INTRODUCTION

My remarks today are about some -- five to be exact -- basic beliefs which have guided me over the years in the practice of management. Even more important, however, is the belief that a succinct and clearly articulated set of personal management principles is essential for each individual who wishes to be a successful manager.

That necessity is greatly amplified during times of turmoil and changes. Certainly that is true of today's business and social environment, so by way of introducing my thoughts on management principles let me begin with a few comments on the environment in which you must manage.

Read the business section of a newspaper or magazine and there's a good chance you'll come across the words "restructure" and "downsize".

As recently as the early 60's neither word was listed in Webster's Seventh New Collegiate Dictionary. By 1985 both words were listed, with "downsize" defined this way: "To make in a smaller size...downsize automobiles."
corporations. And the definition might read: "To narrow the focus of an organization's activity. To make leaner and more competitive."

And every indication is that the surge in downsizing of the '80's will continue. In last Tuesday's WSJ (7/9/91) the consulting firm of Temple, Barker and Sloane was quoted as predicting that one in three U. S. companies would downsize or restructure every year for the next five years.

Three years ago it was estimated that downsizing and restructuring had eliminated approximately 1.5 million professional and managerial positions at U.S. companies over the previous 10 years. Obviously, that figure has increased substantially and, as the Journal article suggests, will rise even higher as American corporations continue to downsize.

In this month's Fortune article on John Akers and IBM the writer of the article refers to "the chaos of today's computer industry". While "chaos", I would have to agree, is particularly rampant in the computer industry, that industry is by no means an "isolated island" of chaos.

Executives of Chrysler, GM or Honda would, I expect, hardly describe their world as one of idyllic calm.

Last week speaking to the CEO of a major energy company he said in a tone of exasperation: "Bob, do you know what the wellhead price for gas is today"? I didn't. "$.89", he said, "hell maybe it would be easier if they just made it zero!"
And those of you traveling to Russia in September will have the opportunity first hand to experience ultimate economic and social chaos. (EJO story - reception for 150 people $480. Laundry $220).

What is going on here? It's easy enough to simplistically dismiss each instance of a troubled company, industry, or country as a failure of its strategy or management. Russia, the failure of centrally planned economies. IBM, a "fat, overconfident giant...an asset-heavy, people-laden, bureaucracy-ridden aggregate" in the words of the Fortune article, struggling to adjust to the world of "high tech jelly beans" in which it finds itself. And so on.

No doubt there is truth in each individual analysis. But I believe it is more profound than that. Our models and paradigms don't fit, and we don't know why. Recall that Krugman, for example, made the valid point that "free trade" as a strategy won't work in a world of imperfect competition and increasing economics of scale; yet "managed trade" is subject to so many unknown consequences that it, at best, must be used with great caution and many would argue is unworkable. That is but one example of models or theories made invalid by oversimplified assumptions and boundary conditions.

It's as if we were to solve the problems of atomic physics using the equations of Newtonian mechanics. And no Albert Einstein or Erwin Schroedinger is around to give us the model of a "unified field theory" or the "equations of fluid flow".
competition. And information technology has fundamentally extended global awareness and shortened response times.

There are smart people everywhere. There are also people with desires, ambitions and demands -- not even to mention unmet basic needs -- everywhere. We live in a world of increasing disaggregation with needs which can be met only in the aggregate. Said another way, we live in a world of “interdependent independence”.

For all the adult lives of everyone in this room, that force has been growing, pressing, and shaping the world around us. For 50 years, from Wendell Wilkie's One World to Toffler's Third Wave, we have been reminded by writers of every ilk of its growing presence. And inevitably, as it has grown, the counter-balancing force of individuality has also grown. Look around us. Take energy and food -- the very basics of existence: Essentially no nation on earth is self-sufficient in both the necessities. Yet have we seen larger and larger political conglomerations of peoples? Quite the contrary, fifty years ago there were 79 nations in the world -- today there are more than 170.

From the Baltic shores to the Middle East -- not to mention our neighbor country to the North or the turmoil in Yugoslavia -- there is a clamor for ethnic and political independence.

Economies of scale are more technologically necessary today then ever before, but in the name of “competitiveness” downsizing and spin-offs are
before, but in the name of “competitiveness” downsizing and spin-offs are the order of the day.

