



DATA PROCESSING MANAGEMENT: IS IT UNIQUE?

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In the past few years, I've become pretty wary of self-diagnosis or diagnosing problems without much data. I don't have much data on your problem, but I do on a lot of other managerial problems. Let's explore the question of whether yours are unique. Certainly we know the forces of change that are affecting all managers today apply to you and probably apply in some ways more stringently. We know that the knowledge of the physical universe is doubling at least every seven years, and that the people you manage and you yourselves contribute significantly to this growth in knowledge. We also know that an enormous amount of information and systematic study and knowledge is coming out of behavioral sciences which tells us we really aren't very well equipped to cope with the impact of physical science as it affects mankind. This isn't a unique problem.

Studies show that the character of the work force has changed dramatically in the last ten years, and again your part of industry is a significant factor in this particular piece of the problem. The growth rate associated with computers -- electronic data processing -- certainly creates a critical situation for you in that quite obviously there aren't enough well-trained, knowledgeable people to go around in your part of the industry. This is a critical problem, but I think history tells that it isn't unique. As a matter of fact, I think I could make a good case today to say that there aren't enough well-trained, knowledgeable people to go around in any segment of our industry. I'm going to assume this afternoon for the purpose of our discussion that you are not talking about competence problems. If you are, I don't think anybody can help you. But again, that

wouldn't be a unique situation. We have to assume competence when we talk about the problems associated with managing people, so I am going to assume that the people you manage have the necessary technical ability. Fundamentally then, most problems of management are human; They are not technological.

Today we know a great deal more about people and about organizations generally than we used to. This again is primarily because of the increasing knowledge being made available to us out of quite rigorous research in the behavioral sciences. This doesn't mean that I view behavioral science as a hard science. It isn't. It's a soft science, probably closer to medical science. On the other hand, research has turned up a surprising amount of useful, systematic knowledge in the field and, because history is an important part of research, it might be useful to go back very briefly and trace the history of human organization. Many of you are probably quite familiar with this subject so I won't take too long on it. The history of American organization and industry can be traced back to the two oldest continuing organizations in the world -- the military and Catholic Church. If you will think of the terms that are used in talking about organizations today, such things as span of control, unity of command, hierarchy, subordinate-superior, and other similar terms, you can readily see that these are both militarily and church oriented. I make no value judgments about either the military or the church as an organization; I simply want to point out that at the time of the industrial revolution when we went from guild and small craft organizations to large mass organizations, there simply was no other place to turn for principles. These principles have been passed along, kind of by osmosis, and I suppose by teaching over the years since. It hasn't been until the last perhaps ten years that anyone has really taken a serious look at these organization principles, and asked whether or not they fit today's situation. I think we can make a case for saying that they don't; that our social, political and economic milieu today

does not support the idea that this sort of organization takes advantage of the motivational forces affecting the administrative, technical and professional people who make up such a significant portion of our modern industrial organizations. Beyond this, our problem has been complicated by the work of Frederick Taylor and his associates from 1910 on, in the area of scientific management. Taylor's work was, of course, historically appropriate to the problems of his time, particularly the relationship of men to machines in assembly-line companies. (Obviously, the relationship of men to machines is a problem with you, but it's not quite the same kind of problem!) Taylor's principles -- the idea of breaking jobs down into the smallest possible component, picking people with the right skills and abilities, training them in the one best way, supervising them closely to see that they do it in the one best way, and controlling their productive behavior by reward or punishment incentive or day rate -- are questionable when applied to scientific, professional, administrative and executive people and is significant to note that this kind of person is accounting for about 50% of our work force today in many areas. Therefore, one thing we know generally about organizations today is that by and large they are designed around notions or problems that are largely irrelevant to today's situations.

What do we know about people generally in organization today? Well, we know for instance that while from man to man we are distinctly unique, as humans we are uniquely the same. We know that predicting anything about one person's behavior is a very risky sort of idea, but we also know that predicting mass behavior is not quite as risky as it used to be. We know, for example, that behavior is always a function of the situation and the individual. That people behave as they do is not simply because of personality, or emotion, but also because of the situations in which they find themselves. We know pretty generally that organizational behavior is a function of situational variables,

leadership variables, and membership variables. We also know that man is not a robot -- a passive receptor of manipulation. Man, uniquely of all animals, can make his own world. We know also, and I think this is very important to computer people, that man is not, has never been, and probably won't ever be a completely rational animal. Only on paper can you separate rationality and emotionality in man. Actually each of us is an inseparable blend of these things, and, therefore, while the machine may be completely logical, people are not. This, it would seem to me, might give you computer managers a rather unique problem in expectation -- you might understandably expect your people to be as logical as your equipment! We also know that most of us manage our subordinates, and deal with one another on the basis of inadequate assumptions, faulty data, myths about human nature, and some sort of self deception or magic that assures us that our particular rationale about people is right, and that of the rest of the world wrong. And finally, for our purposes, we know that behavior begets behavior. In other words, how I deal with you pretty much governs how you're going to deal with me. How I manage my subordinates is going to have a significant effect on how they manage themselves and how they react to my management, and it is quite possible that the apathy and passivity, the frustration and the lack of commitment to organizational goals and the other things that we see generally in industrial organizations are consequences of interacting behavior and not due to the basic nature of man.

