With those words Bill Hewlett opened the 17th annual Hewlett-Packard management meeting, a two-day gathering of 61 officers and general managers near Carmel, California, late last month. Theme of the meeting: The challenges in becoming a billion-dollar company.

Measure

For the men and women of Hewlett-Packard/July 1973
A restatement...

by Bill Hewlett, president and chief executive officer

"Structurally, we are a highly diversified organization, with independent divisions that, in turn, are formed into groups.

"In this situation there are two possible ways to go. We could allow each division or group to operate as completely separate businesses. Under this arrangement life would be much simpler—each would have its own profit center, and you would simply observe how each was doing.

"No doubt we could be very successful at that—but I think we would then be just another company.

"On the other hand, our strength lies in the fact that our divisions have real freedom of choice in their operations, yet we have learned to talk across these divisional and group boundaries. This has enabled us to share our problems and strengths, thereby building a much stronger company.

"If we do operate on this basis then that alone is an excellent explanation of why we need to be refreshed—so that we can meet each other and really try to learn how this company is operated, and to talk about our common problems and goals.

"Another important aspect is to review our ability to do a job of planning. Long-range planning, as such, is a fairly recent development at HP. We started it about five years ago, and we have found it is something you don’t learn out of books but rather by doing.

"This brings up the question of where we are going. We will be looking at various forms of that question during the next two days, but of all the problems we’ll discuss, the most persistent that I see ahead occurs in the ‘people’ area. Being the kind of company that we are, with a high degree of autonomy at the division and group levels, as well as our belief in the value of individual initiative at all levels, then we have to be sure that we continue to attract an increasing number of good people.

"To manage the various functions that make up this company we will need a steady supply of well qualified people, and we need to train them adequately and give them opportunities at a very early stage to experience the problems of management.

"At this point I’d like to share some of the thoughts we discussed during a recent product review at Loveland Division. It was a particularly memorable meeting for me because I really experienced a sense of what this company is all about.

"In looking at our projections of growth—they were just hard to believe. When we were a million dollar company, we said: ‘We can’t possibly double the number of oscillators that we make and sell!’ Yet we more than doubled it. Then when we reached ten million dollars in sales we didn’t see how we could grow
much beyond that level. Yet we went to 100 million—and now 500 million.

"The growth curves that we see today make you wonder how we are going to go from 500 million to a billion.

"These are very big numbers—so that before the end of this decade we are going to have to repeat or recapitulate the total effort that was made over the past 30 years.

"Yet, as you go around the various divisions, as I did recently, they impressed me greatly. I saw remarkably forward-looking things going on—the kind of creative engineering thinking that leads us into new areas as well as strengthens our position in traditional areas, making it possible for our growth to occur.

"So I must say that—although there are a lot of problems, and we must talk about them—I really feel that if we keep this initiative—this creativeness not only in engineering but also in marketing, quality of manufacturing and other aspects such as financial planning—then these big numbers are not a pipe dream but reality. But it's going to take an awful lot of hard work."
...a reaffirmation

by Dave Packard, chairman of the board

"Early in the history of the company, while thinking about how a company like this should be managed, I kept getting back to one concept: If we could simply get everybody to agree on what our objectives were and to understand what we were trying to do, then we could turn everybody loose and they would move along in a common direction. In many ways I think that has been the philosophy of our company.

"We also decided to sit down and write out those objectives. At one point we debated a bit about what should be first. I stated my belief that profit was one measure that made the other objectives possible, and that it was really the best overall measure of how we operated as a company. Profit allows us to provide the environment in which everyone can contribute their talent and ingenuity, and to achieve their personal goals.

"But this doesn't mean that we overlook the importance of other things. Bill has mentioned the importance of people. It's certainly true that in the long run the success of the company will be determined by the abilities of the people at all levels. By giving people that opportunity, they will contribute with that extra enthusiasm that is so important to this company. We have to keep in mind the thought that everyone is doing an important job. We all have certain things to do, but that doesn't mean that any one person is more important than another.

