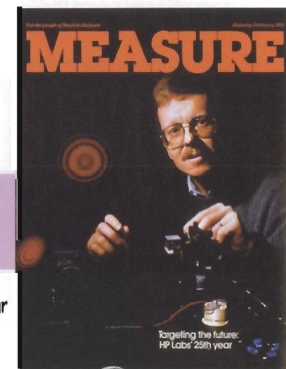
While the Internet has been around since the late '50s and early '60s, it became more accessible in the early '90s after the development of visually oriented search tools such as Gopher. When the World Wide Web was made freely available to the public in 1991, it started a revolution in the way the world conducts business and exchanges ideas.

Internet content swiftly became more commercial than scientific, and popular browsers, such as Netscape Navigator and Microsoft Internet Explorer, and Internet service providers such as America Online brought the masses to the new medium. By 2005, the world's Internet population is expected to reach 300 million.

Of course, if you're an HP employee, you have to add a few more words to sum up the '90s: strategic realignment, Agilent Technologies, Lew Platt, Ned Barnholt and Carly Fiorina. Toss in Y2K readiness, career self-reliance and work-life balance and you've covered the highlights.

HP had smashing product successes in the '90s, including the 11-ounce HP95LX Palmtop PC; HP SONOS 1500 echocardiograph, which allows non-invasive cardiac analysis; the all-in-one HP OfficeJet series that lets customers print, fax, copy and scan with one product; the HP Pavilion PC, designed for the home-computing market; and amber and red-orange LEDs that expanded the range of LED applications in cars, traffic-control signals and moving-message panels.

Radio took 40 years to reach 50 million listeners, and TV took 13 years to reach 50 million viewers. The Internet took four years to reach 50 million users. It's estimated there are now 160 million Web users globally and that there will be 300 million by 2005. HP would like to be of service to each and every one of them.



At HP

March–April 1990

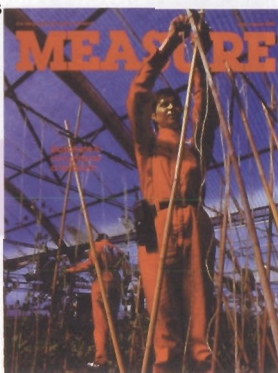
- Perestroika and glasnost policies of Soviet President Mikhail Gorbachev blew through Eastern Europe like a hurricane in the late '80s and early '90s, and *MEASURE* looks at how it might affect HP business in Russia, Hungary, Poland, Czechoslovakia, Bulgaria, Romania and East Germany.
- Special HP and the environment section grades HP on its efforts to be green and supplies lots of good suggestions for employees everywhere.

September–October 1990

- Special edition focuses on education and shows how the company and its employees devote time, talents and money in education efforts throughout the world.

July–August 1991

- Photo feature on Bill Hewlett's hobby of identifying and photographing wildflowers. "Which are my favorite photos? The good ones," Bill told *MEASURE*.



- The HP 95LX palmtop computer made a huge splash in the market. One analyst told "The New York Times," "With the palmtop computer, Hewlett-Packard is again creating a new category of personal-computer products."

September–October 1991

- A challenge for *MEASURE* editors is keeping employees informed of HP's new subsidiaries, joint ventures and diverse acquisitions. This feature welcomed the "new kids on the block," such as HP Thailand, Ltd., Idacom Telecom Division, HP Polska, Bergamo Hardcopy Operation, India Manufacturing Operation and Edisa Informatica SA.

May–June 1992

- A special section on HP directions for the '90s provides a fairly accurate prediction of how the "information highway" will change lives and business by the end of the decade.

September–October 1992

- John Young steps down after 15 years as HP president and CEO. Lew Platt named successor.

January–February 1993

- "New ways to work" explores self-managed work teams, alternative work schedules, telecommuting and job-sharing, all already a reality at HP in 1993.

March–April 1993

- HP is one of 55 U.S. companies to be included in both the original 1984 version and the '93 version of "The 100 Best Companies to Work for in America." The book also named *MEASURE* as one of the nation's seven best employee publications.
- *MEASURE* explores Malaysia, where more than 3,100 HP employees manufacture and sell HP products.

May–June 1993

- "The pain (and gain) of facing change" tells some of the employee transition stories in Roseville, California, when 170 people of the Networked Computer Manufacturing Operation learned their jobs were moving to Fort Collins, Colorado. Employees who came through the change with flying colors advised other HP

With HP's magazine

July–August 1990
Biosphere feature

- U.S.-led coalition defeats Iraqi forces in the Persian Gulf War.



- **1992**
- United Nations heads relief efforts to reduce famine and civil war in Somalia and other African nations.
- The Soviet Union ceases to exist as 15 new nations are formed, including Russia.
- Yugoslavia breaks up and erupts into bloody civil war.

- **1993**
- Bill Clinton inaugurated as the 42nd U.S. president.
- A terrorist bomb explodes in New York's World Trade Center.
- The North American Free Trade Agreement enacted.
- Andrew Wiles solves Fermat's last theorem.

- **1994**
- Nelson Mandela, African National Congress leader, assumes the presidency of South Africa.
- *Ardipithecus ramidus*, a 4.4 million-year-old hominid found in Ethiopia, confirmed as the oldest known member of the human family.

- **1995**
- The first planet outside the solar system discovered.
- A car-bomb explosion rips a nine-story hole in the Alfred P. Murrah Federal Building in Oklahoma City, Oklahoma, killing 168.
- A shattering 7.2 earthquake hits Kobe, Japan, killing more than 5,000 people and causing an estimated \$60 billion in damage.



JIM KERA/GEORGE

John Young retires and Lew Platt (left) is named HP president and CEO in 1992. In '93, he adds the chairman title when Dave Packard retires as chairman.

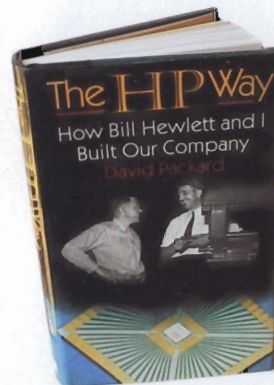
Lew joined HP in 1966 and worked in almost every functional area on his way to the top. Words people used to describe him: down-to-earth, open, solid, honest, fair but tough, a good boss, easy to talk to, articulate.



STEVE CASTILLO

1992— Bill Hewlett, co-founder of and director emeritus of the HP board, sits in his original office holding a model of the HP-35 handheld scientific calculator on the 20th anniversary of his calculator. On the desk, to his right, is the production model of the HP-35 and in the middle is the HP 95LX.

1995— HP introduces the HP SureStore CD-Writer 4020i, an internal compact-disc recording system.



1995— "The HP Way," by Dave Packard, published.

employees to "keep their skills current, think of change as an opportunity and take risks."

July–August 1993

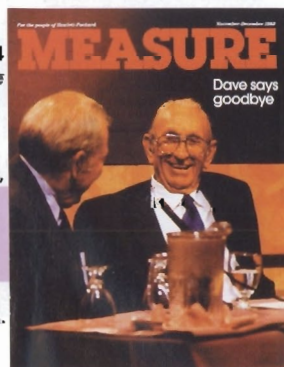
• "Is HP still one company?" *MEASURE* asks. "Or has it become many different companies, loosely bound by a name and a common heritage but not much else?"

November–December 1993

• It's the end of an era when 81-year-old Dave Packard retires as the chairman of HP's board, passing the title on to President and CEO Lew Platt. For the first time in its 54-year history, HP will operate without the day-to-day involvement of its co-founders.

January–February 1994

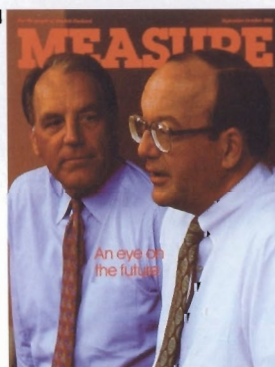
• Special feature on test and measurement shows how new customers, new products and new ways to do business have transformed HP's oldest business.



May–June 1994

• Feature on the wide world of online services tells employees how they can plug into the electronic superhighway and provides an explanation for some of the "emoticons" they may encounter :-). Another story shows how Singapore paved the way for the information superhighway 20 years ago.

• Feature explains why HP Japan has escaped the worst of a continued sluggish economy when a global recession hits Japan particularly hard.



July–August 1994

• "Strategic or short-sighted?" That's what HP software engineer Chris Huggins asks in this "On My Mind" article about HP's increasing reliance on contractual help.

September–October 1994

• Feature on telecommuting shows that for more and more HP people, work is not somewhere you go, but something you do.

• Jim Haberkorn's "On My Mind" article entitled, "I'm losing my job" drew an enormous amount of response from fellow employees. He wrote, "If I could write a letter today and magically have it delivered to myself two years ago, I would warn myself not to be complacent."

July–August 1995

• Article features HP products and services that are No. 1 worldwide, including worldwide commercial RISC/UNIX system-based computers; laser, inkjet and color printers; handheld PCs; optical disk-drive jukeboxes; HP's place in overall test and measurement products; gas chromatography systems; LED lamps and displays and fiber-optic communications transceiver modules.

• Feature on how cc:Mail for OpenMail, the next generation e-mail system, will replace HP Desk, used by HP employees since 1982.

September–October 1995

• HP closes its Palo Alto Fabrication Center at historic 395 Page Mill Road, the site that includes the "Redwood building," the first building HP owned after the garage.

November–December 1995

• Dr. Cyberspace joins the *MEASURE* lineup as a regular Internet feature.

1990s

Around the world

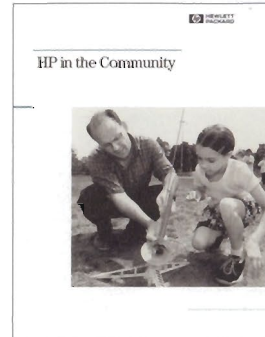
- 1996
- Earth's core found to spin faster than the rest of the planet.
- "Dolly" cloned from an adult female sheep.
- More than 100 people injured when a bomb explodes at the Summer Olympics in Atlanta, Georgia.



Dave Packard died March 26, 1996, resulting in an outpouring of love, affection and admiration from his friends, colleagues, political leaders and HP employees around the world. Lew Platt, HP chairman, president and CEO, summed it up best: "He was our mentor, our inspiration and, for most of us, our closest personal experience with greatness."



In 1999, HP gave \$57.9 million in cash and equipment to nonprofit agencies and educational institutions worldwide. Seventy percent of that went toward improving education. HP got its philanthropic start in 1940 when the company was just one year old. Dave Packard's wife, Lucile, recorded HP's first grant in the company ledger—a \$5 miscellaneous gift.



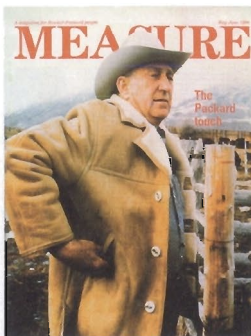
At HP

January–February 1996

- The brilliant and colorful Barney Oliver, founder and head of HP Labs for 30 years, is remembered following his death November 23, 1995.

May–June 1996

- A special 16-page insert memorializes Dave Packard following his death March 26. When *MEASURE* asked employees to submit memories of Dave for this issue, it received more than 150 phone calls, faxes and e-mail messages within a few days. Each gave a warm, funny, generous or no-nonsense example of the Packard touch.



November–December 1996

- In "Fasten your seat belts: Internet ahead," *MEASURE* looks at HP's emerging Internet role. It marks the beginning of sidebars telling readers where they can find more information on the subject via the World Wide Web.

March–April 1997

- Beautiful photo feature shows how Dr. Holmes Morton uses HP analytical equipment to help Amish children in Pennsylvania stricken with a rare, hereditary disease.
- Sounding the alarm: *MEASURE* tells readers to brace themselves for possible computer problems when the year 1999 changes over to 2000.

July–August 1997

- "Is MBWA still alive?" strikes a lot of nerves in the company, and managers

known for their MBWA (management by wandering around) skills give some tips on how to keep the practice alive.

January–February 1998

- HP computers map shrinking koala habitats in all-out Australian effort to save the cuddly national symbol from extinction.

March–April 1998

- David Price describes a downside of working for a large corporation—Multiple Name Syndrome—and the confusion and the many missing e-mails, voice mails and regular mail it causes. Pity the 25 David Smiths who work for HP.
- Serious changes begin and *MEASURE* tries to make sense of it as one senior executive leaves the company, another is named to head a major new business organization, a third retires, the company scraps its Management Council and reporting relationships change for Geographic Operations—all in one day.

With HP's magazine

NASA discovers fossil evidence of microbes on Mars, the first trace of potential life on another planet.

1997

Mars Pathfinder transmits images of the Red Planet.

Garry Kasparov loses a chess match to IBM's Deep Blue computer.

- Madeline Albright confirmed as first female U.S. Secretary of State.
- Hong Kong returns to China's control.
- Princess Diana dies in a fiery car crash in Paris.
- Mother Teresa of Calcutta, India, dies of a heart attack at 87.



- 1998**
- Viagra introduced.
- An international team of surgeons in France performs the first human limb transplant—a hand.



William Redington Hewlett, HP co-founder, pictured in 1997. Redington was Bill's mother's maiden name.

The HP Board of Directors stunned employees, customers and partners when it announced a strategic realignment in 1999 to create two companies: an independent measurement company composed of test and measurement, components, chemical analysis and medical businesses, and a computing and imaging company to include all of HP's computing, printing and imaging businesses. Agilent Technologies, the new measurement company (referred to as "NewCo" during the realignment planning process), was announced by President and CEO Ned Barnholt at an historic name-launch event in San Jose, California.



After Carly Fiorina became HP's fifth president and CEO July 19, 1999, she began a worldwide series of coffee talks to introduce herself to employees. Carly triggered a landslide of media and employee interest when she joined the company. Prior to HP, she spent nearly 20 years in high-profile jobs with AT&T and Lucent Technologies.

May-June 1998

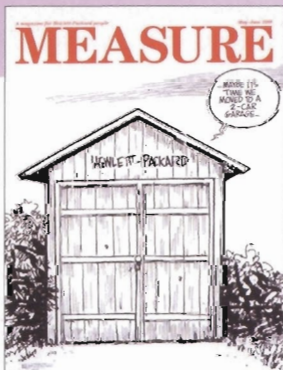
• MEASURE looks at the challenges facing the European Union as it moves to a single currency, the euro.

July-August 1998

• Feature on HP's Electronic World strategy built on e-business, e-consumer and e-commerce explains how HP plans to emerge on top in the race to conquer the Internet.

November-December 1998

- An in-depth look at HP's position in the critical and brutal PC business, and HP's rise to the top four in the business.
- In "Other Voices," business professor and consultant Dr. Albert Vicere muses that HP might have three problems: culture, culture and culture. He says HP needs more people who are excited and passionate about the future, willing to push for change.



splitting into two companies, and looks at what it's going to take to make it happen. Lew Platt announces he'll oversee the division of companies and then retire.