Suppose we take some of these ideas and explore them a little. In the process, perhaps you can answer the question of uniqueness for yourself. Over the past few years, I have been picking up some admonitions to managers, and I've put a little list of them together this afternoon. These are things that consultants and management experts say you ought to do if you're going to be an effective manager, and I am sure some of them will sound familiar to you.

1. Give information to subordinates on a need-to-know basis. Don't clutter up his mind with things he doesn't need to know.
2. Make work assignments clear and unambiguous. Set deadlines for accomplishment. Be sure correct methods are used.
3. Having done this, don't do the work yourself -- delegate. Have specific check points in mind, and follow up.
4. Be prompt to reward and prompt to discipline. Be sure that when a subordinate goofs that he understands that you know he goofed, and be certain that he understands he must not make the same mistake again.
5. Have rules and see that they are enforced firmly and fairly. Don't tolerate absenteeism, tardiness, leaving early and the like. Be sure that your subordinates understand that the office is a place to work, and that conversations not relating to work are to be held to a minimum.
6. Serve your own boss well. Don't bother him with problems you should handle yourself. Be particularly alert to keeping a firm hand on subordinate proposals which you know will be rejected on the basis of company policy.
7. Have departmental meetings only when you have something which needs to be communicated to everyone at once or when you need to be briefed. Keep meetings short and to the point. Avoid allowing subordinates to wander from the agenda or to push personal points of view.
8. Learn to distinguish a subordinate's personal needs from those of the organization and make the hard choices. Remember, you are paid to make decisions for the good of the organization.
9. Train your subordinates. A good way is to take a problem for which you have an answer and ask a subordinate to study it and give you a recommendation. This will enable you to point out the mistakes and force him to

think through his recommendations before making them to you.

10. Develop your subordinates. Have a performance appraisal program that will help to identify your weaknesses so that you and they can go to work on them.

I don't suppose everybody will agree with all of these, but they are fairly common assumptions about how to manage people. One of the characteristics of physical science and the reason that it doubles every seven years is because physical science is always challenging its own assumptions. It makes rapid progress as a consequence. To draw a very simple analogy, if nobody had ever challenged Newtonian physics, we wouldn't know anything about atomic physics. Now I'd like to play a little game with you this afternoon and challenge some assumptions. I assume all of you here are managers of one kind or another, and, of course, each of us who is a manager is also a subordinate. I'll ask you now to put on your subordinate hats and pretend that I'm your manager for a little bit. Contrary to the usual practice of managers, I'm going to make some explicit assumptions about you. What's even more unusual is that I'm going to tell you what these assumptions are. You all work for me. And here are my assumptions about you. You lack integrity. You're somewhat dishonest. You're lazy by nature. You avoid responsibility as you would the plague. You don't want to achieve anything. You're incapable of controlling your own behavior. You're indifferent to the needs of the organization. You must be directed; you prefer to be submissive. You avoid decisions. You're a little bit stupid. And you need to be protected from things that might upset you or ideas that might disturb you. My job then is to motivate you -- that wonderful word. I'm going to manipulate you. I'm going to control your behavior on the basis of these assumptions. Now mind you, these assumptions are only true of you; they're not true of me. These are what Douglas McGregor and a lot of others of us call Theory "X" assumptions. From these kinds of assumptions are derived the kinds of rules

I just read you and are derived even more implicitly most of the principles of human management on which we operate.

Of course, as a manager, I don't really tell you these things, although I might tell you one or two of them when I'm really angry. But I think I can communicate them in a normal way pretty well by my very behavior. For example:

1. I withhold information from you. You see, as a manager my integrity is beyond question -- as a subordinate, yours is somewhat suspect. Confidential information is perfectly safe with me, but not with you. I have integrity; you don't. So I devise the accounting systems, and the control systems and the audit systems are designed to cope with your basic dishonesty.
2. I'll assign your work; I'll set your methods and your deadlines. Oh, I use a little participation as a gimmick, but after all, I know you're lazy. If I don't do these things for you, they won't get done.
3. I'm a modern manager, of course, and I know that delegation is a good thing, so I talk about delegation and I'm quite open about delegating with this hand. But just to be sure, I'm going to set up a few little controls over here with this hand so that things don't get out of control. You and I both know that you avoid responsibility, so I've got to keep my eye on you.
4. I use the carrot and the stick theory of motivation, because, like donkeys, you're not going to do anything unless I kick you one time and bribe you the next. You don't really want to achieve anything by yourself.
5. I'm going to devise and enforce all the rules. I'll probably write and sign all the important letters, or I'll have you write them and I'll sign them. I might even screen the incoming mail, to be sure you don't get upset by anything. I'm certainly going to require

you to get permission to travel, to come in late and leave early, to spend company money and to take time off. Everybody knows you're not capable of controlling your own behavior.