"One of the things we started talking about early was the fact that we had a responsibility beyond making a profit—that we have responsibilities to the community in which we live, and our success will be determined in some measure by the environment in which our company existed.

"That concept has become much more widely accepted—30 years ago if you made a statement that you had an obligation to the community, many businessmen would have said it wasn't so.

"I think this responsibility to the community is going to become more important. As a result of some recent experiences we have to accept as a fact of life that some people do not accept any business enterprise wishing to grow in a new area. This is further reason to recognize that we do need to participate in the activities which form a sense of community and help shape its opinions.

"In looking at long-range planning, I think it has a very important use for us—that of being prepared for things that are likely to result from our other activities. But I don't think planning is the cause of growth—we can get carried away in thinking that planning is reality. The fact is we are very close to being where—ten years ago—we said we should be today. But we certainly aren't there for any of the reasons we understood then!

"Very clearly, a large share of our profits and growth have come from products and developments that we did not anticipate at that time.

"So as I see these things, it's the development of a better product that largely determines where we are going and where we are successful. It's
just not possible for us to turn an indifferent product into a success by marketing skill alone.

"Another lesson we've learned again is that we can't sell something that isn't developed. I spent a lot of time talking about that subject when I was back in Washington.

"There are other lessons and problems to consider: Getting important developments into production in timely fashion; understanding and controlling inventories—companies have gone broke letting their inventories get out of hand.

"One new problem we face is that we now have a broad enough base that some trouble spots might easily be covered up. Things might look so good overall that we fail to get in and control our problem areas soon enough.

"If we are to continue operating on a decentralized basis as we grow, then we need to understand these things—and do our homework in a thorough fashion."
Some comments and cautions...

by Ralph Lee,
executive vice president

"Looking at 1973 performance to date, orders are obviously riding the crest of a wave. In particular, orders for the pocket calculators are very strong, especially international orders for the Model 35 because we have really just begun to promote it abroad.

"At Data Systems, Paul Ely is going to have his hands full with a rapid growth rate that will have a major long-term effect on the company. Again, international orders for our computer products are very high.

"Traditional instruments are still the heart of the company, amounting to more than half of volume, with good growth rates and a performance well ahead of target for the year.

"For the past three years, Medical Electronics has had the highest sustained growth rate in the company. Profitability has steadily increased.

"In International, after a relatively flat period, we're now seeing a real turnaround. In fact, the growth rate for International has forged into a lead over our U.S. rate, driving the whole curve upward.

"Other areas, including Analytical, Service, Delcon, Parts and miscellaneous operations all show steady, sustained growth, with the international portions of these areas having the largest share of the gain.

"One area we will need to review carefully is the cost of administration. This has moved up well ahead of target, due mainly to some increased order-processing costs. Marketing and selling costs are also high—at a faster rate than shipments.

"One problem that has affected all of us is inventories—and it's just as complex as can be. The problem got started right at the outset of 1973. Deliveries by outside suppliers began to slow down, forcing us to work around shortages and to accumulate a lot more work in process.

"The cost of inventories has consequently moved sharply higher, and we are going to have to do something about it."

Planning for people...

by John Doyle,
director of Corporate Planning

"There's no question that during the rest of this decade we are in for a period of significant growth—but not necessarily at the same rate we have experienced over the past 18 months.

"The forecasts prepared by all HP organizations indicate that during that period we will pass the billion-dollar a year mark, that we will have a worldwide employee population in the neighborhood of 40,000 people, and approximately 10 million square feet in facilities.

"Even if these forecasts are optimistic for the short term, we still have a big job ahead of us in planning.

"And in my view the biggest job we face is that of training people—the 20,000 or so people—who will join us during the next few years in filling new jobs as well as replacements for normal attrition. The HP way of doing things needs to be explained, and it takes some time to understand it, to appreciate it and to practice it. But this is well worth doing in order to keep the kind of successful, informal and adaptive company that we are—even as we grow large.

"In doing our planning we will have to consider a number of variable factors.