September-October 1999

• Feature on HP's fifth president and CEO, Cara Carleton "Carly" S. Fiorina, dynamic, energetic and ready to lead HP into the new millennium. Dick Hackborn, retired from HP since 1993, is appointed

May-June 1999

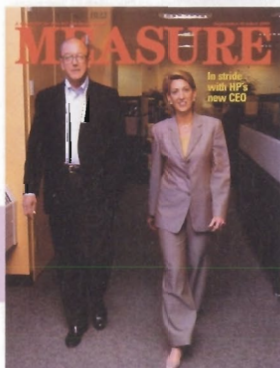
• Special section, "Breaking up is hard to do," documents the biggest change in HP's 60-year history,

non-executive chairman of HP's board of directors, effective January 1, 2000.

- Feature on the name-launch event in San Jose, California, where CEO Ned Barnholt announces that "NewCo" will be named Agilent Technologies.
- You've got mail! Lew Platt's last letter to employees as president and CEO; letter from Agilent Technologies CEO Ned Barnholt; and letter from Carly Fiorina, HP's new president and CEO, all appear in one issue.

November-December 1999

- Feature on new U.S. \$200 million-plus brand campaign, based on the company's inventiveness, to redefine and reinvigorate HP's image.
- Feature on the long-awaited "Day One," November 1, when Agilent Technologies began separate operations from HP.



The decade of the '00s—the noughts, the noughts, the zeroes—whatever you want to call them—began with the biggest non-story of the decade: the much-feared worldwide Y2K computer disaster that never materialized.

Nearly 20,000 HP and Agilent employees were involved in the largest outreach program to customers in the company's 61-year history. HP and Agilent employees called and visited customers during the New Year's Day weekend, reassuring the companies' total commitment to assist customers.

Early on in the year, HP President and CEO Carly Fiorina and Agilent counterpart Ned Barnholt named eight HP and four Agilent organizations as recipients of the 1999 President's Quality Award.

HP's reinvention efforts continued full steam with high-level teams established to focus on business, marketing, infrastructure and the "Rules of the Garage."

Delta Air Lines chose HP to supply desktop PCs and printers to all 72,000 employees for its Wired Workforce program.

Antonio Perez, president of the Consumer Business and Digital Media Solutions organization, retired in March after a 25-year HP career, and Franz Nawratil, a 35-year HP veteran and the company's European chief executive officer, retired in May. HP mourned the death of Bill Doolittle, a retired director and senior V.P., who was instrumental in setting up HP's European operations.

Agilent began to establish its name in the community in January with two

public events—sponsoring a lecture by world-renowned cosmologist and author Stephen Hawking, and donating \$250,000 to "Plugged In," the oldest and most successful community science and technology center serving at-risk populations in East Palo Alto, California.

Agilent also named Alain Coulder—chairman, president and CEO of Packard Bell NEC, and a former HP general manager—as its chief operating officer. Company earnings increased 77 percent in the first quarter of fiscal 2000, and Agilent's stock price—which opened at \$30 a share on November 18, 1999—soared to as high as \$162 a share in '00.

In March, Agilent acquired

J&W Scientific and became the world's largest manufacturer and supplier of capillary gas chromatography columns.

Paris's Eiffel Tower put on a spectacular show of fireworks to celebrate the millennium.



\$1 trillion in a month, drying up lots of venture capital and bringing down scores of dot-coms.



Alain Coulder

At HP

January–February 2000

- Agilent Technologies grabs the headlines—and the cover photo—with its November 18, 1999, listing on the New York Stock Exchange. *MEASURE* chronicles the grueling three-week, 25-city road show that preceded Silicon Valley's largest IPO ever.
- Chairman of the Board Dick Hackborn, retired HP executive vice president, discusses how the HP Way will help us reinvent the company. He says: "If you have motivated employees, you're going to have happy customers, and if you have happy customers, you're going to have satisfied shareholders."



With HP's magazine

A political battle focused on a 6-year-old Cuban boy, Elián González, erupted between the United States and Cuba, and between Cuban-Americans and the U.S. government. The boy, who was miraculously plucked from the ocean that killed his mother while escaping to the United States, was returned to his father after federal agents stormed the house of his Miami relatives.

Yoshio Mori chosen prime minister of Japan, replacing Keizo Obuchi.



It was the non-story of the millennium. As the not-really-the-start-of-the-new-millennium began, people around the world were glued to CNN to see if life as we know it would end because of the Y2K computer glitch. Instead of massive blackouts, plane crashes, panic and chaos, people saw the Eiffel Tower turn into a geyser of fireworks, the River Thames light up like nothing seen since World War I, and a Waterford crystal ball drop in Times Square in New York City.

America Online engineers the largest merger in American corporate history when it pairs up with media giant Time-Warner. The companies valued the combination at \$350 billion.

Web security assaults continue with an outbreak of denial-of-service attacks, causing huge slowdowns in February at Yahoo, Amazon, eBay and CNN, and the malicious Love Bug e-mail virus launched in May.

Pope John Paul II, turned 80 in May, visited the Holy Land and made history by making a general apology for the wrongs the Roman Catholic Church has committed over the centuries, including the Crusades, the Inquisition and inaction and silence during the Holocaust.



Taiwan ignores Beijing's angry rhetoric and elects an independent-minded president, Chen Shui-bian.

Author Stephen King got more than 500,000 readers to go online to download his new 66-page short story.

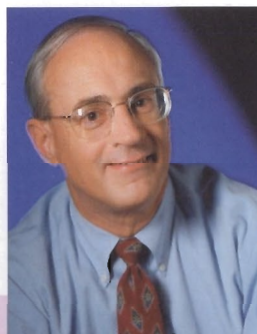
The U.S. government finds Microsoft guilty of unfair business practices and abusing its power as a monopoly, recommending that Microsoft be split into two companies.



Agilent Technologies

Innovating the HP Way

Ned Barnholt, Agilent Technologies president and CEO, who had a 34-year career with HP, starts June 2, 2000, with a totally independent company from HP.

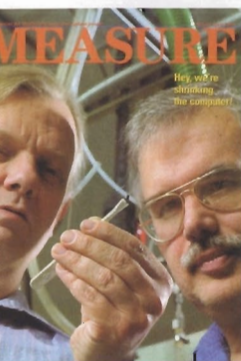


Carly Fiorina, Hewlett-Packard Company president and CEO, takes the company into a new era of inventiveness.

Feature on the mountain of paperwork created by HP and Agilent's legal, tax and financial experts to split the two companies. Some issues raised by the split were so complex that even the authorities didn't have the answers.

March-April 2000

HP Labs researchers are among the worldwide leaders in nanotechnology—growing wires chemically at the molecular level—which could lead to very small computers.



MEASURE
Art
Directors
Tim
Mitchell
and
Annette
Yatovitz
(retired)
hold
copies
of their
work in
front of
Tim's area
—across
the wall
from Jay
Coleman,
the editor.



Making it happen

Over the years, many hearts and minds have brought the stories of HP to life in *MEASURE* magazine. Here are reflections from some who made it happen.

How it all began

By Dave Kirby

We had a relatively easy time naming *MEASURE* when it began in 1963. After a brainstorming session with several HP friends, I had about 50 names, including the obvious and dull (HP Monthly, HP in Perspective, etc.). I whittled the list to 10, then took the names to a meeting of Dave Packard, Bill Hewlett and Noel Eldred, vice president of marketing. They all zeroed in on *MEASURE*, so that's what it became.

The first issue itself was black and white, 12 pages and with some color on the cover. Lots of color, in fact... sort of a Godawful pinkish salmon that only an art director could love.

The day after *MEASURE* appeared Dave Packard stopped by my desk.

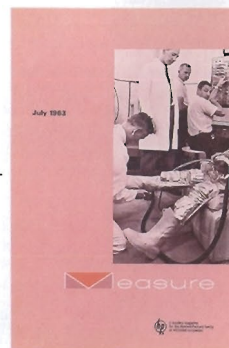
"I think you're off to a good start with the magazine," he said. I felt good.

"Interesting articles and good pictures," he added. I felt even better.

But then he didn't move on. Instead he cleared his throat and I knew what was coming.

"I just hope you can do something about that damn color!"

Quickly I pointed out that the color was going to change with each issue...and it did. Placated, Dave moved on.





MEASURE
Editors
(from
left)
Dave
Kirby, Jay
Coleman,
Brad
Whitworth,
Gordon
Brown
and Jean
Burke
Hoppe
hold their
favorite
covers
in Jay's
office.

ANNE KNUDSEN PHOTOS

Come to think of it, that first issue is a collector's item. The color has never been repeated in 37 years.

(Dave Kirby, HP's first public-relations director, launched MEASURE in 1963 and served as editorial director. He retired from HP in 1989.—Editor)

History or mystery?

By Gordon Brown

When I think about the history of Hewlett-Packard, particularly in terms of ranking important events, I immediately think of an interview I had in 1973 with Fred Terman, then head of the engineering school at Stanford University and an HP director. I interviewed him for a special issue of

MEASURE (August–September 1973) about “The HP experience.”

In the course of a three-hour session, he made one piece of history ring a big bell in my mind: Dave Packard's decision to give up a very promising career at General Electric Company and return to Palo Alto as Bill Hewlett's partner in a totally untested business venture.

At that time in the late 1930s, Dave was making a strong impression on the GE staff, especially in his role as a major contributor to a very successful product. After three years at General Electric, he was in a



position not only to advance up the corporate ladder but perhaps also to invite his college buddy, Bill, to join him in Schenectady, New York. There goes HP and maybe even Silicon Valley!

So what changed all of that? Fred Terman had the answer. In brief, it involved a corporate gift to finance an engineering project at Stanford—one for which Dave was ideally suited, thanks to his studies at Stanford and his work at GE. With Fred's encouragement, Bill suggested that Dave take a break and come look things over. So Dave took a leave of absence to return to Palo Alto for a few weeks to work on the project.

Then, in a very short time that involved work on the project as well as Bill and Dave's own audio oscillator, Dave knew he would never give up his new partnership. And, in short

order, "the garage" was shipping oscillators to Walt Disney Studios and other discerning businesses.

As most HP people know, Bill Hewlett won the coin toss to decide whose name would come first on the company name. But in the history of HP, Dave's decision to join Bill was more than monumental: It was an inspiration to an industry that seems to know no bounds.

And let's not forget Fred Terman. He was a genius. In fact, he was the son of Stanford Professor Lewis Terman, who developed the IQ test

known as the "Stanford-Binet Test." Fred was right up there among the 1,500 kids put through the test—all of them becoming known as "Terman's Termites." Fred certainly had a major role in mentoring and encouraging the HP partnership.

(HP retiree Gordon Brown was MEASURE editor from 1968 to 1981.—Editor)

Defying the odds

By Brad Whitworth

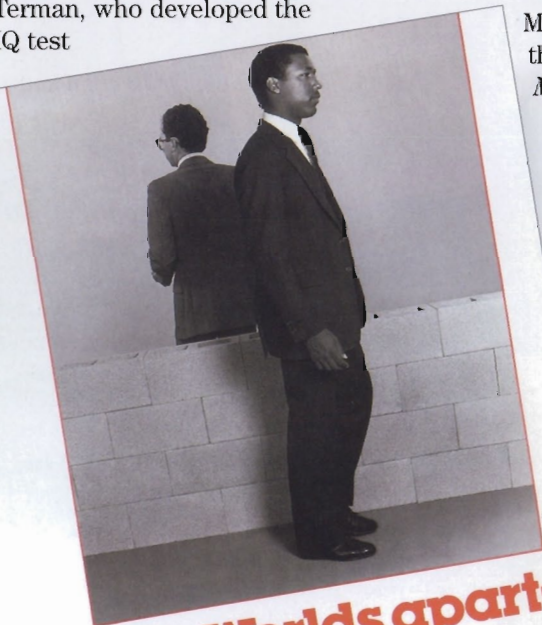
Magazines normally don't live to the ripe, old age of 37 like *MEASURE* has.

In the United States, where 10 new consumer magazines are launched every week,

only half of them last a full year. And only one in 10 makes it to its tenth birthday.

The track record isn't much better in the corporate world where mergers, divestitures and frequent management changes often bring sudden deaths to even the most-respected employee publications.

So it's very impressive to look through the bound volumes of 37 years' worth of *MEASURE* in the corporate archives in Palo Alto. It's the company's history captured for posterity in 309 issues of a magazine. The CEO transitions from Bill Hewlett and Dave Packard to John Young to Lew Platt to Carly Fiorina. The introduction of the first handheld calculator.



Worlds apart: The HP way in South Africa

Archie Rogers and 13 other HP people start and end each workday the same way: They board a minibus that travels a 45-mile (70-kilometer) route to take them to and from HP's sales headquarters near Johannesburg. The bus they ride is provided by HFP because public transportation between Sandton, the site of HP's office, and Riverlea Extension 2, where Archie lives, is unreliable and dangerous.

Archie's choice of residence, as with all South Africans, is limited by the government's Group Areas Act. Under the law, each racial group may live only in specified areas. Archie, who is classified as "coloured"



HP people in Cape Town are focusing their community support on Crossroads, a squatters' community of 50,000 blacks.



HP's Daring Bhadani, shown at home with his wife Lorella, a nurse, promotes black business through an HP task force.

The roots of apartheid

The first white settlers in Southern Africa were Dutch merchants who established the Cape of Good Hope as a trading post for ships going to the Far East. Because the British also recognized the Cape's strategic importance, the territory changed hands several times before the British won sovereignty in 1814.

Dutch settlers—briding under English colonialism and seeking to establish their own government—migrated into what was perceived to be the vacant interior of southern Africa. However, the lands the Dutch ranchers and farmers (Boers) were settling were at the same time being occupied by black African cattle herders fleeing tribal conflict and overpopulation.

By the 1850s, the Dutch settlers, who called themselves "Afrikaners," forced two republics where farming was the main money. Their relationship with the black tribes in these areas was alternately cordial and war-

like, because the culturally dissimilar groups coveted the same economic resource: land. With the technological advantage of firearms, the Afrikaners were able to subdue competing tribes.

The British, meanwhile, had hemmed in the Afrikaner republics by occupying the entire coastal region to protect sea lanes important to their empire. When diamonds and gold were discovered in Afrikaner territory in the late 1800s, the British saw the potential for massive markets. The Afrikaners loathed the intrusion of the British, but eventually were defeated by them during the Anglo-Boer War.

Once again a reluctant part of the empire, the Afrikaners, determined to regain control over what they believed was rightfully theirs, became intensely nationalistic. Their priority was to establish an identity and maintain it through an Afrikaner state.

Caught between the English and the numerically superior black groups, the Afrikaners created the policy of apartheid, or "separate development." In 1948 when the Afrikaner political party took power, the apar-

theid philosophy became official. Apartheid calls for racial groups in South Africa to develop equally but separately. Economic realities, however, make this goal impossible.

Further, apartheid ideology has never had a mandate from a majority of South African citizens. The doctrine artificially and unrealistically pigeonholes broad categories of South African society into "Africans," "coloureds," "whites" and "blacks."

Today the nation is politically and socially split by apartheid, even as the government slowly moves away from the errors of the past. South Africans are realizing the urgent need for consensus, especially since economic survival depends on an open and integrated society.

—Simon Middleton

Simon, HPESA's Sullivan coordinator, is a history honors graduate of the University of Cape Town.

