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Salyer American automates for maximum return on investment

With the help of HP computers, this agribusiness giant has cut inventory costs by 68 percent and increased profitability while producing consistently high quality products.

Personal productivity imperatives: convenience, competence, communications

by Robert Puette

A dramatic change has swept through business and professional organizations during the past half-dozen years. That change has seen the hands-on use of personal computing power expand from a relative handful of special operatives to embrace the broad ranks of almost all knowledge workers and decision makers.

These new users are very different. They deal with all kinds and forms of information that often must be communicated to one or many points as quickly as possible. In this context, today's PC-based personal productivity workstations have become powerful and even essential additions to the internal communications spectrum of their users' workgroups. In turn, this vastly expanded need to communicate between workstations has brought about a rapid convergence of the technologies involved. The goal of that convergence has been to endow each workstation—no matter whether its function is basically administrative, word processing, or technical—with the ability to communicate directly with other workstations in a department and also quickly reach other workgroups. In short, workstations must serve as communication tools as well as independent data-processing units.

That has certainly been our view and philosophy at Hewlett-Packard. To implement that viewpoint, we insist that the workstations of today and tomorrow must fulfill three basic functions; these are the "convenience" function, the "competence" function, and the "core communications" function.

Convenience refers to the ability of users to access industry-standard software. Users are not captives of manufacturers' proprietary software, but benefit from choosing the best solutions for their specific applications. These programs can be ported to technically updated computers in the future, thus assuring against loss of software investment.

Competence, on the other hand, refers to the individual characteristics of a workstation—its ability to support the particular functions and skills of a user. A great range of hardware and software features and options are involved in this concept of competence. In each case they must work together to provide the proper solution for that user. A sales or service representative, for example, will want a workstation that's portable and equipped with all of the features that optimize time spent with customers (see *Special Report* on page 6). A designer will need advanced graphics capability, while a physician will employ a workstation as a diagnostic tool.

The *core communications* function is vital in every case. Its role is to link knowledge workers with their sources of information and with those who make the decisions. Since studies show that most such communications and decisions occur within a workgroup, the logic of structuring the communications function of workstations along such pathways becomes obvious.

That is what we have been doing at Hewlett-Packard—providing customers with integrated systems that offer a workgroup virtually all of the power that once was exclusive to corporate data centers. Access and sharing of workgroup information via departmental systems not only is much faster but also more convenient and economical.

The three "C" functions that I've outlined here—convenience, competence and core communications—are right not just for today's systems but for those of the future, too. All will have an important role in creating more powerful and comfortable personal productivity centers—rich with sound, motion, color, and other enhancements to competence and communication. **[hp]**
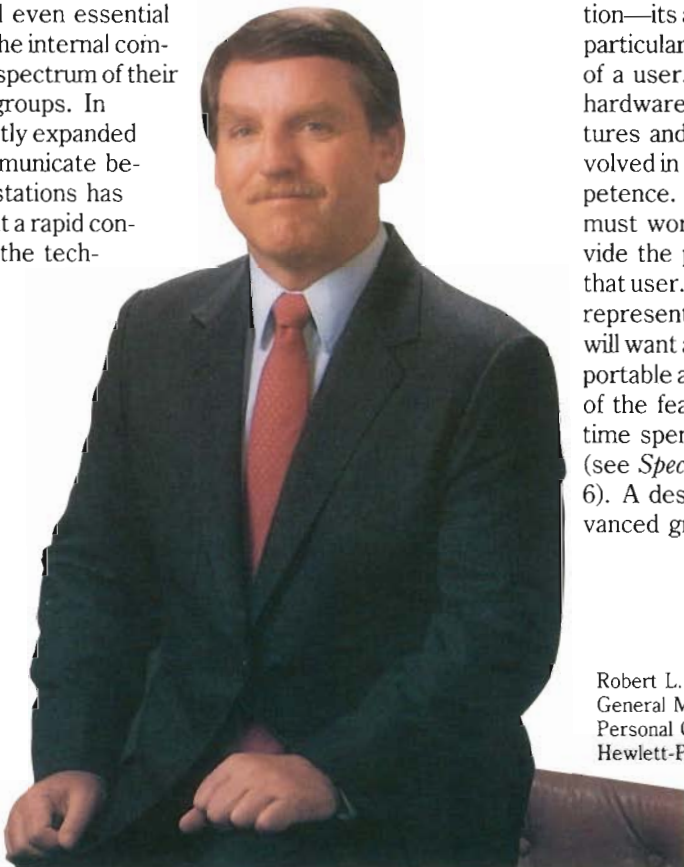
Robert L. Puette
General Manager
Personal Computer Business Unit
Hewlett-Packard Company