"In spite of claims that we are part of a 'managed economy,' we can expect continuing periods of inflation and deflation, tight money and easy money, devaluations and revaluations. In fact, the only consensus about the economy over the next couple of years is that there is no consensus.

"We can now see a much closer coupling between the U.S. economy and the economies of other countries. Where there once was a lag time between related events of about a year, it now is closer to six months or less.

"All in all, we need to do our planning carefully. We need to worry about the effective ingredients of our business—the people, the cash, and the land. Most of all, the people:"

Opportunities for growth...

by John Young, vice president, general manager of Electronic Products Group

"In reporting on the projections of our divisions, it is encouraging to see that there obviously still are many opportunities they will be pursuing in the years ahead. As historically has been the case, there are more things we could do than people or money to do them so it's vital that we concentrate on solutions to the real problems of the future.

"Plans developed by the managers of our EPG divisions show a doubling of orders over the next four years. This may be optimistic, but let's see what is revealed by an examination of the individual segments of our EPG 'store':

"Components—optoelectronic and display products together with high frequency components—are forecast to grow very rapidly in 1974, and at a slower, but still significant rate in succeeding years. The broad and growing technology base of the company provides many new areas to consider for growth opportunities for components.

"Systems is an area that has grown very rapidly, and there are many opportunities to take orders and put complex computer based measuring solutions to work. But we must look more closely at the balance between growth and current profit performance, and concentrate on those fewer areas where we can clearly make a contribution and get paid for it.

"Distance measurement—DMI—has come a long way in building a forward looking business over the past three years. They have a very aggressive new product program underway, with good growth and profitability prospects.

"Our traditional instrument product lines are projected to become a half-billion dollar business over the next several years. Digital testing and logical troubleshooting in particular will have a major impact on products from a number of divisions. We also see communications and related measurements as an attractive area. At the same time, we will see maturing markets in some products areas, and there is a need to further develop solutions to customer problems in industries new to electronics such as automotive.

"One point I would like to urge is that managers become more personally and directly involved in the planning being done in their divisions and departments. It's important that they have a hand early in the planning cycle and that they communicate management's viewpoint, rather than acting chiefly as a clearing house for plans prepared by staff people in engineering, marketing and manufacturing."
by Bill Terry, vice president, general manager of Data Products Group

"I think there really are great market opportunities for small computer systems, and each day's experience brings new opportunities. Therefore, I think we can realistically project good growth for our computer business.

"However, the size and growth rate of HP's data products activities has rededicated many of us to keeping this growth objective in proper perspective with other HP fundamentals such as profit.

"The present challenge is in raising the level of profitability in the Data Systems area. Here, investments in R&D and marketing have been deliberately high. What are we going to do about this?

"First, we have to re-emphasize HP fundamentals of making a sound technical contribution with a product that is clearly better than anyone else's.

"Then we have to surround it with the required investment in marketing and manufacturing. This approach has worked well for HP in the past, and is just as applicable to computers, even though it means keeping the task well defined and doing a few things well. In doing this, we are not going to be able to do everything that everyone wants.

"Finally, we've got to take a harder look at the so-called 'gray areas,' and stress clearly defined product contributions that are profitable and not just different 'convenience versions' of another division's products.

"Calculators, of course, are a very bright spot for HP now and we can look forward to a lot of very good new product contributions forthcoming from Advanced Products and Loveland.

"Overall, we have a lot of very good people to help us do what we have to do. 1974 will be a year to become more efficient and get greater returns from the investments of the past. It will be quite a big job, with plenty of challenge for everyone!"

Meeting fundamental needs...

by Dean Morton, vice president, general manager of Medical Electronics

Dean Morton, made it clear he and his MED people feel very optimistic about reaching their five-year growth objectives:

"Our whole position in the industry is stronger than ever before.

"The most important single portion of our medical business is patient monitoring, or ICU, and this has done very well for us. However, several of the newer lines, such as x-ray, respiratory care and perinatal, will grow at an even faster rate.

"Our entry into the medical x-ray business through the acquisition of Femcor (now the McMinnville Division, Oregon) gives us great potential in a $500 million-a-year market.