The line of *MEASURE* art directors and editors

Editorial director	Dave Kirby
Editors	William Bigler Merle Mass Gordon Brown Brad Whitworth Jean Burke Hoppe Jay Coleman
Managing editor	Carlos Vidal Greth
Art directors	Tom Martin Don Letta Annette Yatovitz Tim Mitchell

The company's 25th and 50th birthday parties. The split of Agilent from HP. *MEASURE* shared these stories with the hundreds of thousands of employees who've worked in places like Böblingen, Germany; Fort Collins, Colorado; and Penang, Malaysia, over the years. And now *MEASURE* preserves that history for people who will be studying one of the world's most successful companies.

The history they'll read isn't candy-coated. Over the years, *MEASURE* has earned a reputation for tackling controversial topics: the dilemma of child care (1988); the personal trauma of losing a job (1994); HP's presence in apartheid South Africa (1985); the scarcity of women in managerial roles (1985); the feelings of a black sales rep calling on white customers (1990); problems with order-fulfillment processes (1993); the reasons people leave HP to start other companies (1984).

Stories like these never would have been published in many other companies. They could have caused the death of the publication or the firing of an editor.

But it is a fact of life that magazines are born and magazines die. So do people and so do companies. *MEASURE* wasn't around to record the founding of HP in 1939. *WATT'S CURRENT* crept onto the scene in 1943 and was replaced by *MEASURE* in 1963. *MEASURE* won't be around when the end of HP comes either. But it certainly has done a magnificent job of chronicling more than half of this company's first 61 years of life.

Thank you, *MEASURE*. And invent—you've got some big shoes to fill.

(Brad Whitworth, MEASURE editor from 1982 to 1986, is now strategic communications manager for HP's Computing Systems organization.—Editor)

An honorable run

By Betty Gerard

When I was invited to write about *MEASURE* as a retiree who spent two-plus decades as a staff writer and associate editor, it was irresistible. I relished my tenure there, which began in late 1976 when Bill Hewlett was still CEO, and ended in 1997, a year after the death of Dave Packard. We viewed *MEASURE* as Hewlett-Packard's book of record and, to a large extent, it reflected the changes going on in the broader society as well.

Change, that most unsettling of conditions, was treated in *MEASURE* with painful honesty from the earliest days on. There were worries about how to keep the small-company feeling as HP grew, and the question was raised, "Is there still a place here for the individual?"

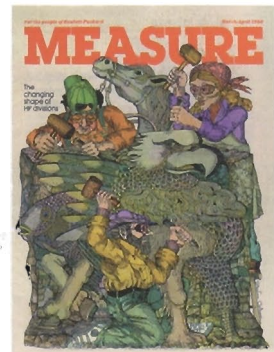
A 1993 article discussed new ways to work—self-managed work teams, alternative work schedules, 10- and 12-hour shifts, telecommuting and job-sharing—as the company coped with severe competitive pressures. Some production functions were consolidated through transfers or were outsourced, and duly reported. The magazine returned several times to a candid look at what was happening with manufacturing. The feelings of employees caught in a move or down-

sizing were captured with honesty. One piece that struck a chord with readers was "I'm losing my job" by Jim Haberkorn of the Boise (Idaho) Surface Mount Center.

HP was growing in gangbuster fashion, but anxious to hang onto its core values as the company became larger and more global. New styles of management, such as "matrix management" and soon-discarded "rows and columns" sought to institutionalize teamwork across businesses. The time-honored division—with its three functional areas of manufacturing, R&D and marketing—was twisting into new and experimental shapes—and *MEASURE* caught the transition in a cover story.

The sometimes-elusive HP Way was a recurring topic. Not given to hyperbole, Dave Packard told *MEASURE* in 1981 that "We started doing certain things because we thought they were a good way to make a business work." In 1993, *MEASURE* started a department called "Other Voices," where people outside the company wrote thoughtful pieces about the special HP culture, such as business writer and author Milton Moskowitz' 1993 query, "Will HP remain true to itself?"

Even when the co-founders withdrew from day-to-day management, they were a favorite subject of *MEASURE* coverage. One popular article in 1992 answered the question, "What are Dave Packard and Bill Hewlett doing today?" The magazine had cover features on the career of John Young, the next CEO, at the five-



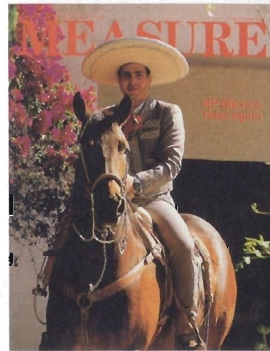
year mark in his administration and at his retirement in 1992, when he was succeeded by Lew Platt.

Meanwhile, HP forged ahead into new territory. *MEASURE* chronicled the first women senior managers in 1985, featuring a picture of Carolyn Ticknor (then an R&D manager, now the president of Imaging and Printing Systems) on the cover. It reported on a growing number of women in the pipeline for future promotion. Minority managers were beginning to emerge, but the company still had a way to go.

The concerns of the larger society were reflected in HP, such as the promotion of diversity. The U.S. policy of Affirmative Action—which includes hiring and promoting people with disabilities—received ongoing attention in *MEASURE* in strong special sections. In 1993, an employee in Germany wrote a touching “On My Mind” article about xenophobia and the staunch support he received from fellow HP GmbH employees as anti-foreigner sentiment flared there.

Covering a worldwide company completely in an every-other-month publication was not easy, particularly with a mostly stay-at-home staff. The special considerations of doing business internationally were recorded, such as cultural and language differences, U.S. customs and licensing rules, expatriate assignments. But as the balance of HP’s sales shifted outside the United States, *MEASURE* printed dozens of profiles on international and domestic operations. They stretched from Alaska to South America, Japan to Australia, and Ireland to Russia. Many articles were written and photographed, respectively, by freelance journalists and photographers on the road.

At the same time, the magazine had generous coverage of HP busi-



nesses, markets, individual products and interesting applications—from the Olympic Games to testing the space shuttle before liftoff. Customer satisfaction and an emphasis on quality became recurring themes of articles.

From its earliest days, HP has been a staunch supporter of the community and education. *MEASURE* often covered positive activities in these areas, such as volunteering in the schools and the company’s many philanthropic grants.

The world’s growing concern about the environment has been reflected in articles about handling chemicals properly, reducing wastewater and HP’s other environmental efforts. Other *MEASURE* stories dealt with natural disasters such as the aftermath of earthquakes in the San Francisco Bay Area and Kobe, Japan.

The wide-ranging interests of HP employees provided great subjects. Among those who have been chronicled in *MEASURE* are a race-car driver, a poet, an ace pilot, a White House Fellow, a guide-dog trainer and an employee who made a poignant return to her native Vietnam.

Reflecting societal concerns, *MEASURE* also has run first-person articles by an employee with AIDS, and a candid account by one winning his battle with drugs.

Back in June 1977, Ross Snyder, then HP’s premier computer writer, predicted in a *MEASURE* article, “Perhaps electronics’ greatest contribution will be bringing the information explosion under control.” He looked forward presciently to the interactive interconnection of com-

puters in business, government, education and homes.

No one foresaw that *MEASURE*, the book of record, would one day chronicle the split of Hewlett-Packard into separate computer and measurement companies.

It has been an honorable run and an experience I’ll never forget.

(Betty Gerard’s 21-year tenure as a MEASURE staff writer and associate editor is a record.—Editor)



Betty Gerard (middle)

From the artistic side

By Annette Yatovitz

Fifteen years with *MEASURE* gave me the opportunity to “meet” a wide variety of HP people worldwide. The “One day” issue in honor of HP’s 50th anniversary necessitated poring over hundreds of rolls of film from sites around the world in order to select, with the editor, those photos which would best represent the energy and diversity of this special company.

My only published article was about HP Barcelona, where I directed a photo shoot that was sandwiched into a family vacation in Spain. What I experienced there was the way HP culture translated without a ripple into a culture very different from that of the company’s origin.

However, the strongest impression of my years with *MEASURE* came from the special issue on Dave Packard after his death. I followed the progress of California, United States and international industry while looking through photos of Dave in the HP archives. Several people answered phones at a table near my office, and the calls came pouring in.



I was amazed at the number of lives

Dave had touched—some employees and some not—and at the fact that those people felt moved to contact the company to express appreciation and condolences.

I hope *MEASURE* has inspired its readers as have the lives of HP's founders and that *invent*—the magazine's successor—will continue to do so.

(HP retiree Annette Yatovitz was MEASURE art director from 1983 to 1997.—Editor)

From another artistic side

By Tim Mitchell

My job is storytelling. The stories I work on for the magazine are truly part of the fabric of this company—the people and their culture.

When my daughter, Nicole, was much younger she told her classmates I was an art detector and I worked for Hacky-Packy. I think she was on to something. After all, I do detect the best pictures to use—only after planning how to capture the feel of the story. It is this part of the equation that adds to the words part. If done correctly, the sum of the two elements melds into one memorable, meaningful communication.

Although I physically art direct few photos outside of the Palo Alto, California, area, I always try to give

advance input to the photographers. I depend on the image makers to be the eyes of the story and capture people as they are, naturally, not posed. It's basic photojournalism and because of life's unpredictable nature it's always an adventure to see what comes back from a "shoot-

ers" session.

Being on a shoot is even more of an adventure.

Besides getting me away from design and production, planning, v-mail, e-mail and meetings, it puts me into direct contact with the story principals—the essence.

One recent session put me in the room with Formula One racing legend Jackie Stewart. He was answering business questions from others and I was thinking about how driven he was to take a car out to the edge of its performance—something I didn't want to do but certainly admired the technology that made it possible. So I asked him what it was like for us Ford Taurus types to strap into an F1 livery and step on it.

His eyes twinkled as he thought about his answer for a few seconds and came back with an explanation matching the length of his pause. He said that an F1 car can go from a standing start to 100 miles per hour and come to a complete stop again in 3.6 seconds. Wow. Thanks for the ride, Jackie, and the photographer got the twinkle.

My last shoot with a freelance photographer was up at HP Labs. We were shooting Stan Williams and Phil Keukes for the story about HP breakthroughs in nanotechnology.

The lab room—filled with wires and tubes connected to experiments

—housed an incredible vacuum chamber (that exceeded outer space in its ability to create a vacuum). It was also delicate and expensive. Just a little "T"-shaped handle on this machine cost more than \$250,000.

Stan cautioned us to touch nothing during the session where we took pictures of the them doing some of their experimental work. It only took a few minutes to set up a light stand for bounced illumination by the vacuum chamber and we were under way.

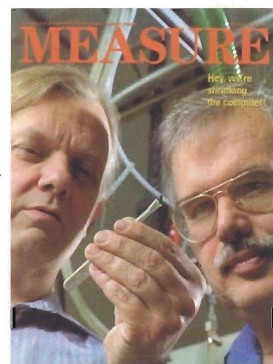
In one of the groupings, Stan and Phil had their backs to the chamber while they looked at data on the workstations. That's when the light stand fell, just missing the main vacuum stand but detaching a few wires in its way down. It was like a machete falling in a jungle of vines and getting caught up without hitting the floor.

Phil and Stan were shaken and the photographer gulped lots of air. I was the first on the scene and held up the lightstand off the equipment until Stan could help. He straightened the light and plugged the loose wires back into the vacuum chamber.

We got some great shots back from that session and I haven't seen any repair bills from HP Labs yet so I guess there was no damage done.

The journey this company is on is a rich source for future stories that I hope will eventually help employees understand the business better. **M**

(15-year HP employee Tim Mitchell has been the MEASURE art director since mid-1997.—Editor)



Whose car was it?

By David Price

A chance encounter with Bill Hewlett reveals the real story behind an enduring HP myth.

PALO ALTO, California—Call it the luck of the Welsh if you want. Call it blind chance, kismet, serendipity. Whatever you call it, the gods handed me a healthy dose a handful of years ago.

Back in 1988, I ventured to Palo Alto from my Rockville, Maryland, office to take part in a gathering of communicator types from around the world. As an HP rookie, I asked Vernon Andrews, who worked in Corporate Communications at the time, for a tour of the company's historic monuments, which are scattered throughout this lovely town.

Our first stop was the garage itself, that familiar icon at 367 Addison Avenue that has become the centerpiece of our current campaign to reinvent HP. As we pulled up in front of the modest structure, Vernon explained that it's only a strong baseball throw from Stanford University, where Bill Hewlett and Dave Packard attended classes with their professor and mentor, Fred Terman.

Fred started one of the most enchanting myths in high-tech history. "If the car was in the garage, there was no backlog," he had said, referring to the original Silicon Valley startup. "But if the car was parked in the driveway, business was good."

Vernon told me that a reporter for a trade publication was writing a story on the early years of HP. The reporter had asked a reasonable question: Whose car was it?

The conventional thinking leaned toward Dave's 1936 Chevy, but nobody was sure. With this tidbit floating in the back of my mind, we

continued our tour, past the Tinkerbell Woodshop nestled behind Polly and Jake's antique store on El Camino Real. Then on to the Redwood Building a block away—the site that Agilent will call home—and the 1948 corporate headquarters.

Finally, we drove west, up Page Mill Road to HP Labs, where—at the time—Bill and Dave still kept tabs on the global empire they had created.

Vernon and I walked through the distinctive building with the sawtooth roof, pausing in front of the wood-paneled offices of the founders. Then the luck kicked in.

By chance, Bill was there, talking in his office with a small group of visitors from Japan. The meeting was breaking up, and the guests thanked him for his time. Bill walked out with them, stopping to talk with Molly Yoshizumi, his secretary.

Vernon nudged me with his elbow and said, "Why don't I introduce you?"

Never one to mess with kismet, I nodded and followed him over.

A moment later, we shook hands—this lowly communicator from the

"If the car was in the garage, there was no backlog."

East Coast and the great man himself. I remember being pleasantly surprised at how tan and fit Bill looked for a man with 75 years of living behind him. But most impressive were his eyes—there was a

benevolent, dancing sparkle within them, one that spoke of wisdom, contentment and even a hint of mischief.

With his body language, Bill silently invited us to join his chat with Molly, and I realized he was trying to recall whose car was parked in the driveway.

"I had a Dodge back then," he said, "but it didn't have a backseat. It was cheaper that way."

I asked if he were referring to the Terman myth. He smiled.

"I don't know how that story got started," he said. "We didn't use the garage for the car. We worked there. I think there was even a power meter in the middle of it. But it's a good story."