HP Computer Museum
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Diverse company unifies operations with HP computers

Integrated information systems from Hewlett-Packard help Allegheny Beverage Corporation unify its diverse operations for quick response to customer needs.

When Allegheny Beverage Corporation, a 26-year-old company headquartered in Cheverly, Maryland, began evaluating information management suppliers in 1983, it looked for a vendor that could tailor information systems for four very distinct decentralized divisions and still maintain effective communications throughout the company. Hewlett-Packard had the answer: powerful HP minicomputers linked with flexible personal computers by a companywide electronic network. "Allegheny Beverage Corporation is an extremely diverse company," says Donn Lewis, vice president of information resources for the $1.2 billion corporation. "We have four operating divisions in as many businesses: food service and vending; coin-operated laundry service; building maintenance; and retail office furniture. Each division is run as a separate company, so each has unique information management needs," Lewis explains. "Yet all the divisions need to communicate with one another, and with headquarters.

"What really sold us on Hewlett-Packard was the compatibility throughout a diverse line of products," Lewis said. "We don't need large data processing staffs at any of our divisions because all of our computer systems are running on the same network and using the same software. Because our technical people can reach any system from our headquarters, we're saving money and boosting the efficiency of our operation at the same time."

Tying it all together. According to Lewis, the companywide private-data network supported by HP AdvanceNet offers a cost-effective solution to the task of connecting the diverse operations of Allegheny's divisions, which employ 30,000 people in locations throughout the U.S. and Canada. "Mail is transferred among all nodes of the network every 15 minutes," Lewis points out. "In any given week, we'll move anywhere from 8,000 to 10,000 messages.

"One of our divisions uses a number of HP Vectra personal computers in a distributed data collection and analysis system that keeps track of all activities within that division," says Lewis. "Users gather financial operational information, then send it through the network to corporate headquarters, where it is analyzed, summarized, and sent back to the division for management review."

The same HP Vectra personal computers, when not used for collecting information, can be used for word processing or to run a spreadsheet program that is key to a particular project.

Competitive advantage. The HP systems have also provided Allegheny with a distinct advantage over the competition. Using HP's nine-pound Portable PLUS with internal modem, each of 15 field salespeople in the Desk and Furnishings Division has an impressive tool for customer calls.

"Let's say a customer is interested in buying two file cabinets," Lewis suggests. "The salesperson plugs The Portable PLUS into the back of the customer's phone, dials headquarters to link to an HP 3000 that contains inventory data, and learns that ten of those cabinets are in stock. The customer buys two; the salesperson enters the transaction into The Portable and the inventory report shows that eight file cabinets remain. We're reserving inventory at the point of sale—something our competitors can't do."

With this streamlined order placement, salespeople can guarantee delivery in three days, compared with up to six weeks delivery time for some competitors.

"This is a significant contribution to the division's ability to establish and maintain customer satisfaction," Lewis believes. "The situation is the same throughout the Allegheny Beverage organization. I can be anywhere in the country and if I have access to an HP Portable PLUS, Touchscreen, or Vectra personal computer, I can dial up a local number and link into our network to retrieve or input pertinent information. It all comes back to the compatibility factor. That's why Allegheny Beverage chose HP in the first place." **hp**

One Allegheny Beverage division uses a network of HP Vectra PCs to gather financial information and share it with corporate headquarters.