"Our perinatal products represent one of our fastest growing and most profitable lines. HP GmbH at Boeblingen is responsible for these products which are gaining wider and wider acceptance by the medical profession in the U.S. as well as in Europe for fetal monitoring before and during childbirth and for neonate monitoring after childbirth.

"Another growing area for HP is in medical computer systems. The application of computers to clinical medicine for patient care is one of the most important last frontiers for computer technology. And the combination of our medical and data products capabilities gives us an important advantage in this area.

"Externally, a basic force that will be felt throughout the period of the plan is the level and nature of health-care expenditures. On the plus side, the goal of many countries around the world is to provide quality care for all at the lowest possible cost and this implies a continued expansion in hospital use of modern equipment. On the other hand, we
are going to see much more government involvement in the area of device safety and standards and a growing concern for costs, with government stepping in to review capital expenditure plans.

"In the U.S., the regulatory activities of the FDA are probably going to slow down the introduction of some new products. Device legislation hasn't been passed yet but no doubt will become a fact of life that we will have to deal with. Although some of these factors may cause us temporary problems, the fundamental need for technological advancement in medicine is too important and too tied up with progress in health care delivery to be denied!"

New directions . . .

by Emery Rogers,
general manager,
Analytical Products

Some of the high-powered "vehicles" that are expected to help transport HP's analytical products team to substantially higher levels of growth and profitability were described by Emery Rogers, general manager of the Avondale-based analytical team:

"Let's start by talking about the 5700 gas chromatograph series. This line has been good news to us—the payoff of a new direction we set for ourselves some time ago. It is now our basic GC line with very good customer acceptance—to the point where we are now leaders in GC.

"The 5930 GC-mass spectrometer combination looks like a real entrant in new markets related to drug detection, drug treatment centers, pollution detection and the like. The GC unit is used to sort out the materials in a sample, then the mass spectrometer does a very sophisticated job of identifying the components.

"The Hupe & Busch liquid chromatograph line brings us a very powerful technique, one that will receive lots of attention. In process control applications, for example, an LC can get results in a couple of minutes that could take 45 minutes by thin-layer chromatography.

"We are also looking at new areas of interest—new markets and new approaches to existing markets. We are also putting a big effort into strengthening the support of our after-sales service!"
A proper return...

by Ed van Bronkhorst, vice president and treasurer

"I remember years ago that Dave Packard said this company wasn't going to become big for the sole purpose of being big, that we should grow only if we could make a contribution and do it profitably.

"We should never forget that. Yet we hear about such things as 'establishing a market position' for a product, but without hearing nearly as much about making it pay its way.

"Quite frankly, we need to put more emphasis on improving our profit margins. Years ago we used to think in terms of 10 percent after taxes. A proper number for ROI (return on investment) was 20 percent on an annual basis. We did reach that figure in 1965, but since then we've drifted off that mark. Yet this is the most critical figure we deal with. An ROI at 20 percent would enable us to pay as we go without having to resort to borrowing or other forms of outside financing.

"To get the curve moving upward again we have to be sure that we get a satisfactory return on the many fixed assets—the buildings and facilities—we invest in. This is particularly true now with so many building programs underway and with building costs at almost twice the level of the late sixties."

Strength through cooperation...

by Bob Boniface, vice president-Marketing

"Now that three years have gone by since HP launched a major restructuring of its marketing organization, it's a good time to assess that change and to comment on its future.

"As a result of restructuring, the company employed what is called a 'product definition' in its selling approach. At that time, we established seven sales forces, with each sales force selling specified products to all potential customers regardless of the business category or market they were in.

"Later, we became aware of the possibility of generating competing products or competing solutions to customer problems in several areas. As this situation occurred, our answer was to shift our customer definition in those areas from a product to a market approach. The goal was to give us greater emphasis on a more in-depth understanding of these businesses and provide a total problem-solving approach.

"Today, with eleven sales-force categories, we employ a modified market approach in three such categories—systems, data systems, and the civil engineering (distance measuring) markets.