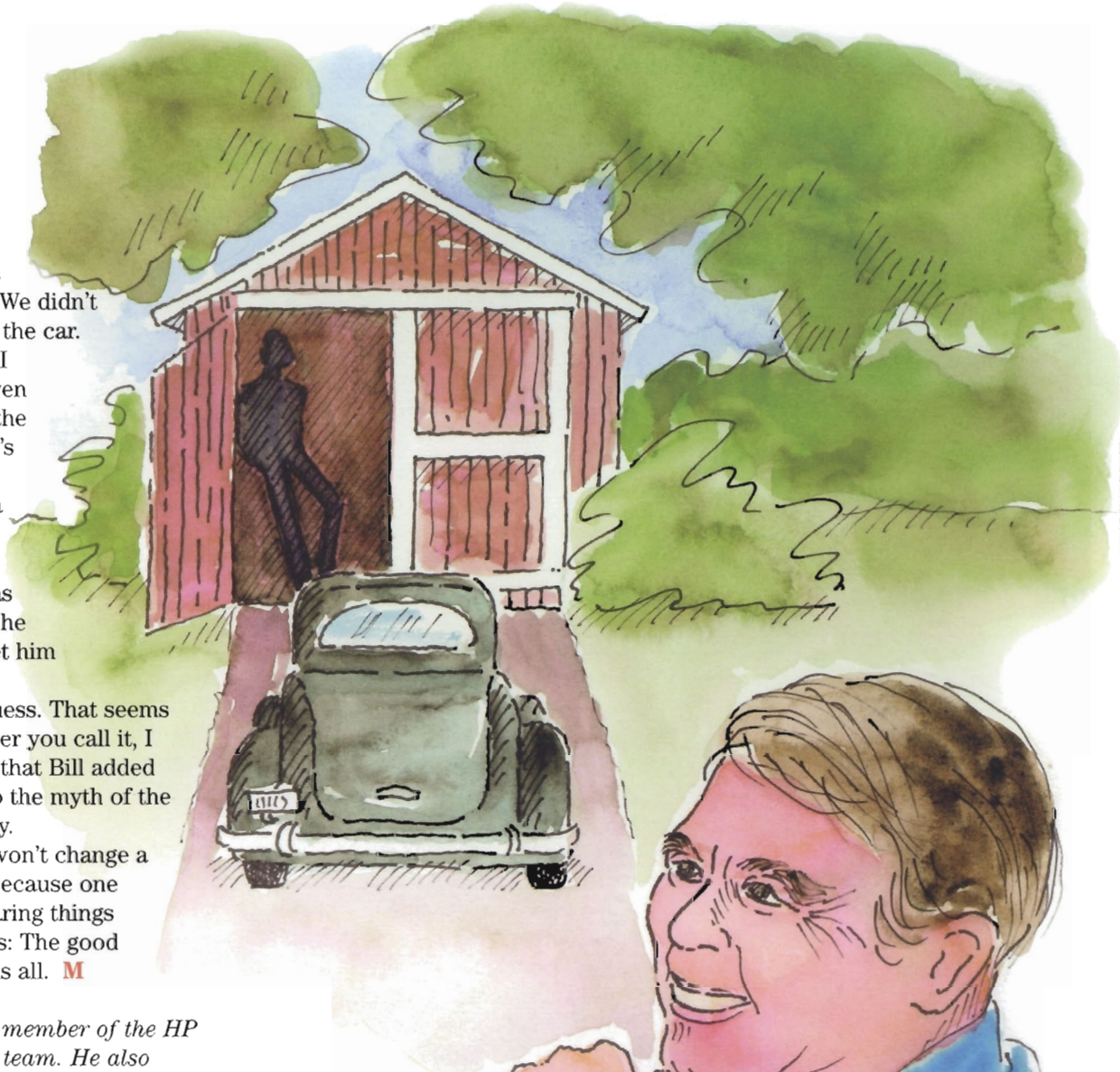
He paused for a few seconds, then laughed.

"Tell them it was Packard's Chevy," he chuckled. "We'll let him be the liar."

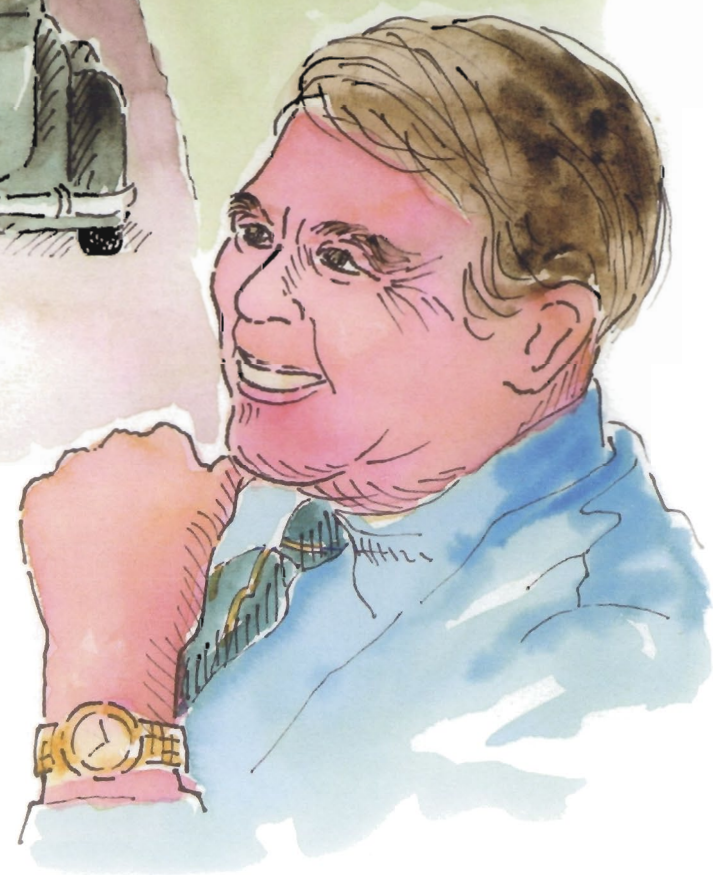
Call it luck, I guess. That seems to fit best. Whatever you call it, I was there the day that Bill added his gentle touch to the myth of the car in the driveway.

The real story won't change a thing, of course. Because one of the many endearing things about myths is this: The good ones will outlive us all. **M**

(David Price is a member of the HP Communications team. He also writes the Apparently So column on hpNOW.—Editor)



ANNETTE YATOVITZ



A ledger in its own time

Conservative? You bet! But HP's 61-year track record of financial success has made good business sense—and extra income for many.

Bob Wayman, HP's chief financial officer, has heard the classic complaint about Hewlett-Packard's financial policy for years: You're too conservative. Bob, HP's CFO since 1984, has a ready reply.

"In 61 years, we've never had a terrible financial period and we've averaged about 16 percent growth per year," Bob says. "Our approach may be conservative, but there are a lot of companies that would love to have our financial success."

In an era of instant IPO millionaires and get-rich-quick schemes, the Bill Hewlett and Dave Packard School of Financial Management seems as appropriate as a 14.4-baud modem.

Bill and Dave were products of the Great Depression and believed in a pay-as-you-go philosophy when it came to finances.

They could've added extra staff and taken on more government contracts during World War II, and the Korean and Vietnam wars, but that would have meant massive layoffs when the contracts ended. Unlike some defense contractors, they didn't want to run a hire-and-fire operation.

Financial stability also was a factor during an economic slump in the 1980s. Instead of laying off 10 percent of the workforce, HP required all employees to take a 10 percent pay cut—taking every other Friday off without pay—in what became known as the "nine-day fortnight."

"Bill and Dave felt that stability is good for shareholders, customers and employees," Bob says. "By keeping the workforce intact, we were better

able to serve customers when business picked up again. So, it was a nice, humanitarian thing for employees, but also a wise business decision. Bill and Dave cared deeply about both."

The same could be said for the HP cash profit-sharing program, which began in 1962. Virtually from the start, HP had a tradition of paying employees Christmas and production bonuses, but the profit-sharing plan established a pool of money—12 percent of pre-tax profits—for all employees worldwide, from the shop floor to the executive office.

The plan made the link between business performance and financial rewards. "It has always been a basic objective of our company," Dave wrote, "to have our employees share in the success which they help make possible." Since 1962, the payout has been as low as 3.12 and as high as 12.83 percent.

Another profitable program for HP people has been the Employee Stock Purchase Plan, which began in 1959, two years after HP's first public stock sale. Employees can designate up to 10 percent of their earnings for automatic quarterly stock purchases, which HP subsidizes. Over time, the stock has split seven times. If you bought one share of stock for \$16 when it was first offered in 1957, today you'd have 192 shares worth around U.S. \$25,000, based on HP's stock price of about \$130 a share in May 2000.

Forty-three years later, today's financial focus seems to be on a company's stock price, which is available instantly via the Internet. Is that too much focus on short-term results?

"That's the environment in which we operate," Bob says. "It's an incredibly important message to shareholders, customers and employees of just

Stock splits happen

HP stock, first offered on the New York Stock Exchange in 1957, opened at \$16 per share. The seven HP stock splits were:

Date	Split	Average trading price
November 6, 1957	IPO	\$ 16.00
September 15, 1960	3 for 1	\$ 77.00 on 6/30/60
February 23, 1970	2 for 1	\$103.28 on 12/31/69
June 27, 1979	2 for 1	\$ 89.28 on 3/31/79
June 17, 1981	2 for 1	\$ 94.13 on 3/31/81
August 1, 1983	2 for 1	\$ 89.88 on 6/30/83
March 24, 1995	2 for 1	\$100.50 on 1/31/95
June 21, 1996	2 for 1	\$105.88 on 4/30/96

how you're doing. Our stock price reflects both current results as well as long-term growth opportunities. If Bill and Dave were running the company today I'm certain they would be paying close attention to the stock price, too."

HP's sound financial management also has been a windfall for major philanthropic contributions around the world. HP donated U.S. \$57.9 million in cash and equipment in 1999, and the HP Company Foundation donated \$1.6 million in '99.

And, thanks to the value of HP stock, the co-founders' family foundations have become two of the world's largest foundations. Grants from the David and Lucile Packard Foundation totaled \$411 million in 1999; it expects to grant \$500 million this

year. The William and Flora Hewlett Foundation awarded more than \$90 million in 1999.

Bill and Dave may have been financially conservative, but they were clear when they established the Corporate Objectives that profit is No. 1. "Profit is not something that can be put off until tomorrow," the supporting text of the objectives states, "...it must be achieved today."

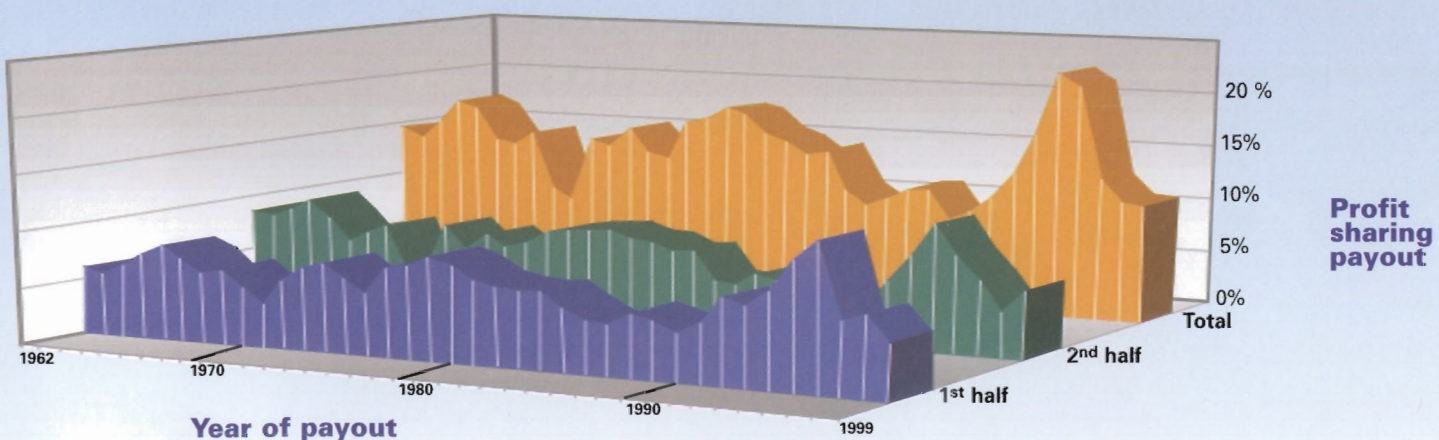
Conservative or not, that's something that HP has done very well for 61 years. **M**

Stock profit-sharing percentages

For nearly 40 years, HP has shared a percentage of its pre-tax profits with all employees worldwide. Some historical highlights of the profit-sharing program include:

- First year (1962): first half 6.0; second half 8.5
- Lowest percentage (1992): second half 3.12
- Highest percentage (1996): first half 12.83
- Average percentage: first half 6.83; second half 7.02

Year	1st 1/2	2nd 1/2	Year	1st 1/2	2nd 1/2	Year	1st 1/2	2nd 1/2	Year	1st 1/2	2nd 1/2
1962	6.00	8.50	1970	5.23	4.10	1980	8.52	9.00	1990	4.33	4.25
1963	5.50	8.19	1971	3.93	4.40	1981	7.46	8.32	1991	5.25	4.11
1964	6.50	8.93	1972	6.05	8.29	1982	7.03	8.12	1992	7.59	3.12
1965	7.50	9.95	1973	7.36	6.34	1983	6.71	7.34	1993	7.06	6.20
1966	8.50	8.30	1974	7.90	7.71	1984	6.88	7.48	1994	8.46	8.44
1967	7.50	6.26	1975	6.66	6.74	1985	5.73	5.05	1995	11.18	11.46
1968	6.24	7.21	1976	5.50	7.28	1986	4.68	4.80	1996	12.83	8.77
1969	6.63	8.00	1977	8.00	8.38	1987	4.49	5.78	1997	6.40	6.71
			1978	8.23	8.75	1988	5.65	5.45	1998	7.06	4.01
			1979	9.10	8.86	1989	5.15	6.11	1999	4.84	6.12



The best of MEASURE?

Following Dave Packard's direction, *MEASURE* has worked for 37 years to find stories and photos that the editors thought would be interesting, entertaining and intriguing for our readers. Occasionally, we hit a nerve with a story that was particularly informative or gripping.

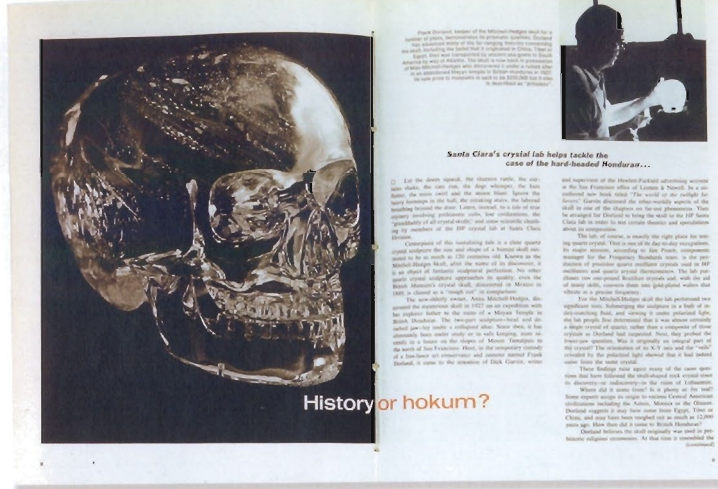
Here's a small sampling of stories and images that captured our collective attention.

February 1971—
In February 1971, *MEASURE* ran an intriguing photo and story about a crystal skull

that experts at HP's Santa Clara crystal lab examined to determine the skull's origin. The 11-pound, 7-ounce Mitchell-Hedges Skull was discovered in 1927 under a collapsed altar in a Mayan temple in British Honduras. HP analysis showed that the skull was a single crystal of quartz that

July–August 1984—

If you think that dot-coms and high-tech startups are a new phenomenon, you probably didn't see the July–August 1984 edition of *MEASURE*. An article titled, "Our Entrepreneurial Alumni," lists 18 companies launched by former HP employees, including Tandem computers (1974), Apple Computer (1977), 3Com (1979) and Integrated Device Technology (1980).