We must structure ourselves to deal with this “interdependent independence” that will be necessary for 21st Century existence. “Interdependent independence” -- is that achievable? or is it just another oxymoron? If it is, in fact, to be workable it requires new models of organization, management and leadership.

**Five Principles to Manage By**

The demands of a turbulent world and the process of management are not only many in number, they are varied and even conflicting in nature. More than ever, then, it is important for a manager to have a personal philosophy of management, a set of principles you believe and practice.

There are five such principles that have guided me over the years. They were particularly helpful as guideposts through Control Data’s turbulent changes during the period 1985 - 1990.

The first principle has to do with motivation. Why should a person want to manage? What is the reward? Baseball Hall-of-Famer Yogi Berra once said, “You got to be very careful if you don’t know where you’re going, because you might not get there”.

That statement is especially true for anyone going into management. You should know exactly what your objective is. And, yet, too many people just stumble into management. They don’t really know what their objective is
Well, the answer is straightforward: The true reward of management is accomplishing complex tasks through the success of others. Once you have experienced that feeling, nothing else in business will ever bring you complete satisfaction. If your prime goals are personal recognition or riches, there are better and easier paths to take. I might add that management is both complex and ever-changing. So it offers both great intellectual challenge and variety. Likewise it offers the opportunity to work with others in the most rewarding way. That is to simultaneously learn from and teach others, to stimulate and be stimulated by others. Openness and a desire to learn are fundamental to a manager's success -- and realizing its rewards.

The second principle is: Develop your own style...learn from everyone, imitate none. Success in this development depends more than anything on remembering that your first obligation is to provide an environment that will enable your subordinates to realize their full potential. And fitting your own strengths and weaknesses to that purpose. This intense focus on an enabling environment sounds easy. Yet know it's not or it would not be such a lucrative segment of the training and consulting business.

The third principle concerns challenge. A manager's greatest challenge is to encourage risk-taking change agents. This is particularly difficult in large organizations. The responsibility for and importance of this grows greater with the higher level of management. Innovation is not in the character of large organizations. It must be consciously induced and separately nurtured or it will be smothered and eliminated by the organization.
More often than not, the people who are most innovative have characteristics that make them unappealing to the organization at large. Indeed, they frequently work at cross-purposes to the objective of the organization so the management job in this regard demands an excellent sense of balance. One thing the manager must remember is this: while most innovators are mavericks, most mavericks are not innovators.

The word innovation, by the way, has a semantic halo effect that results in the association of innovation with the creation of some wonderfully new and different product or service. But the management task with respect to innovation at once more mundane and more profound than that.

What it amounts to is this: a manager must inculcate in the work group the concept of continuous improvement -- change -- in every work process. Said more simply, it's the "There's gotta be a better way" mind-set. So embracing the change in the work group is the single greatest challenge of management today and for the future.

The fourth principle is that of management responsibility.

In the 1970s there was a running debate as to whether the purpose of a business enterprise was simply profits or encompassed a larger set of "social responsibilities".

In recent years this debate has become more narrow. Mere profits no longer suffice. The issue has taken the form of whether the corporate
responsibility is solely to the shareholder -- more explicitly to the shareholder value -- or to a broader group called stakeholders -- customers, employees, shareholders, and the communities in which the Company operates.

Unfortunately, the debate is most often set forth in terms of invective and rationalization rather than insight and rationale. So there's nothing to be gained here from reciting the familiar arguments.

At the root of all this is a failure to understand the difference between “creating value” and “realizing value”. Indeed, the misunderstanding is so profound that people continually refer to the process of realizing stockholder value as “creating stockholder value”.

“Creating value” or “creating wealth” (and I'll use the terms interchangeably) means building competitively advantaged businesses and, over time, generate superior financial performance. Creating wealth is a relatively long-term process. “Realizing wealth” means to rearrange, or broker a portfolio of businesses or properties so that the underlying values become more immediately evident. In the case of publicly-owned companies, this leads to a higher stock price. Realizing wealth is a relatively short-term process.

Clearly a business and its managers have the responsibility to both create wealth and realize wealth for its stockholders. And I assure you that while realizing wealth primarily involves analysis and paper, creating wealth is much tougher, and is impossible without an intense focus on customers and
employees.

Furthermore, social change can just as surely threaten business as can technological change or change in its financial health.