Salyer American automates for maximum return on investment

One of the world's largest cotton producers began diversifying five years ago to increase profitability. Today, Salyer American managers use HP computers to operate efficiently according to plan—with sophisticated analysis and controls.

At the helm

Ever since the first Salyer began farming in California's fertile Central Valley in 1926, the family has been considered an agricultural innovator. So it was no surprise when, five years ago, Salyer American looked closely at its operations and made a number of changes that have placed this agribusiness leader high in the ranks of sophisticated industrial managers.

First, the company embraced strategic planning and continuous forecasting. Secondly, its managers began a systematic diversification from cotton to a broad range of feed and produce crops.

To make all this possible, the company replaced its previous mainframe computer system with a stable of Hewlett-Packard mini, personal, and handheld computers. Today, these computers are tightly woven into the operating fabric of Salyer American.

Salyer American has become more than what many of us think of as a farm. "Just like anyone in any other business, we are concerned with the efficient use of our assets to produce profit," says Scott Salyer, vice president and chief operating officer.

In addition to cotton, Salyer American grows 21 other products, including vegetables and grains. Three Salyer operating divisions are responsible for marketing, providing computer support, and managing a range of agricultural processes. These include 80,000 acres of farm land, two cotton gins, feed-grain processing, a seed cleaning plant, grain storage facilities, crop dusting operations, corporate aircraft and airport, the soils laboratory, and extensive maintenance activities.

Profitable innovation. "We're always looking for a better way to do things," says Scott Salyer. "We can't do things the way they've always been done in farming and survive today. We have strong competition from other countries, on top of what we run into in the U.S.," he adds. "The most fundamental change we've made in our operations is to turn our cost centers into profit centers. Every one of our managers now thinks about profits, rather than just about how to cover costs."

Salyer American's quest for profitable innovation led naturally to an expanded use of computers. When the company's existing computer stopped meeting its needs, managers began looking for a re-
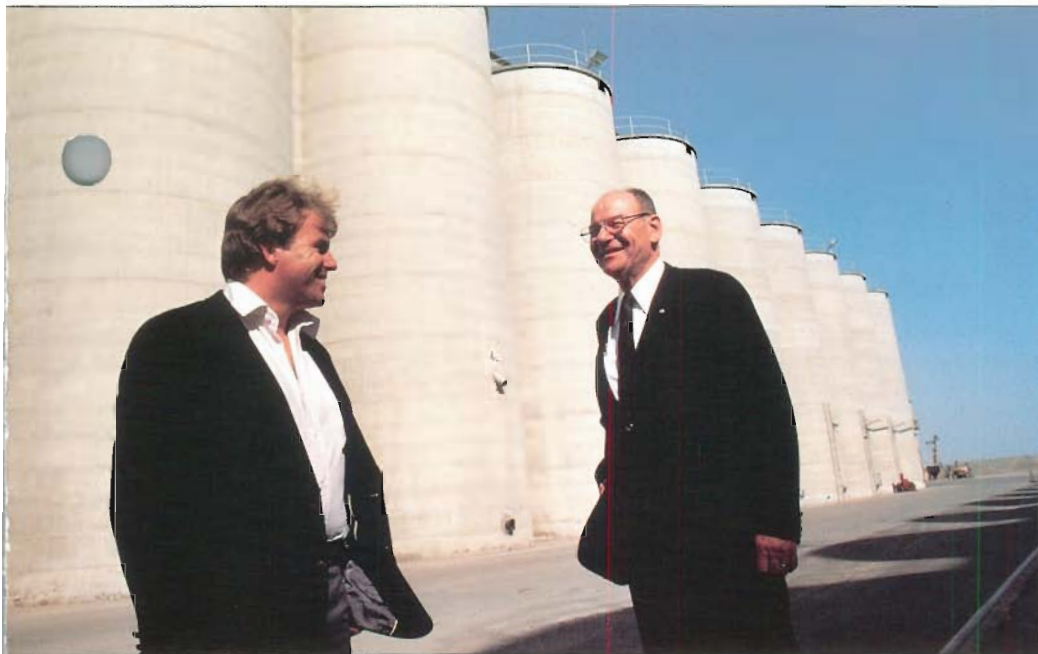
placement "that had the flexibility to meet Salyer's needs for future growth and diversification," says Frank Rogers, director of management information systems. "We wanted computers built with the same high standards we strive for in our own products. That led us to HP."