History or hokum?

took an estimated 300 "man-years" to create. People had speculated that the skull was as much as 12,000 years old and came from either the Aztecs, Mixtecs, Olmecs, Egypt, Tibet or China, but there was no way to pinpoint its origin.

November 1971—
Historically, the regular "letter" from the CEO has been one of the most popular articles in each edition of *MEASURE*. In *MEASURE*'s early days—long before e-mail and the Web—the letter was a primary vehicle for reporting HP's business plans and quarterly results to employees.



Our Entrepreneurial Alumni

Few would deny that Hewlett-Packard is a great place to work. Yet Silicon Valley is filled with companies founded by former HP employees. Why did they leave and what do they think of their alma mater?

One of Hewlett-Packard's strengths through the years has been its ability to attract, hire and keep some of the brightest people in the world. Engineering and computer science grads regularly name HP as one of the most desirable places to work. Employment ads in newspapers bring hundreds of applicants for available openings. The company's turnover rate is one of the lowest in the business.

But not everyone stays at HP. People leave every day. A few leave to form their own companies, many of which have turned out to be successful (see list on page 17). Some of the HP alumni are customers; some are vendors, suppliers or original equipment manufac-

turers (OEMs), and a few are direct competitors.

Probably the most famous alumni is Apple Computer's co-founder Steve Wozniak. "I tried to propose something similar to what became the Apple II—a 81,000 machine with 4K of RAM—to a HP manager (at HP), and he lost a lot of sleep thinking about it. But it wasn't great for a start-up product, so I got a legal release to do the Apple. The Apple's success has followed since a lead and have started their own companies. Others have gone to work for the young firms. "We have lost some key people to start-ups," admits Paul Ely, executive vice president, "but this

has to be expected. Our rate of loss is as low as ever. In fact, HP's turnover rate among professionals is about 25 or 30 percent of that of other Silicon Valley firms."

HP tries to keep people with a pay and benefits package that is competitive with the leading firms in the industry. There is also an open-minded policy at HP that allows qualified employees to return to HP if things don't work out elsewhere. But start-ups are part of doing business in Silicon Valley.

The formation of these start-ups can be a plus for the overall business climate. More jobs are generated, technology is advanced and new markets are developed. "I'm kind of encouraged by

the fact that a lot of people still are willing to go out and make a run for it on their own," says Dave Packard. "Look at all the new businesses starting up here in the Silicon Valley—with all sorts of and no less ideas."

Dave Nelson's Nelson Analytical, can also be a direct benefit to HP. The four-year-old firm buys HP equipment and adds its own software and hardware enhancements and sells it to customers. Nelson's \$14,000 chromosome topography data system which holds about 88,000 worth of HP computer gear is considered to be among the best in the market.

"As an OEM for HP, I feel we helped sell 700 HP computers last year that might not have been sold if it hadn't been for our software," says Dave, former marketing manager for HP's Analytical Group.

"For a number of my seven years at HP I've been preaching that we were spending a lot of money on the hard-ware side of analytical data systems when we should be putting more of our resources into software," says Dave. "Finally I decided to put my own ideas to work." Today HP also sells analytical data systems complete with software. Even if HP were the first to develop and market every new product, some of the company's most entrepreneurial employees would still leave. Most alumni who start their own companies have known all along that at some point in their career they'd be running their own shop. Almost all of them make a conscious decision not to compete directly with Hewlett-Packard in established markets.

Fred Gibbons, president of Southwest Publishing Corporation in Mountain View, California, hit upon the idea for his company while he was marketing his company while he was marketing the former General Systems Division. He envisioned an organization that would publish software for individual authors. He discarded the idea later because he wanted closer linking of the company's various product lines. He wrote a business plan that outlined his proposal. When HP turned it down, he and two other HP employees it down. The company developed a product called FILE and marketed it. Today

A FLOCK OF START-UPS			
Here's a list of some of the high-tech companies that can trace their roots back to Hewlett-Packard. Shown is the year they got started, their major product, their founder, and their location.			
1974	Intellect	Intelligent robots	1981
	Tandem Computers	Multi-processor systems	
	Apple Computer	Personal computers (PCs)	1977
	3Com	Local area networks for PCs	1979
	Siratus Computer Inc.	Office work stations	1980
	Softworks Publishing	Personal computer software	1980
	Lam Research	PC processing equipment	1980
	Acogee Robotics	Manufacturing robots	1980
	Integrated Device Technology	Integrated circuits	1980
	Ridge Computers	32-bit minicomputers	1980
	Nelson Analytical	Analytical software	1980
	Extended Systems	Interface cards for personal computers	1980

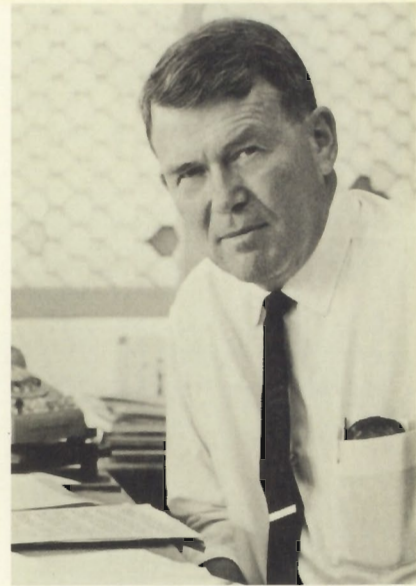
From the president's desk

During the early part of this year it became evident that our ability to produce exceeded the incoming order rate for a number of our divisions. With the hope that the condition was temporary, we delayed taking any action at that time and allowed a substantial increase in inventory and reduction of backlog to occur. By July it became clear that there were no prospects for an increase in the order rate, and even though most domestic divisions had stripped down to a team of efficient, reliable people, it was obviously necessary to bring production more into line with the current order rate. In general, this gap represented about 10 percent of production. The alternative courses of action were to either have a 10 percent layoff or to work out some method whereby the work reduction could be shared on a more equitable basis among all employees. The latter course of action seemed far more in keeping with HP's tradition and it represented a much more understanding way to resolve what appeared to be a relatively temporary problem. It was for these reasons that the plan of taking every other Friday off without pay was instituted.

As we have now come to the end of our fiscal year and have returned to a full work week, I felt that it might be of value to review in perspective the results of this program in which most of you shared. At the time the plan was instituted, there were about 10,000 people employed in the divisions involved, in the field marketing organization, and in the headquarters office in Palo Alto. Thus to bring our employment into line with orders, we would have had to lay off about 1,000 people. Let us look at what has happened in the interim. To date we have had an attrition of about 525 people and have been able to achieve interdivisional transfers of another 125 people. We have been able to effect some small reduction in our inventory position. During this period our backlog has improved slightly. As a result of these factors, our borrowings have decreased about \$12 million and we have not had to spend about \$3 million in wages and salaries. Of this latter amount, slightly more than 20% will be paid back to employees in cash and deferred profit sharing. Approximately 43% will be paid out in taxes to the Government and the remainder of slightly more than \$1 million has served to bolster what otherwise would have been a very poor earnings record for the final quarter of our fiscal year.

We are not, however, out of the woods, as order rates are still below our ability to produce with a full-time work force. Rather than continue the alternate Friday off program with its options of a long weekend, that was attractive during the summer months, it appeared more desirable to concentrate an equivalent number of days (four) between Christmas and New Years—a period during which production and orders have been traditionally slow, as well as a period when such time off could be effectively used by our employees and their families. Further, at our present rate of attrition and internal transfers, we should be in balance between production and orders if the present order rate does not further deteriorate. In considering the relative impact of this work reduction program during the past four months as well as the forthcoming period between Christmas and New Years, it seemed appropriate to spread profit sharing among all employees on the basis of full-time wages and salaries, rather than on the 10% reduced base.

One final word, and that is to express my appreciation to all of you who so willingly shared this work reduction program so that one in ten of your fellow employees might continue to work rather than enter the job market during a period of high unemployment. We have had many favorable comments from the outside about this program and the acceptance and cooperation by HP people that made it effective.



Bill Hewlett

SOLUTIONS

Keeping the faith

Story by Thomas Ulrich
Photos by Clark Mishler

In a world away from modern technology, HP analytical equipment helps a group of "special children" stricken with a rare disease.



above
Coats and hats hanging in a farmhouse cloakroom reflect the simplicity and conformity that is so important in all aspects of Amish life.

LANCASTER COUNTY, Pennsylvania — In late summer, ripened field corn follows across Bunker Hill, and the Fischer farmstead resembles an island on a sea of gold.

Blessed with the richest soil in North America and a climate perfect for farming, Caleb Fischer and 12 generations of kin have left their mark upon the land.

Four mules generate enough horsepower to turn the soil at Caleb's farm. Without electricity, kerosene lanterns light his farmhouse. The nearest telephone is a quarter-mile down the road. Because Caleb doesn't have an automobile, a horse named Chester fetches him back and forth to town.

Caleb and his family are Old Order Amish. They belong to a community living at the edge of modern society with spiritual values that reach back to the Protestant Reformation.

Most of the 16,000 Amish living in Lancaster County are descended from the 200 Swiss-German farmers who emigrated here during the 1700s. Because Amish forbid marriage outside the Old Order, centuries of intermarriage have affected them with hereditary diseases that threaten their heritage and strike their young in disproportionately high numbers.

Before Holmes Morton, a pediatrician from West Virginia, worked among Amish families from Lancaster County, researchers documented eight cases worldwide of a disease called glutaric aciduria. An inherited metabolic disorder, glutaric aciduria often strikes children between the ages of six months and five years. The disease is triggered by childhood illnesses such as chicken pox or fever. Children stricken with the disease can suffer permanent brain injury that leads to a lifetime of paralysis or an early death.

Devastated by a disease that strikes the Amish 10 times more often than the general population, Dr. Morton accepted a research fellowship at the Kennedy Krieger Institute in Baltimore, Maryland. Working with Dr. Richard Kelley, he diagnosed 17 Amish children with glutaric aciduria. His studies showed that an additional 25 to 50 Amish born during the next generation could inherit the defective genes that cause the disorder.

Without treatment, nearly all would be disabled, and a quarter of them would die before age five.

Inspired to help these children, Dr. Morton traveled once a week from his home near Philadelphia to Lancaster County to work among the Amish. "The Plain People (Old Order Amish) call them God's special children," he says.

Because this disease devastates a child in a matter of hours and because it is impractical for Amish families to travel many miles to a university medical center for care, Dr. Morton knew he needed to build a clinic nearby to help these children.

"By the summer of 1980," Dr. Morton says, "it was clear that the grant I hoped to get from the National Institutes of Health was not going to work out." So he applied for a second mortgage on his home to raise money to build and outfit a local clinic.

Grateful for Dr. Morton's diagnosing and treating their granddaughter's illness during his weekly visits to Lancaster County, Caleb Fischer and

top right

Amish farmers use nineteenth-century methods to harvest field corn on one of the many family-owned farms in Lancaster County. The land was donated by William Penn.



his wife, Rachel, gave him three acres of land as the site for the clinic.

Shortly before sunset on a blustery afternoon in November 1980, 12 Amish carpenters and farmers raised the Clinic for Special Children. With sledgehammers, Douglas fir timbers and oak pegs, they framed the post-and-beam building in less than a day.

"The only piece of expensive equipment I needed," Dr. Morton says, "was a mass spectrometer made by Hewlett-Packard Company."

Alerted to the plight of the Amish children by a front page story in the *Wall Street Journal*, Hewlett-Packard co-founder David Packard donated an HP 5890 gas chromatograph, an HP 9070 mass spectrometer, and an HP 9000 workstation for analyzing urine samples of children at the clinic.

"When Dr. Morton came to our home to explain that our daughter Rebecca had glutaric aciduria, Joshua and I thought he had made a mistake,"



above
Retired thoroughbred training horses, like this one, are sometimes purchased to pull carriages owned by most Amish families, who use them for transportation.



above
Dr. Holmes Morton—awarded the Albert Schweitzer prize for humanitarian medicine from Johns Hopkins University in 1993 for his work among the Amish—examines a sample about to be tested for glutaric acid in an HP mass spectrometer.

March-April 1987 5

March–April 1997—

Writer Thomas Ulrich and photographer Clark Mishler teamed up for a spectacular photo feature article, "Keeping the faith," that gave *MEASURE* readers a rare glimpse into the Amish community in Lancaster County, Pennsylvania. Dr. Holmes Morton used an HP-donated gas chromatograph/mass spectrometer system to diagnose and treat Amish children who suffer from a hereditary disease. After seeing the *MEASURE* article, *TIME* magazine asked Thomas Ulrich to write an article about Dr. Morton for a special edition on "medical marvels." Because of the visibility in *TIME*, Dr. Morton's clinic received a number of donations from outside the region.



January–February 1989—

One of the most striking images from the "Day in the life" 50th anniversary of HP edition came from HP Singapore. Muslim women don robes, spread their prayer rugs and pause for prayers during break periods. Isolated stairwells provide a quiet place where the women bow northwest to Mecca for their required prayer sessions. The "Day in the life" edition was the most popular in *MEASURE* history.

All in the family

When it needed a model for the cover photo, *MEASURE* turned to "the most-photographed family in HP history."



ANNE KNUDSEN

Former Editor Brad Whitworth (second from left) and three of his relatives—brother-in-law Carl (top left), niece Kelsey and son Bradley—each were drafted into service and appeared on a *MEASURE* cover.

For 37 years, *MEASURE* has faced a constant conundrum: How do you produce a high-quality publication without spending a lot of money?

In the case of cover photos, the answer was simple: Keep it in the family—the Whitworth family.

Brad Whitworth joined the *MEASURE* staff and HP in 1980 and served as editor from 1982 to 1986. Between 1984 and 1994, Brad, one of his sons, his brother-in-law and a niece all appeared in *MEASURE* cover photos. The four covers make them the most-photographed family in *MEASURE* history. "We were all reasonably willing to help and very affordable—free, in fact," Brad says.

MEASURE offers this where-are-they-now update on Brad and his kin:

Carl Nakano was a San Jose State University student in 1984 when he agreed to pose as a modern-day samurai warrior for a *MEASURE* cover story (March–April) on Yokogawa-Hewlett-Packard's quest for total quality. "I'm not exactly huge, and I was amazed at how tight the armor was on me," Carl says of the tiring, two-hour photo session. "The samurai who wore that outfit must have been petite."

Married, with a 2-year-old son and a daughter due to be born in June, Carl is the director of the grievance department of the San Jose local United Food and Commercial Workers union.

Bradley Whitworth, Brad's 16-year-old son, was 5 when he appeared on the November–December 1989

MEASURE cover. That edition—the final one during HP's 50th anniversary year—focused on the company's future, including HP's vision of computing.