The challenge to the manager is to correctly sense and appraise the environment and its changes and establish strategies to both create wealth and realize wealth. Without exception, change will present market opportunity. The degree of health of the organization in its multiple dimensions -- stockholders, employees, customer base and community relations -- determines its ability to grasp those opportunities.

The fifth, and last, principle involves the personal resources of managers. The managerial job is physically, emotionally, and mentally demanding. Poor husbandry of those personal resources will ultimately result in failure.

Timeframes in management tend to be extended. The results of missed opportunity or lack of vigor are seldom immediately apparent. A sense of urgency is fundamental. And yet a proper sense of urgency is not possible for people who are physically debilitated, mentally dulled, or emotionally unstable.

The management job demands perspective. Perspective can only come from experiences -- as many experiences as you can cram into a day. Reading is the only shortcut to actual experience available. It is simply a way to share the experiences of others, and therefore, it is highly leveraged in this matter of gaining perspective. Even so there is a caveat. And that is: always
try to learn from what you read, but don't always believe what you read.

Today we have the potential for another shortcut to gaining insight's perspective, and that is computer simulation. Although computer simulation of physical process is an everyday affair, computer simulation of human resource management processes is rudimentary at best, and very rare in any event. So at this point unfortunately it remains only potential.

These personal resources -- intellect, emotion and health -- are highly interdependent. Intellectual achievement and mental alertness are impossible with a sluggish body. Mental confusion and distress leads to physical deterioration. And disorganization of time use can induce pathological states in either body or mind.

Those, then, are the five principles that have helped me as a manager and executive. I have thus far discussed them in the abstract, but let's look now at the principles in practice.

THE PRINCIPLES IN ACTION
In 1985 Control Data lost $567.5 million. The Company's liquidity was so bad that U. S. lenders refused to advance additional funds, forcing the Company into default on its domestic debt. The imminent demise of Control Data was routinely predicted in the media.

In December 1985, someone gave me a bumper sticker that pretty well summed things up: "It's been Monday all year".
In that setting, I became the Company’s board chairman and chief executive officer.

No manager, no leader, could ask for a greater prospect of reward than to enable the people of Control Data to overcome the problems and their fears in that winter of 1985-1986.

So principle number one was operating in full force. The challenge and the excitement for me are difficult to describe. And, looking back, the sense of accomplishment, the reward of that sense is impossible to describe. But one comment by a senior executive sticks in my mind. In response to a comment regarding my successor and the outlook for the future he said: “Yes, he may be the right person for the future but only one person could have brought Control Data through the past five years and that’s Bob Price. Without him we wouldn’t have a future”.

You can live a long time and never know a reward like that.

I should add that much of the media and financial community didn’t necessarily see it that way. As I say, personal reward and personal recognition are two different things.

There were two major problems evident in the Company: overdiversification and overcentralization. What was not so evident were those aspects of the Company’s culture which had given rise to the problems. The problems themselves could be attacked rather expeditiously. But the underlying causes likewise had to be fixed if we were to have permanent change and
improvement. This, by the way, was in no way made easier by the fact that I was part of the culture.

The task of addressing overdiversification was both an opportunity and a challenge. Doing so related directly to principle number four -- that of responsibility. We clearly were in imbalance -- busily creating wealth in myriad different businesses and with insufficient regard to the resources required. At the same time we had been paying scant attention to realizing wealth for those -- our shareholders -- upon whom we depended for much of the required financial resources.

We had to do less and do it better. We narrowed the Company's focus to those businesses we felt could be made most competitively advanced -- at least within the bounds of reasonable time horizons and financial resources. Some 20 businesses or product lines were sold. We raised $1.3B through the sale of assets and another $400M through public debt financing. All the bank debt was paid by mid-1986. The stock price more than doubled in the course of 2 years.

Through all this period, however, we never lost sight of the concommitent need to continue to "create wealth" by devising new products and services. Some were relatively short-term efforts -- we introduced more than a dozen new leading edge disk drive products by the end of 1987. Some were longer term -- we continued to expend some $50 million a year in developing a new supercomputer.

That particular effort by the way failed. We ran out of resources -- time and
money -- before commercial success could be achieved, and faced with a potential loss of more than $75M in 1989 we canceled the project and took a write-off on it of over $300M in the 2nd quarter. The press gave me credit for having achieved a record loss in Minnesota history.