"In all of this, one of our chief strengths has been the broad common base of HP technology. Yet, today, it is that same strength—HP's inter-related technology—that is presenting us with a big marketing challenge. It does this, in part, by generating products and solutions that do not necessarily fit within our existing channels of distribution—or that cross over a number of them."

"There are no easy solutions to this; while it is relatively easy to reorganize the company, it is relatively difficult to reorganize our customers.

"However, on the premise that we do want to preserve our basic organizational structure, our fundamental philosophy and our uniqueness, there are some things we can do:

"We need to be sure to recognize and give full credit for product contributions throughout the company. We need to be sure our system encourages the free flow of products to markets and doesn't establish artificial barriers within HP.

"We need to think in terms of HP having eleven channels of distribution rather than eleven independent sales forces with overly restrictive charters.

"And we need to think of quota credit as only one of the measures by which we evaluate performance of the individual field salesman. His total sales contribution must be recognized if we are to foster the high degree of cooperation existing between field people representing the various disciplines.

"I believe our basic sales structure is responsive to our multi-business, international sales requirements, keeping in mind that continuing modification and flexibility will be needed.

"Overall, it is important that we preserve our independent spirit of enterprise while we also maximize our common corporate resources and opportunities through cooperation. In my opinion, these two objectives are not inconsistent."

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Decade of growth...

by Dick Alberding,
director of European Operations

"Europe in 1980 will not contain too many surprises for us, nor will it require any significant changes in course direction than what we are doing now. But it will challenge us as one of HP's most dynamic markets.

"Among the conditions we face by 1980 will be 130 million more consumers in the 17-country market—a total of 350 million people in what will probably become the free world's largest economically advanced market relative to geographical size. On the other hand we face a wide range of national and regional differences—including widely varying cultures and customs, ten currencies and ten languages, and even five different TV-broadcasting technologies.

"Economically, we're looking at a prospect of 5 percent real growth annually plus 5.5 percent for inflation.

"The key message in Europe today is labor scarcity. This looks as if it will continue to be a major fact of life, one that may be compounded by demands for a shortened work week.

"We can also expect to see more devaluations and revaluations of currencies.

"All of these factors obviously will have a big impact on the company. Coping with the scarcity of labor is going to require a lot of planning effort if we hope to hold and attract good people and to improve the efficiency of our facilities. To do this means we must have the best reputation, the best training, and more innovative approaches in manufacturing.

"Overall, Europe is going to become a high-cost, highly protected marketplace. For us to compete effectively there and to gain greater acceptance, we must continue emphasizing our local national character. We must deliver a completely localized service to our customers.

"But above all, we need to be sure that other priorities do not displace HP's management style—its concern for people."

Closer to customers...

by Carl Cottrell,
deputy director,
International Operations

"In serving the worldwide markets of 1980 we are going to have to get a lot closer to our customers as well as the HP people in the field.

"To do this, Intercontinental Region (Icon) will undertake a strategy of decentralization that eventually will result in area general managers and technical support being located on site rather than in Palo Alto.

"We will also have to give serious consideration to more local manufacturing, setting up operations where that becomes important in overcoming problems of protectionism or for better proximity to customers.

"At the same time we hope to be able to communicate readily with the worldwide HPIC organization with equal ease as we now communicate between Geneva and Palo Alto."

* Serving HP International markets outside of Europe.*
Six simultaneous workshop sessions (each held twice) plus informal gatherings gave participants at the HP meeting a real chance to swap a wide range of management experiences and views:
GENERAL MANAGEMENT

Broad questions relating to orientation of new people, profitability, planning and compensation policies were reviewed by the workshop led by John Young, vice president and EPG general manager, and Bill Terry, vice president and general manager of Data Products Group. The company has a catch-up job to do in its orientation of new people, having hired record numbers this year. The use of some new mass communications techniques such as videotape can help. But it concluded that there is no substitute for the face-to-face communication that is so much a part of the HP tradition and style.