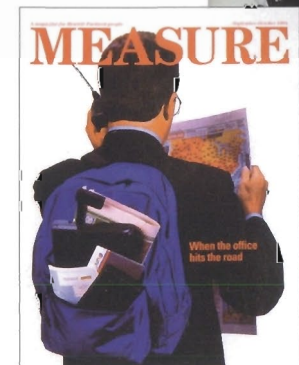
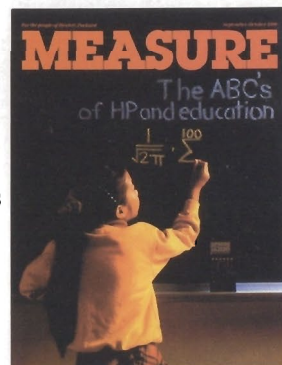
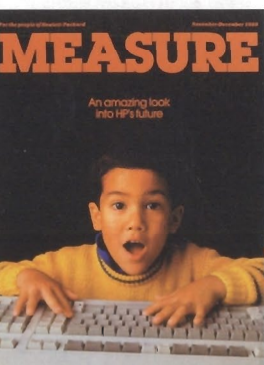
Today, Bradley is a strapping 5-foot-10-inch-tall high school sophomore who excels at hockey, water polo and swimming. He's also an avid Web surfer.

Kelsey Yamaoka, Brad's niece, was 7 years old in 1990 when she became a *MEASURE* cover girl for a special section (September–October) about "The ABC's of HP and education." "I got to the photo shoot and got scared because I thought they were going to make me figure out the formula on the blackboard," Kelsey says with a laugh. "Math is my worst subject!"

Kelsey is putting big numbers on the scoreboard instead of the blackboard today as a player on the Los Altos (California) High School girls' basketball team.

Brad reluctantly agreed to let the back of his head appear in the September–October 1994 issue when *MEASURE* wrote about the rise in mobile communications and telecommuting in "When the office hits the road."

In addition to his stint in the HP Communications department, Brad has headed communications for HP's former Intercontinental Operations and the highly successful Y2K program. Today, he's facing new challenges as the strategic communications manager for HP's Computing Systems organization. **M**



The yesterday, today and tomorrow of HP

There are many things that make HP a great company to work for—just ask its employees.

By Desiree Sylvester

Perhaps you're an old timer around Hewlett-Packard and have forgotten what it was in the first place that gave you the idea that you'd like to work here. Or maybe you're one of the hundreds of new people worldwide who have joined the company, and you're not quite sure if all those things you were told about HP could be true.

But you are aware—or were told—that HP is “different.” So, how do you put your finger on that, or explain it to someone else? With some anecdotes? Or a quick recitation of the HP Way?

MEASURE asked a few HP people to explain their views of HP's uniqueness and what its prospects are in the face of current changes and future growth. The yesterday, today and tomorrow of HP are very impressed with what it has become.

For nearly 60 years, Hewlett-Packard has been steady, predictable, envied, imitated. And amid all the recent changes, HP old-timer Henry

Sanchez feels the company is losing a part of the social structure that contributes to its shining soul. Henry laments the absence of the old-time picnics. “When you had the old picnics, you had them at Little Basin (an HP recreation facility in the San Francisco Bay Area) and it was a real get-together for the families,” he said. “Doing away with picnics, which fostered a lot of team bonding, did away with the old social culture. It's extinct now.”

Henry, project manager for the Americas Solution Deployment Organization in Mountain View, joined HP 46 years ago during a time that he says was very fun. “Managers were even involved in your after hours social life as well as with work,” he says. “It was the most extreme positive social culture—everyone had a good time and knew each other.”

Faced with his retirement in May, Henry remembers what was so special about HP that kept him here all those years. “HP gave me the ability to progress to different positions while providing me all the high-caliber training to get there and once there, additional training,” he says. “I was provided with many job opportunities because of HP's product diversity.”

Russell Lee, who joined HP, left and came back again, has seen the company from both sides. Russell, an executive and strategic communications manager in Cupertino, says he was first attracted to HP by its working culture that clearly placed an importance on its people. “I've taken advantage of everything from flexible



Henry Sanchez (left) poses with HP co-founder Dave Packard.

Russell Lee (right), had many occasions to talk with Lew Platt, now retired HP chairman, president and CEO, when Russell was an executive speechwriter.



STEVE CASTILLO

“I was attracted to HP by its reputation, the wide range of career possibilities,

its support of employee growth, competitive benefits and laid-back atmosphere,” Aresia says. “It’s also great that HP supports my personal goals. The more successful we are as individuals, the more successful the company will be as a whole.”

Companies such as IBM, Nortel, Lockheed Martin, Lucent Technologies and State Farm recruited Aresia, but she says HP rose to the top of her list. “I saw great potential in what HP would be and has become,” she says. “I also want to be in a company where I can make a big difference in its success.” **M**

(Desiree Sylvester, a Santa Clara [California] University student who’s majoring in Communication, was the 2000 MEASURE summer intern.—Editor)

hours, to the open-door policy, to EAP (Employee Assistance Program),” Russell says.

During his 14 years at HP, Russell has worked his way up from material handler to executive speechwriting with former CEO Lew Platt—a feat he credits to HP. “Where else can you get that kind of opportunity?” he says.

But in 1998, Russell left HP to join the booming world of dot-coms. He was heavily recruited by a small start-up where he knew the people, the industry and the technology. They

offered to match his HP salary and benefits, as well as provide stock options. “I decided that if I were ever going to try a start-up, this would be the right time,” he says. “If it didn’t work out and I wanted to return to HP, Lew told me ‘it takes 15 seconds to open the door.’”

Russell was lured back to HP by its diversity and infrastructure. “At HP, you can always find someone with your interests,” he says. “I had also been an active member of the HP choir. I missed everything from instant access to office supplies, to internal IT support, to managers who cared about my personal development as well as my results. These are all things you take for granted until you don’t have them anymore.”

Now that he’s back, Russell is optimistic about the new HP. “The new HP is an improvement because without it, we will not survive in today’s marketplace,” he says. “Companies are recognized today by the amount of ‘buzz’ they generate, and our reinvention is certainly generating ‘buzz.’ And I truly believe that

we have a compelling story to tell moving ahead.”

While Henry and Russell are both seasoned veterans at HP, new recruits aren’t so savvy about HP’s history. So what attracts them to HP?

Dacia Tareleton, who joined HP as a SEED student in 1997, is the project manager for collaboration services in Agilent Technologies IT in Atlanta, Georgia.

As a new recruit, Dacia says she was looking for a geographically dispersed company with a diverse corporate environment, a high retention rate and excellent benefits—all of which she found at HP.

After considering offers from Northrop-Grumman, Bell-Core, Bell-Atlantic and Nortel, Dacia chose HP. “I was very familiar with HP and the environment since I interned here,” she says. “I was very excited about the work location (Atlanta). HP offered better benefits and more flexible schedules, and the job was more interesting than any of the others I was offered. And there is plenty of room for growth in a wide variety of areas at HP.”



Aresia Rhodes

Aresia Rhodes first came to HP as a SEED student in 1998 and was hired last year as the senior application support engineer for Global Product and Pricing System product support in the e!now organization of Mountain View.

In the May–June 1980 edition, *MEASURE* began printing letters to the editor in response to articles in the magazine. Once those floodgates were open, there was no turning back.

Sometimes you really, really liked us—and other times you didn't. *MEASURE* received the most flattering responses for its January–February 1989 “Day in the Life of HP” edition celebrating HP's 50th anniversary. You also liked “The Packard Touch,” a special section eulogizing Dave Packard in the May–June 1996 *MEASURE*.

Editors were most often flayed for being geographically and technically challenged.

Following are excerpts from some of our favorite letters to “Your Turn” through the years.



Ellen Price, a production worker at HP's Sunnyvale, California, facility, closes one eye to more effectively check the raster alignment of a touchscreen personal computer.

Fortunate rating

I was intrigued and happy to read that Fortune magazine now ranks HP 81st in its 500 list. Being a super optimist with a yen for crunching statistics advantageously, I couldn't resist looking back down memory lane to 1976 when Fortune had us pegged 200. Then I made a simplistic projection to see when we'll make the No. 1 spot.

Year	Rank	Annual change	5-Year average annual change
1976	200		
1977	184	16.0%	
1978	167	17.0%	
1979	150	17.0%	
1980	120	30.0%	
1981	110	10.0%	
1982	81	29.0%	20.6%
1983	60	20.6%	
1984	40	20.6%	
1985	19	20.6%	
1986	1	20.6%	

Obviously things just won't go that easy for us, but there's no harm done except good fun to look forward and make plans to celebrate being Numero Uno!

JACK BENSON
Palo Alto, California
November–December 1983

The eyes have it

Are you putting us on? I'm referring to the photo in your September–October issue where the young lady is closing one eye to check the alignment of the Touchscreen raster. We've certainly come a long way from the garage production line that Dave and Bill pioneered. I wonder if they calibrated their oscillators by wetting their fingers and touch-

ing the coils? ...How can we keep copies of this magazine from falling into the hands of our customers?

A. REENIGNE
Boise, Idaho
January–February 1985

Dear A. Reenigne: (Could your name possibly be “engineer” spelled backward?) We kid you not. Ellen Price is really checking on the alignment of the raster on the HP Touchscreen computer. But she's being helped by a thick alignment plate mounted on the CRT.—Editor

If you promise not to tell anyone, we do have equipment to automatically check the raster. The only trouble is that the machine is three times slower and a lot less efficient than Ellen. But [we're] working hard on improving automation in that area.

WES STELTER
Sunnyvale, California



The July–August 1985 issue of MEASURE ran a story about HP in South Africa called “Worlds Apart: The HP way in South

Africa.” It drew a huge reader response in the September–October 1985 issue.

Covering South Africa

As a freelance journalist I visited South Africa in 1979. What I saw there convinced me that South Africa is a modern version of a slave state.

No amount of charity can justify HP's investment in this country...HP should get out.

MEGAN ADAMS
Cupertino, California

I was...pleased to read of HP's plans to carry on in South Africa. ...All too often people protest an undesirable situation by pulling out. But this is the coward's approach; it's easier to withdraw in protest than to remain and fight for change.

DON BRAUN
Loveland, Colorado

Yesterday on the 6 o'clock news I sat and watched a South African police officer ram his truck into a crowd of innocent people. During tonight's news, I watched armed South African soldiers charge into a group of unarmed students who were protesting apartheid.

Then I picked up *MEASURE*. Inside were pictures of smiling and obviously happy black South Africans. What is a person to believe? (TV newsman) Dan Rather? Or the white-washed portrait presented in *MEASURE*?

DEBORAH SANDERSON
Cupertino, California

...We must consider more than profits. The HP Way should mean more than helping only HP employees. It should also take into account how we are affecting the people where we do business. That is why we should pull out of South Africa if apartheid has not significantly changed within two years.

MICHAEL SMITH
Palo Alto, California

This is a warm thank you from South Africa for the time, editorial space and thought you gave us. I sincerely hope your article will create a greater awareness of the situation here.

IRMA LIGHTFOOT
Johannesburg, South Africa

The joy of printing

Mr. David Packard: It has been a long while. I write out of a burst of utter, irrepressible enthusiasm having just bought one of your HP LaserJets. I mean, it is the most beautiful work from the hands of man since the wheel. You should be very proud. I am. Bless you.

WILLIAM F. BUCKLEY, JR.
New York, New York
January-February 1986

Fish and chips

In the "Extra*MEASURE*" section of the last magazine, you point out that it would be difficult to read a bar-coded fish unless that fish could swim through a slot. What if the fish were a barracuda?

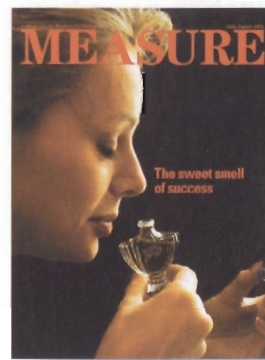
RON KEIL
Corvallis,
Oregon
March-April
1986



Here's to openness

How many other companies would publish a letter from an employee (admittedly retired) opposing their CEO's vision of the future?

That's what makes HP a leader, not a follower, in our industry. ...The



more ideas, the greater the possibilities. Please continue to stimulate debate on our vision for HP in the 1990s through *MEASURE*.

JO NAYLOR
Sydney, Australia
March-April 1990

Critical praise

I was on the verge of writing you another critical letter. You know the type: "Everything is too technical. ...Articles are not interesting...plus, the grammar is lousy."

But then I did something I had never done before. I made an effort to read through each and every article in the magazine. Then, while reading the Your Turn section, it hit me: We here at HP are a unique and diverse group of individuals, and as such, *MEASURE* has a staggering job in trying to please everyone. This, needless to say, is impossible! I was a good example of this.

Therefore, since the number of "thumbs-down" letters are surprisingly low despite the diverse population the magazine serves, I must commend *MEASURE* for an outstanding job. This critic at least gives you a four-star rating, and I am sure our partners all over the world would do the same.

PAUL PUTNAM
Rohnert Park, California
July-August 1993



Your last turn

The September–October 1995 MEASURE ran “Making our voices heard,” a story about black, gay,

lesbian and other employee network groups that started a long debate in Your Turn about diversity.



...What offended me was the amount of space given to the Gay, Lesbian and Bisexual Employee Network groups. I'm all for treating every employee with respect, but let's be careful to distinguish between legitimate diverse groups and immoral lifestyles.

BOB VAUGHAN
Roseville, California
November–December 1995

...I am pleased HP gives encouragement to these diverse groups but dismayed that the environment in HP still makes them necessary. ...If something about a person's lifestyle or appearance makes you nervous, then it's time to check your prejudices at the door; don't bring them into the workplace.

STEVE KENDALL
Camas, Washington
November–December 1995

...I am encouraged that Lew (Platt) has spoken about the importance of diversity, but it is time for HP to start practicing what Lew preaches. In today's fiercely competitive environment, we cannot afford to exclude the contributions of talented individuals who might somehow not completely conform to HP's old-fashioned employee paradigm.

HAROLD MOSS
Cupertino, California
January–February 1996

...Like many other gays and lesbians in the workplace, I've chosen HP as my employer after careful considerations. After 12 years of management—seven at HP—I shudder to think of what my career would be like if my management believed me to be “immoral.”

STEVE LEECH
Cupertino, California
January–February 1996

Globally challenged

At times we thought, perhaps we should quit mentioning the United Kingdom altogether...but now, by George, we think we've got it!

...Thank you for the 50th anniversary issue. Would it not be appropriate, however, for the staff to acquire a somewhat better geographical knowledge...and not mention Scotland and Great Britain as two countries?

JAPP VEGTER
The Netherlands
May–June 1989

The caption read: “The dozen European Community countries (including Ireland, Scotland and Great Britain, which comprise the United Kingdom) span a tremendous economic market.”

...The map...contains several inaccuracies. The territory shown as “Great Britain” can, in fact, only lay claim to being England plus Wales. Scotland is not some appendage just to the north; it is very much a part of Great Britain. And by the way, Ireland is not part of the UK and Switzerland is not part of the EC.

ROB PEARSON
South Queensferry, Scotland
July–August 1990

...There was a mistranslation in the January–February 1992 article called “Culturally Speaking”...the question, “Eres flojo” was translated “Are you ugly?” The correct translation should have been “Are you lazy?” since flojo means “lazy, loose” in Spanish and feo means “ugly.”

ELISA ESKENAZI
Los Angeles, California
March–April 1992

Regarding your story about John Major in the May–June 1992 MEASURE, there has been no such position as the king or queen of England since 1603. Similarly, there has been no such person as the prime minister of England since 1707.