The overall effort to reposition the company higher up the value-added “food chain” did not fail and as a result by last year was strategically positioned as the value-added applications systems and services company I had envisioned so many years before.

You can imagine, then, my feelings when I read the article by Andrew Rappaport and Shmuel Halevi in the July-August ‘91 Harvard Business Review. It begins:

“By the year 2000, the most successful computer companies will be those that buy computers rather than build them. The leaders will leverage fabulously cheap and powerful hardware to create and deliver new applications, pioneer and control new computing paradigms, and assemble distribution and integration expertise that creates enduring influence with customers. So long as companies have reliable supplies of adequate hardware - and this seldom means the most advanced hardware - there are fewer advantages and a growing number of disadvantages to building it. The future belongs to the computerless computer company”.

A firm focus on the principle of responsibility -- on the need for balance in both creating and realizing wealth made the job of dealing with overdiversification straightforward, although by no means easy.
Overcentralization was another matter -- it was far more subtle in nature.

Over the years, there had evolved within Control Data a “looking to the center” mentality.

This looking to the center culture was exacerbated by a transactional control type of operation. In other words, control was accomplished by approving individual transactions as opposed to control by establishing strategy and standards and measuring adherence to them.

Ironically, this was not because Bill Norris, the founder, insisted on absolute central control. It was the opposite. He encouraged people to be innovative. Indeed, staff people -- as well as product designers -- were given free reign to be creative. The unfortunate result was a large structure of policy practice, and people to support the implementation of all this staff creativity. And, regardless of what the policy said, people “looked to the center” for guidance in things both large and small.

Decentralization of Control Data, of course, involved many mechanical things -- policy changes, corporate staff reductions, procedural changes, changes in executives, and so on. But underlying all that was cultural change.

The cultural change was rooted in the second and third of my management principles: The second of developing your own management style based on your obligation to help people realize their potential and the third that of meeting the challenge to encourage innovation -- to inculcate the concept of
continuous improvement.

You will recognize in those words of course the essence of what is called Total Quality Management. An additional dimension of TQM is generally expressed as some variant of the phrase: “conformance to customer expectations”.

When you think about it “conformance to customer expectations” is also a way to describe effective marketing.

The word “marketing” means many things to many people. I think it is most useful to think of it like this: Marketing is a system of management that produces an in-depth understanding of what you must do to help make your customers successful. It includes, as well, the processes necessary to assure the successful implementation of that understanding. By focusing on customer success -- their needs and requirements to achieve success -- you, yourself, can gain competitive advantage and success.

So marketing in that sense is strategy. Moreover marketing and Total Quality Management go hand-in-hand in exploring, articulating and implementing successful strategy.

Finally marketing, quality -- and for that matter strategy -- are all about people.

They rest on the three principles of the obligation to help people realize their potential, the challenge to encourage continuous improvement, and
the responsibility to weigh the varied interests of the people who are your stakeholders.

The other two principles, reward and personal resources, have to do with a very special person -- yourself.

I vividly remember when I first articulated the principles for myself. I was on an airplane reading a book on management principles when I decided to write down my own thoughts. I still have the original notes.

About once a year I get them out and test them against a recent experience. I can say they have served me well.

As I was reading them in preparation for today, I came across a statement on leadership and General George C. Marshall, America's chief of staff in World War II and the architect of Europe's postwar economic recovery plan -- the Marshall Plan, as it became known.

Here's what I wrote: "General Marshall was in the context of his culture and background, the ultimate leader. He was stronger and tougher than Eisenhower. He was more rational and considerate than Patton. Above all, he was not driven by ego-mania as was MacArthur. He was as smart as any of them. But his single greatest attribute was . . . self-discipline".

I recall a story about Marshall when he was a second lieutenant stationed in the Philippines. There wasn't much for him to do at the time so he decided to work on improving his mechanical aptitude, which was lousy. He got an
old truck and every afternoon he made himself take the engine apart and put it back together again. He did this until he overcame that particular weakness in himself. This was indicative of the leader he was to become, dealing with himself and others.

Few people can match General Marshall's greatness. But we can follow the example of his management skill and self-discipline as we go about our tasks.

The rewards are enormous.