"It was also important to us that the HP computers could talk to each other and could be easily upgraded when necessary," Rogers adds.

Thanks to the computerization of the company, "top management has the ability to find the cash flow for every profit center, and the company as a whole, within 10 minutes," says Rogers. Not

> **"Farm operations have historically been labor and capital intensive,"** according to Scott Salyer. "By using HP computers we have been able to make sure everyone we hire, every piece of equipment we use, every acre of land we till, produces the greatest return on our investment."

of Salyer American are Scott Salyer (left), vice-president, and Fred Salyer, president.

HP computers track cotton from field to final product. Every cotton module (1,600 cubic feet of raw cotton) is tagged in the field and bar coded for identification. As the module is fed into the cotton gin (left), a worker uses an HP bar code reader to log the module's ID into an HP 1000 computer. The ID stays with the cotton through the ginning operation; at the end of the process, a bar code reader again logs the status of the finished cotton bale into the HP computer (below). This not only provides quality control information but allows Salyer American to sell bales of cotton from specific acres of land to specific customers.

many such complex $50 million dollar companies can make that claim.

Maximum return on investment. Hewlett-Packard computers are everywhere at Salyer American. The 85 full-time employees have access to 45 terminals hooked up to an HP 3000 minicomputer, 25 HP personal computers, a dozen HP handheld computers, and a number of HP bar code readers. An HP 1000, linked to the HP 3000, maximizes the operation of two cotton gins.

There is no facet of the farm that is not affected by HP computers, and savings and efficiencies have come in every area:

□ The data processing staff alone has been reduced by half, while usage is up 80 percent.

□ More effective control of inventory (machine parts, fuel, seeds, pesticides, etc.) has resulted in a cost reduction of 68 percent.

□ Every single piece of the multimillion dollar inventory of farm equipment—pickers, tractors, trucks, aircraft, and the like—is monitored by HP computers for performance and effective maintenance.

□ "Virtually every acre under cultivation has a history in the computer," Rogers says. "We know its performance under every condition, as well as its yield and profitability. Some customers buy cotton from us even before we plant it, based on the history of specific acres."

□ The marketing department develops pricing strategies on the computers, while also keeping track of customer inquiries.

□ Managers use the personal computers for "what if" calculations and budget analysis. Pertinent information can be downloaded from the central HP 3000 to the PCs.

□ Employee skills are cataloged by computer, so they can be placed in the most effective place at the best time.

HP's service and commitment. "Precision and timeliness are keys to success in farming," concludes Rogers. "Significant down time can erode profits. That's why we appreciate HP computers and the service and support HP has always given us. Although we are in a remote location, HP has always gone the extra mile to serve our needs." **[hp]**

Sales force automation: HP's own competitive edge

Based on the positive results of a recent pilot program, HP has begun to automate its entire U.S. sales force with HP Portable PLUS laptop computers and other productivity tools.

Today's Hewlett-Packard sales rep is selling more complete solutions to meet your needs than ever before, encompassing a wide range of products. And that's good news. However, each sale involves administrative activities—system and network solutions to configure, implementations to plan, information to communicate—that can take a third of a sales rep's time. On top of that, our reps are faced with ever-increasing competition and mounting pressure to sell more effectively and get answers to customers faster. They need an edge. And HP's U.S. Field Operations is delivering just that.