They are the king/queen/prime minister of the United Kingdom of Great Britain and Northern Ireland.

WILF WRIGHT
South Queensferry, Scotland
July–August 1992

...I was delighted to see an article in MEASURE about global cultures. You did make one large mistake with regard to the Japanese culture.

The drawing of the rice bowl and chopsticks on pages 13 and 31 is a serious offense. Chopsticks are not to be stuck into food or left sticking into food—especially in rice bowls. This is only done at funeral (memorial) ceremonies.

KEN LODGE
Tokyo, Japan
May–June 1995

I hate to pick nits, but the November–December (1997) MEASURE contains a couple of whoppers.

First, the photograph on the back cover certainly is unique, but mostly because the negative was reversed.



Half Dome should be on the right in this view.

Second, in the shaded box on page 12, the copy states, "Ushuaia, capital of Tierra del Fuego province, is the farthest point south in the world." Strangely my globe has an entire continent, Antarctica, well south of Ushuaia.

DAVID FISHER
Palo Alto, California
January–February 1997

Photos some of you really hated

HP Roseville's Rebecca Gidding was featured in the national Muscle and Fitness magazine after eight years of weight lifting. (Warrior woman from September–October '85, page 20)

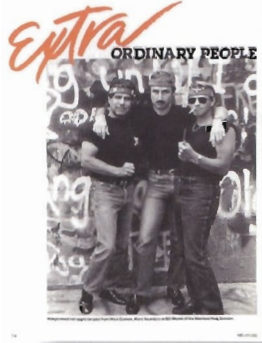


...I do not wish to discourage her ambitions as a body builder, but her appearance as Conan's protégée in the employee magazine of a "progressive" company is ludicrous, offensive and a sad, sad reminder of how little progress has been made.

WILLIAM SEAMAN
Vancouver

Stanford Park Division managers Mike Cuevas, Marc Saunders and Bill Moore dressed up as street fighters to talk to employees about the competitive edge. (Stanford Park warriors, November–December '86, page 12.)

...MEASURE should be a reflection of the HP Way of community involvement and of employee's personal



commitment to others outside of work. ...In this case, you chose to display one division's publicity stunt, a poor representation of the HP Way. MEASURE has an obligation to represent the best HP can offer and to show that HP really is different.

DAVE STOFT
Spokane, Washington
January–February 1987

The cover of the July–August 1995 MEASURE looked...like Game Hunters Digest. ...I was offended ...and frankly, it wasn't much fun explaining to my child why mommy's work magazine that comes in the mail had a scary picture of a dead animal on the cover.



TERRY CLARK
Cupertino, California
September–October 1995

Just finished reading my MEASURE [November–December 1995]. Great article on safety in the workplace. Very informative.

But that cover! It was worthy of the National Enquirer. I expect more sophistication from MEASURE.

DAVE MONTGOMERY
Cupertino, California
January–February 1996



A lack of integrity?

I should first say I've been usually very pleased with MEASURE magazine, its content, style, choice of

articles, etc. But the March–April 2000 issue had a disappointing surprise. The story behind the "Parting Shot" was unsettling. Did anybody realize that the photographer (HP employee Randy Azarian) only obtained this photo from dishonesty and telling a lie?!

"The guard drew the line after the single woman standing in front of me. Then the guard looked at me and asked 'Are you with her?' Quickly, even though I didn't know her, I said, 'Yes.' "

How much integrity (or lack thereof) are we willing to compromise? Printing the photo after it was obtained from dishonest means was bad enough—and it should not have been printed by anything tied to HP. But printing the story and thereby condoning the behavior is even worse.

Don't you think it would be a good idea to be a little more scrutinizing and maintain our integrity and HP values?

DAVID BRASWELL
Fort Collins, Colorado

Please contact us

Do you have comments about this final, commemorative edition of MEASURE? Please drop us a note, send an e-mail message or fill out and return the survey card on the inside back cover of this issue. You could win a MEASURE T-shirt.

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

In July, HP employees will begin receiving invent magazine, a new publication that replaces MEASURE. Agilent Technologies is formulating its new publication; for more information, contact Ron Fuchs in Agilent's Communications department.

The test of time

Since 1957, HP's seven Corporate Objectives have been guiding principles for how the company conducts its business. The objectives have been updated from time to time but have remained true to the ideals that Bill Hewlett and Dave Packard established from the start.

Here, edited slightly for space, are the objectives:

Profit

To achieve sufficient profit to finance our company growth and to provide the resources we need to achieve our other corporate objectives.

The profit we generate from our operations is the ultimate source of the funds we need to prosper and grow. We measure our profitability not just as a return on sales but, increasingly important, as a return on the value of assets needed to produce our profits.

These profitability measures, which will vary among our individual businesses, are absolutely essential indicators of our corporate performance over the long term. Only if we continue to meet our profit objectives can we achieve our other corporate objectives.

Our long-standing policy has been to reinvest most of our profits and to depend on this reinvestment, plus funds from employee stock purchases and other cash-flow items, to finance our growth. Effective asset management is essential to our ability to self-fund our growth. We will use debt from time to time as part of a prudent currency and tax-management program or to provide a source of financing for customers who prefer to lease (rather than buy) our products, but not as a basic instrument for financing growth.

Meeting our profit objective requires that each and every HP product and service is considered a good value by our customers, yet is priced to include an adequate profit. Maintaining this competitiveness in the marketplace also requires that we focus on businesses where we can make a contribution and that we perform our research and development, manufac-

turing, marketing, support and administrative functions as economically as possible.

Profit is not something that can be put off until tomorrow; it must be achieved today. It means that myriad jobs be done correctly and efficiently. The day-to-day performance of each individual adds to—or subtracts from—our profit. Profit is the responsibility of all.

Customers

To provide products and services of the highest quality and the greatest possible value to our customers, thereby gaining and holding their respect and loyalty.

HP's view of its relationships with customers has been shaped by two basic beliefs. First, we believe the reason HP exists is to satisfy real customer needs. Second, we believe those needs can be fully satisfied only with the active participation and dedication of everyone in the company. We must listen attentively to our customers to understand and respond to their current needs and to anticipate their future needs.

The essence of customer satisfaction is a commitment to quality, a commitment that extends into every phase of our operations. Products must be designed to provide superior performance and long, safe, trouble-free service. We must work closely with suppliers to ensure that we receive high-quality materials, components and subassemblies at reasonable prices and with assurance of supply. Once in production, our products must be manufactured at a competitive cost and with superior workmanship. It's important that we choose our suppliers and production partners carefully to ensure they

share our commitment to quality, safety and environmental protection.

Careful attention to quality not only enables us to meet or exceed customer expectations, but it also has a direct and substantial effect on our operating costs and profitability. Doing a job properly the first time, and doing it consistently, allows us to employ fewer assets, reduces our costs, and contributes significantly to higher productivity and profits. This applies to every aspect of our business, from research and development to order fulfillment and support. Each of us must strive for quality and efficiency in everything we do.

Providing innovative, reliable products and services is a key element in satisfying customer needs, but there are other important elements as well. HP offers many different products and services to a broad set of customers.

It is imperative that the products and services recommended to a specific customer are those that will best fulfill the customer's overall, long-term needs. This requires that our field-sales and support people and our extensive network of dealers, resellers and other channel partners work closely with customers to determine the most appropriate, effective solutions to their needs. It requires, as well, that our products be readily available through our customers' preferred source, be easy to order and configure, and be supported with prompt, efficient services that will optimize their usefulness.

When problems arise, we must respond in a way that demonstrates ownership and a desire to resolve matters quickly and effectively, thereby enhancing customer loyalty and trust.

Fields of Interest

To participate in those fields of interest that build upon our technologies, competencies and customer interests, that offer opportunities for continuing growth, and that enable us to make a needed and profitable contribution.

Our company's growth has been generated by a strong commitment to research and development in electronics and computer technology. That growth has been accomplished by providing a rapid flow of new products and services to markets we already serve, and by expanding into new areas that build upon our existing technologies, competencies and customer interests. In addition, we've actively pursued emerging opportunities in related fields that our company is well-positioned to serve.

Our first products were electronic measuring instruments used primarily by engineers and scientists. In time, we extended our range of measurement expertise to serve the areas of medicine and chemical analysis. Recognizing our customers' needs to gather and use large quantities of measurement data, we developed a small family of computers which later evolved into a broad line of computer and computer-based products, including associated software, peripherals, support and services.

Today, HP is one of the world's foremost suppliers of measurement, computation and communication products and services. Our product offerings range from consumer products for home offices, small businesses and on-the-go professionals to precision instruments and extremely powerful computer systems for the most advanced applications.

Service and support offerings also cover a broad spectrum, from world-class hardware maintenance and support to professional services, such as consulting and outsourcing.

We continue to invest heavily in research and development to strengthen our capabilities in measurement, computation and communication. Further, we've learned that combining and effectively applying our expertise in these three areas creates major new opportunities, both in our traditional markets as well as in important new fields, such as electronic commerce.

HP's basic purpose is to accelerate the advancement of knowledge and fundamentally improve the effectiveness of individuals and organizations.

We provide products and services that help customers acquire, display, analyze, communicate, store and manage information. Customers' information needs may require a solution where HP must work in partnership with other companies to meet those needs. For that reason, our design goal is to provide highly functional, interactive hardware and software that can be integrated easily by HP, customers and other organizations.

Within its broad fields of interest, HP has ample opportunities to pursue a variety of businesses. In evaluating those opportunities, we favor those that link to or complement our existing technology and customer base or that build on an established competency (such as a strong presence in a key distribution channel).

Corporate Objectives

Growth

To let our growth be limited only by our profits and our ability to develop and produce innovative products that satisfy real customer needs.

HP does not believe that large size is important for its own sake; however, for at least two basic reasons, continuous growth in sales and profits is essential for us to create shareholder value and achieve our other objectives.

We serve a dynamic and rapidly growing segment of our technological society. To remain static would be to lose ground. We cannot maintain a position of strength and leadership in our fields without sustained and profitable growth.

Growth is also important in order to attract and retain high-caliber people. These individuals will align their future only with a company that offers them considerable opportunity for personal progress. Opportunities are greater and more challenging in a growing company.

Increasing global competition and worldwide demand for technology products require that we establish ourselves successfully in every corner of the world. To compete effectively we must be close to our customers. We must also capitalize on our size and global presence to realize important economies of scale and to make best use of the broad array of skills and resources available to us.

Our People

To help HP people share in the company's success which they make possible; to provide them employment security based on performance; to create with them an injury-free, pleasant and inclusive work environment that values their diversity and recognizes individual contributions; and to help them gain a sense of satisfaction and accomplishment from their work.

We are proud of the people we have in our organization, their performance, and their attitude toward one another, their jobs and the company. The company has been built around the individual, the personal dignity of each and the recognition of personal contributions.

Relationships within the company depend upon a spirit of cooperation among individuals and groups, a commitment to teamwork, and an attitude of trust and understanding on the part of managers toward their people. These relationships will be good only if employees have faith in the motives and integrity of their peers, managers and the company itself.

On occasion, situations will arise where people have personal problems which temporarily affect their performance, and it is important that people in such circumstances be treated with understanding while the problems are being resolved.

HP selects and manages its businesses with a goal of providing long-term employment for its people and opportunities for personal growth and development. In return, HP people are expected to meet certain standards of performance on the job, to adjust to changes in assignments, schedules and the work environment when necessary, and to be willing to learn new skills and to apply them

where most critically needed. This flexibility is particularly important in our industry where rapid technological change and intensifying worldwide competition compel us all to continually seek better ways to do our jobs.

Another objective of HP's personnel policies is to enable HP people to share in the company's success. This is reflected in a total compensation package, including pay and benefits, that places us among the leaders in our industry.

HP also places a high value on creating an inclusive environment that benefits from diversity at all levels, values individual differences and enables all HP people to develop and contribute to their full potential. HP actively supports or creates outreach programs that enrich the pool of diverse candidates available for hiring and promotion. By tapping the talents and ideas in such a diverse work force, the company can expand its base of knowledge, skills and understanding, become more responsive to customers' needs and strengthen our global competitiveness.

Advancement from within is based solely upon individual initiative, ability and demonstrated accomplishment. Since we promote from within whenever possible, managers at all levels must concern themselves with the proper development of their people.

HP managers should anticipate customer and business trends, consider the impact on knowledge and skills needed in the future, and communicate these requirements to their employees in a timely way. They also should give them ample opportunity—through challenging work assignments and continuing programs of training and education—to broaden their capabilities and prepare themselves for more responsible jobs.

Management

To foster initiative and creativity by allowing the individual great freedom of action in attaining well-defined objectives.

In discussing HP operating policies, we often refer to the concept of “management by objective.” By this we mean that, insofar as possible, each individual at each level in the organization should make his or her own plans to achieve company objectives and goals. After receiving managerial approval, each individual should be given a wide degree of freedom to work within the limitations imposed by these plans, and by our general corporate policies.

Finally, each person’s performance should be judged on the basis of how well these individually established goals have been achieved.

The successful practice of “management by objective” is a two-way street. Management must be sure that each individual understands the immediate objectives, as well as corporate goals and policies, and has the necessary training and tools to be successful. Thus a primary HP management responsibility is communication, coaching, constructive feedback and mutual understanding.

For their part, employees must take sufficient interest in their work to want to plan it, to propose new solutions to old problems, to take reasonable risks and exercise sound judgment in the performance of their jobs. “Management by objective,” as opposed to management by directive, offers opportunity for individual freedom and contribution; it also imposes an obligation for everyone to exercise initiative and enthusiasm.

In this atmosphere it is important to recognize that cooperation between

individuals and coordinated efforts among operating units often are essential to our growth and success. Individual businesses must continuously seek the appropriate balance between focusing on their own needs and objectives and contributing to or drawing from the strength, size and reputation of the company as a whole.

Our businesses are independent in many respects, but they’re also part of a single company whose strength is derived from mutually helpful relationships among units that are closely linked through common technologies, customers, values, goals and objectives.

The dynamic nature of our business places an important responsibility on managers to create an environment that embraces change and helps employees manage the increasing demands of work with their other life activities. This requires a high degree of flexibility and a willingness to consider nontraditional approaches to getting the job done.

At the same time, it is important for everyone to recognize there are some policies which must be established and maintained on a companywide basis. We welcome recommendations on these companywide policies from all levels, but we expect adherence to them at all times.

Citizenship

To honor our obligations to society by being an economic, intellectual and social asset to each nation and each community in which we operate.

All of us should strive to improve the world in which we live. As a corporation operating in many different communities throughout the world, we must make sure that each of these communities is better for our presence. This means identifying our interests with those of the commun-

ity; it means applying the highest standards of honesty and integrity to all our relationships with individuals and groups; it means creating desirable jobs and generating exports and tax revenues; it means building attractive plants and offices of which the community can be proud; it means designing and providing products and services that are safe to use and can be manufactured, operated and disposed of in an environmentally responsible manner; it means contributing talent, time and financial support to worthwhile community projects.

Each community has its particular set of social problems. As citizens of the community, HP people can and should do whatever they reasonably can to improve it—either working as individuals or through such groups as charitable, educational, civic or religious institutions.