FINANCE

The two finance workshops headed by Ed van Bronkhorst, vice president-Finance, and Jerry Carlson, manager of Corporate Accounting, considered the key questions of return-on-assets and return-on-investment: What should they be? It was generally agreed that the company should pay for growth out of its own funds—that we should be able to depend on profits rather than loans. Discussion also focused on the question of how to account for acquisitions, and methods of developing better views of assets and operations at the local management level.

MANUFACTURING

Ralph Lee, executive vice president, and Jim Ferrell, general manager of Manufacturing Division, tackled the tough and timely problems of inventories and production targeting in their workshop sessions. Among approaches to these problems were more and better long-term planning of production, and more local control and responsibility in the case of inventories. Another discussion centered on the "people problem," particularly the important role of the first-line supervisor. The workshopers also talked about the potential effects of the energy crisis on HP, the problem of keeping facilities apace with growth, and sub-contracting relationships.

(continued)
PLANT EXPANSION AND SITES

When should a division begin thinking about an expansion site? Discussion on that point led off a workshop chaired by Bruce Wholey, vice president-Manufacturing, and Paul Ely, general manager of Data Systems Division. Their conclusion: the search should begin well before the present plant is half full. Regarding financing of new facilities, the workshop endorsed the present policy of self-financing as a self-discipline that’s healthy for a division—in keeping with HP objectives. It was noted that, in the long run, there was little if any worldwide difference in the cost of establishing facilities. The workshop also agreed that our present optimum size for a site—100 to 150 acres—was about right.

PERSONNEL

The problems of hiring, integrating and developing large numbers of people on a worldwide basis were reviewed at length in discussions led by vice presidents Ray Demere (EPG-Operations) and Ray Wilbur (Personnel). It was noted that in some areas of the company more than half of the people were relatively new, and that projections indicate still further major increases in the percentage of new people. The workshop concluded that HP faces a big task bringing these people “aboard”—in acquainting them with the HP philosophy. The workshop also reviewed compensation philosophy and practices, progress in equal opportunity programs, and the “generation gap.”

MARKETING

Bob Boniface, vice president-marketing, and Jim Arthur, general manager of Customer Service, led discussions that ranged widely over the field of HP’s marketing programs. In particular, they talked about the new Marketing Council. Formed earlier this year, the council is made up of marketing managers from each discipline, plus International, group, region and Corporate representatives, with the basic purpose of reviewing HP’s corporate-wide policies. The council recognizes that the various disciplines share a large common customer base, hence there is a need for continuing intercommunication and cooperation. The council is also functioning to resolve potential conflicts between the product areas.
Things to do and not do in avoiding legal pitfalls and problems in business were reviewed by John Chognard, Corporate general counsel. The gist of his message: get in touch with the legal staff if any legal involvements are anticipated—the sooner the better.

Jim Arthur, Manager of Corporate Customer Support, reviewed the current trends in replacement parts and customer service. Important factors in both areas include the size, rapid growth and increasing complexity. HP uses more than 400,000 individual parts in its manufacturing operations. He noted we must improve the distribution and utilization of replacement parts inventories in both the parts centers and sales regions. HP has an outstanding service organization, but even closer cooperation and planning between the service organization and manufacturing divisions will be required to meet the customer demands of the future.

A series of workshop meetings between HP's R&D managers last April reviewed some significant directions in the technologies employed by the company. This was reported to the general management meeting by Paul Greene, director of HP Labs' Solid-State Lab. Among the major points discussed were: technical problems of dealing with global standardization of the new computer interfaces—the so-called ASCII bus; and the importance and potential impact of the various IC technologies.
With so many new faces coming into the company, and with so many of them young people brought up on the new life styles and attitudes of recent years, has any "generation gap" shown itself within the company?

That was one of the questions discussed in a workshop on personnel matters during the recent HP management meeting in Carmel, California.

The participants, a cross section of general managers and Corporate staff people, concluded that, in fact, there was no great gap within HP. It seems that the people of longer service in the company tend to be parents of grown or growing children who have done a real missionary job in making their views and values known at home. And some HP managers and supervisors are young enough to be virtual contemporaries of the youthful newcomers.

Is it possible that Generation Gap was just a minor detour, after all?