The edge: sales force automation. Since last March, approximately 100 HP sales reps have participated in a pilot program to test the feasibility of sales force automation. The project was designed to minimize administrative work, thereby increasing sales reps' time with you. This would allow them to better understand your business and to provide more useful solutions.

Each participating sales rep was equipped with a sales force automation solution that included an HP Portable PLUS laptop computer, an HP ThinkJet printer, and access to HP 3000 systems. This system offered:

□ MemoMaker (word processing), Time Management (appointment calendar), 1-2-3® from Lotus® (budgeting, financial analysis), and Executive Card Manager (electronic address book) for personal productivity;

□ HP DeskManager (HP's electronic-mail system, which operates from a central HP 3000 minicomputer) for instant, electronic communication with other HP employees;

□ Access to each sales area's HP 3000 business computer systems, allowing sales reps to check your order status and product prices and availability from the field; and

□ Easy access to databases for information on products, markets, and software solutions from both HP and HP's value-added businesses.

The results are in. Preliminary results indicate a greater than 25 percent increase in customer contact time, as well as highly positive customer reaction and greatly increased sales rep motivation. These findings led to the decision to automate HP's entire U.S. sales force.

Plans are to equip sales reps with Portable PLUS computers by the end of next spring. These sales reps will also receive application software to help them manage the sales process more effectively and forecast sales more accurately. An elec-

tronic-mail-management software package called Advance-Mail is also being provided. AdvanceMail allows sales reps to send and receive HP DeskManager messages without a constant connection to an HP 3000 system.

What's more, qualified sales leads will be automatically sent to sales reps' Portable PLUS computers. How? Customer re-

Wherever HP sales reps go, they'll have instant access to vital sales information.

quests for product information will be fulfilled at a central site. These leads will be qualified by telemarketing professionals and sent to sales reps via HP DeskManager the day that customer is ready to buy.

Sales force automation works for us. The steps we have taken to automate our sales force reduces the time our sales reps spend on administrative tasks. It gives them more time for you. And it increases their knowledge about HP's products from practical, first-hand use.

In turn, our sales reps are better able to focus on your needs, explore every "What if?" scenario, and get the best possible solution for you.

For more information about how HP's sales force automation solutions can increase the productivity of your sales people, contact your local HP sales rep. [hp]

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New, prepackaged HP Vectra PC office systems

HP Vectra 3000 and Vectra Office give office workers HP Vectra PC workstations with all the critical software tools they need in an easy-to-install preassembled package.

HP Vectra 3000 and Vectra Office are new bundled (fully preassembled, including software) HP Vectra PC workstations that provide the convenience of a desktop personal computer as well as the ability to tap the resources of the powerful HP 3000 minicomputer. With just one product number, you can order complete HP Vectra PC systems to increase your productivity in gathering and communicating information.

With popular HP Vectra PC components, Advance-Link 2392 software (a data communications package that allows the Vectra PC to communicate with the HP 3000), and choice of monitor, Vectra 3000 is a complete personal computer workstation ready to connect to the HP 3000. This workstation provides both PC-based flexibility and access to the HP 3000's resources. It is available in a monochrome model or Enhanced Graphics Adaptor

model for high-resolution color graphics display. With IBM PC/AT compatibility, the Vectra 3000 can run thousands of off-the-shelf software packages.

The Vectra Office combines the advantages of the Vectra 3000 with two powerful software packages: the Professional Software Pack and the Assistant Software Pack. These two packs feature all of the core applications needed for a basic office workstation, including word processing, spreadsheet, graphics, data management, and communications. They also include an HP Mouse to make designing graphs and charts easier.

With Vectra 3000 and Vectra Office you benefit from convenient installation, simplified ordering, and pricing at a special bundled discount.

Now a letter-size HP QuietJet printer

The HP QuietJet series printers now come in two sizes. The previously introduced HP QuietJet Plus printer is especially useful for users needing a wider carriage for graphics and spreadsheets. The new HP QuietJet printer has a narrow carriage so it takes up less space.