In a broader sense, HP’s “community” also includes a number of business and professional organizations whose interests are closely identified with those of the company and its individual employees. These, too, are deserving of our support and participation. In all cases, managers should encourage HP people to fulfill their personal goals and aspirations in the community as well as attain their individual objectives within HP.

At a national and international level, it is essential that the company be a good corporate citizen of each country in which it operates. This means looking for creative ways to apply technology to societal problems and contributing HP products and support to philanthropic programs that address immediate or long-term societal needs. **M**

Agilent Technologies' president and CEO discusses how HP's legacy will help Agilent make dreams real.

For all of us in Agilent Technologies, our HP past is a powerful influence on who we are today.

I joined HP as a young R&D engineer in 1966, about the time that HP was moving aggressively to diversify into new lines of business. A few years earlier, it had acquired Sanborn and entered the medical business. In '65, it was beginning in analytical instrumentation with another acquisition. HP Labs was formed that year, too. And in '66, HP introduced its first computer, designed as a controller for our test and measurement instruments.

In the mid-to-late 1960s, our revenues were increasing about 20 percent a year on average. It was a time of tremendous growth and vitality, and I was excited to be a part of it.

Fast-forward 34 years to 2000.

While a lot has changed, it is amazing to me how we are, in some ways, "back to the future." In the last year, Agilent has made no fewer than eight acquisitions to strengthen our product lines and fill technology gaps. We are expanding Agilent Labs into the United Kingdom. And while in 1966 HP was creating computers to work with instruments, today we are HP's primary supplier of specialized integrated circuits for products like HP DeskJet printers.

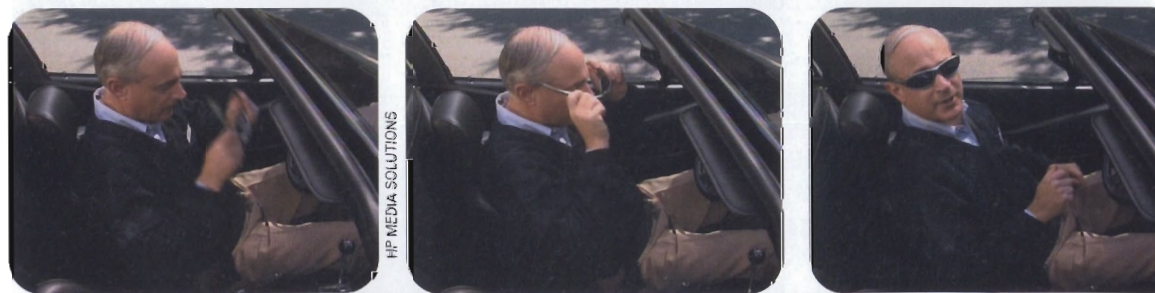
Agilent net revenues in the last three quarters have averaged 20 percent growth.

How can we sustain this growth and the enthusiasm and excitement that drives it?

It's useful to remind ourselves that the objective of the realignment was not to split the company. It really was to create two new companies and to capture the value of the two parts. To do this, Agilent has to be a different organization from what we were as a part of HP. Similarly, HP is working to reinvent this company as it refocuses on its remaining businesses.

Agilent today is, in many ways, not unlike what HP was when I joined it in the 1960s—an innovative growth company that leads in its fields of interest. Back then, Bill and Dave didn't use the words "growth company," but a glance through the issues of *MEASURE* from that period affirms that they were actively managing HP's diversification and development. They were entrepreneurial and pushed the company into new parts of the world. At the same time, they continued to build on the company's strong technology

Our attitude, our culture, our processes and systems all must be geared toward performance.



In a video shown on Agilent's Day One—November 1, 1999—Ned Barnholt invited Agilent people around the world to "...see what this baby can do!" as he donned his blue sunglasses and drove off in a Ferrari.

base in order to grow into new markets, such as computers and, later, printers.

Today, in this new millennium, communications is king. Over the Internet, over networks, via mobile telephones, across the globe. Voice. Data. Images. This is one of the most exciting markets for the next 20 years. It's Agilent's top market.

Our other exceptional opportunity is in life sciences. There is a revolution under way in the field of genomics that is driving giant leaps in drug discovery and development. It promises to fundamentally change the pharmaceutical industry and, ultimately, the healthcare industry.

The pace of innovation and change is faster than any of us could have imagined even 10 years ago.

What does it take to be a growth company and to compete successfully in the new century?

Our attitude, our culture, our processes and systems all must be geared toward performance.

Growth companies operate at a very different speed from that which we have been used to. They have a bias for action. They make what I call "80-percent decisions." They gather enough data and input to be 80 percent sure of their decision, then they move ahead. We, too, do not have to make perfect decisions every time. If we are agile, we can quickly make course corrections.

Growth companies focus on a few high-impact, breakthrough goals. They are focused on customers, in fact, they're passionate about their customers. They don't take "no" for an answer. They play to win.

They figure out how to get things done.

Growth companies are concerned with results, not with completing tasks. They drive to create shareholder

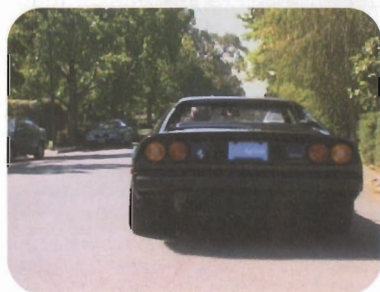
value, in other words, to see their stock price rise. This is one of our most important measures. Growth companies recognize and reward top performers.

Growth companies manage for their growth. They make conscious investments in areas with high potential. They take risks, have the courage to challenge the status quo and try new ideas. They draw on profits from established product lines to fund new investments. They maintain a strong technology foundation on which to build for the future. Many, including Agilent, have a diversified portfolio of businesses and technologies that offer a better chance of sustaining growth over the long term.

We have a tremendous opportunity to build a great company for the next 60 years...

As Agilent looks ahead, we can hark back to our past and know that we are continuing the strong tradition that Bill and Dave established. Innovation and contribution. Trust, respect and teamwork. Uncompromising integrity. But also speed, focus and accountability.

My personal goal is that Agilent be widely recognized as one of the great success stories of this new millennium. We have a tremendous opportunity to build a great company for the next 60 years, just as we have been for the past 60 years. Working together, we can make dreams real.



HP's president and CEO discusses the company's rich heritage and its outstanding future.

Before joining HP in July 1999, I spent several months studying the company—a company that I have admired for years. I read Dave Packard's book, "The HP Way," and I thought I knew quite a bit about Hewlett-Packard. But getting a sneak preview of the stories in this special edition of *MEASURE* gave me a deeper appreciation for HP's history.

This company has a treasure chest of riches: a richness in the culture that Bill Hewlett and Dave Packard began establishing more than 60 years ago; a richness in our inventiveness; and a richness in the spirit and talents of our people. Sometimes I think that people inside HP take these riches for granted—that those of us who are relatively new to HP can see them more easily.

For example, I was struck by what Dave Packard said in 1943 when *WATT'S CURRENT*—the forerunner to *MEASURE*—was launched. Dave told the newsletter editor, "You are free to use it in whatever way you wish. Do not hesitate to criticize anything you feel is wrong." This sense of honest communication and trust in our people has been an HP hallmark for more than six decades.

As someone whose undergraduate degree is in history, I appreciate the value of HP's storied past. In their modest, unassuming ways, Bill and



JOSE MARIA CASARINO

Dave created a great company. In fact, that's what today's reinvention of HP is all about—retaining the best of HP's history and reinventing the rest to ensure that HP reaches its full potential.

This is an historic moment in our history as Agilent Technologies establishes itself as its own company. Throughout this issue of *MEASURE*, you can see the contributions of HP's test-and-measurement business. These accomplishments will be part of the company's history forever. We wish Agilent CEO Ned Barnholt and his team great success in their new venture.

The Agilent spin-off truly marks an ending *and* a beginning for us. It's the end of HP as we knew it, but the start of an exciting new chapter in our story.



In downtown Buenos Aires, Argentina, members of HP's Latin American management team from Argentina enjoy lunchtime with Carly. (From left) **Ricardo Rodríguez**, Enterprise Computing Sales Organization manager; **Hugo Strachan**, GM and South CONE (Argentina, Bolivia, Uruguay and Chile) ECSO GM; **Analia Remedi**, Commercial Customer Organization GM; **Carly Fiorina**, HP president and CEO; **Jose DiFabrizio**, Customer Services and Support Group manager; **Horacio Sanguinetti**, Financial Operations Division manager; and **Airton Gimenes**, G.M., Enterprise and Commercial Business organization, Latin America and Caribbean region.

What do I see in the future for this great company? Five things:

- a customer-focused organization that fully understands the total customer experience and insists on extraordinary efforts to satisfy their needs at each step;
- a technology powerhouse that delivers superior solutions;
- an organization that thinks and acts as one company, rather than a collection of tribes;
- a market leader and a market maker whose financial performance is consistently excellent;
- and a company that combines a winning spirit with a shining soul; a company that will be known as much for our strength of character as our strength of performance; a company that will do good and do well.

What will it take to get there? I believe that many of the building blocks for unparalleled success already are in place. We have 61 years of invention as a foundation. We have a set of behaviors—the Rules of the Garage—to guide us. We have a unique business advantage at the intersection of e-services, information appliances and infrastructure. And we have a team of 86,000 employees that understands that the reinvention of HP is more than something we should do, it's something we *must* do.

This final edition of *MEASURE* is a fitting tribute to the past. *MEASURE* has been a valuable tool for keeping HP people connected for 37 years. But the reinvention of HP means making the good even better. I think HP employees will see this on every

page of *invent*, the new publication that begins in July. *Invent* is a word to work by and a word to live by. I'm confident that *invent* magazine will live up to the promise of that word.

In his understated manner, Dave Packard told participants at a 1947 trade show in New York, "HP's future appears very promising." Today, given the richness of our history and the prospects of a great future, I'll make a bolder statement: No company in the world can beat us if we commit ourselves to HP's success. I feel that in my head and in my heart.

Together, we will write a new chapter in HP's history.

No company in the world can beat us if we commit ourselves to HP's success.

The evolution of a world-renowned icon

The history of Hewlett-Packard's logo is almost as old as the company itself.

In 1939, Bill Hewlett and Dave Packard decided the company's name—and order of names—with a flip of a coin. Two years later, the first HP logo was introduced.

By Desiree Sylvester

1941

The first visual image made its debut. It encased the customized lowercase italic “hp” within a circle. By this time, with growing sales and workforce, the young company had moved from “the garage” to a small building nearby.



1946

The company logo was simplified for legibility and ease of engraving on products. Its basic elements remained for the next 21 years. During this period, HP broadened its product lines and saw substantial growth in new markets, including medical electronics.



1967

HP's physical expansion paralleled the company's product diversification. In 1967, shortly after the introduction



of the first HP computer, the company logo was redesigned to look more contemporary and to reflect the new direction of the company. HP retained the lowercase italic “hp” in a circle, however.

1968

Since the logo did not visually complement the linear (wider versus taller) design of many HP products, modified logos for products only were developed. This included a square-cornered rectangle with a rule around it that encased that lowercase italic “hp.” The redesign endured more than 10 years—during a period that witnessed a boom in the develop-



ment of calculators. HP built new facilities all over the world and introduced leading electronic, medical and analytical instrumentation products.

1979

The logo's redesign took on a wider shape that coincided with HP's product design. The stacked names on the right used a unique typeface known as HP Gothic, while the lowercase italic “hp” in an open circle preserved the original design spirit. This design remained until 1999.



1999

As the company split, Agilent Technologies created its own logo that represents innovation, renewal and creativity. The Agilent logo includes the Agilent Spark of Insight—said to illustrate a moment of invention and the spreading ripples that emanate from that discovery. It also features the heritage line, “Innovating the HP Way,” under the typeset Agilent Technologies.



The HP logo, like the company, has evolved over time. Its latest redesign launched in this year—inspired by new CEO Carly Fiorina—illustrates the company's inventive spirit and reflects the new HP. HP retained the lowercase italic “hp” in an open circle encased in a solid rounded-corner rectangle with a shadow. The word “invent” sits underneath this in lowercase letters.



THANKS

For a communication investment of approximately U.S. \$6 per employee per year, *MEASURE* magazine has kept us informed about many important company activities and the people who make this company work.

It is clear that print is a viable mix in the process of saying and showing what's going on around the globe while keeping our culture connected.

With this last issue of *MEASURE*, it is appropriate to give special thanks to the people who have mastered the art and science of producing it for the employees of the Hewlett-Packard Company.

Producing *MEASURE* has not been a trivial task.

We acknowledge contributing writers, photographers and illustrators in each issue so you know who they are outright. Here are some regulars who you might not be aware of:

- HP's/Agilent's Archives staff of **Karen Lewis, Carol Parcels and Margaret Dawson** for keeping and retrieving history;
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- **HP's imaging division** for cool digital cameras;
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Historically, many people have helped *MEASURE* stay in print.

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- Editors: **William Bigler, Merle Mass, Gordon Brown, Brad Whitworth, Jean Burke Hoppe**;
- Managing editor: **Carlos Vidal Greth**;
- Associate editors: **Les Carpenter, Dennis Cresswell, Terri Ocegueda, Betty Gerard, Joanne Engelhardt, Rhea Feldman, Donna Jones, Cornelia Bayley, Mary Anne Easley, Joan Tharp**;
- Contributing writer/Web liaison: **Lila Kakuk**;
- hpNOW intranet liaison: **Vicki Russell**;
- Circulation/editorial assistant: **Tena Lessor, Grace Razo, Muoi Tran**;
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- Correspondence assistance: **Joan Gruenebaum**;
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- Intern: **Nancy Fong** and **Julie Ratner**.

PARTING SHOT



The tail of a tale

They met in college and became lifelong friends. Sure, they wanted to make money, but their real motivation was to make a contribution.

In retrospect, Bill Hewlett (left, above, in a 1945 photo) and Dave Packard were two of the most remarkable men of the 20th century.

Remember the movie "It's a Wonderful Life"? George Bailey, the Jimmy Stewart character, gets to see what the town of Bedford Falls would have been like had he never been born.

Now, imagine that there never was a Hewlett-Packard Company:

- When would other companies have started progressive employee programs such as flexible work time, long-term disability and cash profit-sharing?
- Would other companies have opened their doors and shared their expertise as generously as Bill and Dave did?
- Would there be ink-jet printing, portable atomic clocks and other technologies that have emerged from HP Labs?

• Without HP and the value of its stock, would there be billions of dollars in funding from humanitarian foundations such as the David and Lucile Packard Foundation, the William and Flora Hewlett Foundation and others?

• No Packard Foundation would mean there would be no life-saving Lucile Salter Packard Children's Hospital at Stanford University.

• Without Packard Foundation funding and the strong interest of Dave and his daughter, Julie, there wouldn't be a Monterey Bay Aquarium—one of the

top tourist attractions in Northern California and a fine research facility.

The list goes on and on.

In 61 years, the Hewlett-Packard Company has touched millions of people around the world in profound ways—ways we'll probably never fully realize.

So, as Agilent Technologies and HP chart the course for their future directions, they need only think back to the actions of two trailblazers who guided the company on an incredible journey—two trailblazers named Bill and Dave.