This new printer offers all the features of the popular wide-carriage HP QuietJet Plus printer including near-letter-quality printing, choice of print modes, and quality graphics. Even though it's smaller, this narrow-carriage printer handles standard size paper, and it's less expensive.

The new HP QuietJet printer is ideal for word processing and other business applications.

Now there's a Hewlett-Packard printer to meet a wide range of your needs: the HP ThinkJet printer, a compact printer that brings quiet to personal computer printing; the HP QuietJet Plus printer, a wide-carriage printer that offers all the features needed for personal printing, and now the new HP QuietJet printer with a narrow carriage.

Whether its business printing or personal convenience printing, there's an HP Jet-Series printer for everyone.

The HP Business Consultant has a partner

The HP 82240 Infrared Printer is a new partner for the HP-18C Business Consultant calculator.

This new thermal printer communicates with the Business Consultant via an infrared interface—there are no cords to tangle with. Just point the Business Consul-

The completely portable HP 82240 Infrared Printer works up to 18 inches away from the HP Business Consultant calculator.

tant at the printer and push (PRNT) or select from the printer menu options.

The infrared printer works up to 18 inches away from the Business Consultant and is completely portable. It is powered by four AA batteries or by an optional AC adaptor.

In just under a second the HP 82240A prints a 24-character line. Now you can have a printed record of your calculations quickly wherever you may be.

IN BRIEF

- **Fast LAN.** A new version of the HP OfficeShare Network, HP's local area network (LAN) for personal computers, provides faster access of computer files from a personal computer server to both HP Touchscreen and HP Vectra PC (and compatible) workstations. With the HP OfficeShare Network, you can share peripherals and information with other PC users on the network. This lowers your investment in office equipment and increases productivity. Instead of buying several printers and plotters, you can invest in a single, high-performance printer or plotter for an entire network.

- **AT&T Agreement.** HP's Components Group and AT&T have agreed in principle to work together to set common components standards for fiber-optics products used in local-area networks (LANs) that link a variety of computers. The standards will also be applied to short-distance fiber-optics applications. The two companies believe the agreement will be a major step in setting de facto standards for fiber-optic components and cable in the U.S. and stimulating development of fiber-optic applications in LANs and computer systems.

- **Voice Technology.** Office Talk,* a new voice communications manager for the HP Vectra personal computer and other IBM PC/AT compatibles, uses voice-data technology developed by Natural Micro-Systems Corporation of Natick, Massachusetts. Office Talk features telephone management, voice messaging, an appointments diary, a memo pad, and remote access to all of these functions through telephones anywhere in the world. Office Talk can handle your phone calls while you are using your computer for other work.

  Available in the U.S. and Canada.

New HP 9000 moves 3-D CAD images in real time

Now you can create sophisticated 3-D computer images with the new HP 9000 Model 320SRX technical workstation, designed for engineers working on applications that require high-performance graphics, such as mechanical engineering computer-aided design (ME CAD), molecular modeling, mapping, and high-end architectural and engineering construction.

With the Model 320SRX, solid images can now be rendered 10 to 20 times faster than on other workstations. It has innovative graphics architecture, custom very-large-scale integration (VLSI) circuitry, and graphics instructions incorporated into the hardware and microcode. This new workstation provides economical power for CAD applications that require high-performance graphics, realistic rendering, and interactive design.

In developing the Model 320SRX, the goal was to give design engineers using solid modeling an interactive response similar to what is expected today from wire-frame applications. The VLSI can now compute realistic 3-D images fast enough for the operator to manipulate them and see the results in less than a second.

Up to now, a graphics workstation could not move solid 3-D images in real time. It could only move a wire-frame 3-D image in real time and then turn this skeleton into a shaded, colored image. Rendering the final image could take up to 60 seconds on some systems.

The new HP 9000 Model 320SRX lets engineers manipulate realistic 3-D color images and see the results in less than a second.

To find out more about Hewlett-Packard or its products and services, please call your local Hewlett-Packard sales or service office. Note: Not all HP computer products are sold and supported in all countries.