6. I'm going to send you to training courses and appraise your performance for development purposes. I'm going to identify your weaknesses and personality defects and give you lectures on economics. I'm going to prod you on profits and clobber you on costs. After all, by nature you're indifferent to the needs of the organization.
7. I'll do the upward and the important lateral communicating. If you have any new ideas, you bring them to me and we'll take them upstairs. We will, that is, if they're good. If they're not any good, I'm going to kill them right here because there's no need bothering my boss with all these crackpot ideas. After all, I have judgment and he has judgment. Quite obviously you don't!
8. If someone else is interested in having you do a job for him, let him come talk to me. I'll deal with you just like a bale of cotton -- sell you or keep you. After all, you're not capable of making these decisions for yourself and I have to keep the best interests of the organization at heart and I know their interests (and yours) much better than you do. (If you should make this decision for yourself, you'll learn something else important and that's not to make that kind of decision again!)
9. When I do communicate with you, I'll do it on a man-to-man basis. This is a simple prospect of keeping you competing for my favor and being sure that I know more than all of the rest of you put together. Fortunately, you're stupid and you don't recognize this.

10. I may ask you to study a problem and give me a recommendation. If you can't guess what I'll buy, I'll give it back to you again until you do. Again, participation is a gimmick but you're a little too stupid to know this.

These are illustrations, of course, of how I get my assumptions across to you. Now, what kind of effect does thing thing have on your behavior? Well, since I don't share information with you, you get pretty ingenious at figuring out secrets, don't you? As a matter of fact, sometimes I tell you a secret. I call you off in a corner, and I say, "Sam, this is strictly between you and me..." Now the trouble with a secret is that it doesn't have any status value unless you can tell somebody else. So now you're in a jam. So you get on the 5:19, and you get your best friend Peter, and you say, "Peter, this is strictly between you and me, but the boss told me such-and-such." Now he's in the same boat! Three days later it comes back to me. What did you prove? You don't have any integrity. You can't be trusted with confidential information.

Since I assign your work and your deadlines and specify your methods and set up a whole series of check points and supervise you closely and clobber you when you try and do it the other way or do it by yourself, pretty soon you learn to let me have my own way, don't you? Then I'm as busy as Ernie Ford's long-tailed cat in a room full of rocking chairs, because I have to do it all myself, and I run around waving papers and screaming about the lack of responsibility of subordinates. You just proved it to me.

Since any fool would rather have carrots than sticks, and since you avoid sticks by not arguing with me or pursuing courses which are right to you but wrong to me -- then pretty soon you lose your initiative, don't you? It's a lot easier just to put in your time and try and guess what I want; do the minimum that

I want, and get your kicks someplace else. Then the bigger job comes along, and you're not able to fill it. Am I blamed for it? No, you! You don't have the desire to achieve. You're not interested in the needs of the organization. You're not interested in developing yourself.

Since I treat you like a child, and I regulate every aspect of your behavior I can get my hands on, you act like a child. You invent excuses for time off. You sneak in late and you sneak out early. You connive to get a travel assignment. You resist appraisal; you ignore economics. You form alliances to keep me off your back. And what do you prove? You can't control your own behavior. You're not interested in organizational needs.

Since I do the communicating, the important kind, and you never learn to communicate as yourself; you never learn the rewards of good interaction with your customers, with your clients, or with your associates. And you never learn the penalties of not knowing how to communicate. Then one day, I step off the curb and get hit by a cab. Are you ready for the job? No. You aren't even known as a serious candidate.

If I steal your good ideas, or relegate you to a minor role when I take them upstairs, or clobber you whenever they're different from what I'd do, pretty soon you quit bringing ideas to me. Then you prove you're not interested in the organization. Or you may get gutty and you may go around me and go upstairs by yourself. Then what do you prove? You can't control your own behavior. You're disloyal. Pretty soon you stop studying problems -- it's a lot smarter to study me and find out what it takes to get along with me. Before long, any behavioral scientist could walk into your organization and look at you and say you're apathetic, passive, frustrated, lazy, not interested in organizational needs -- you've proved all the assumptions I made about you by a self-proving mechanism. Strangely enough, you're probably getting your kicks someplace else, like maybe in this conference.- or working in politics - or building a church -or doing all kinds of things involving hard work, long

hours, little recognition, and no money. It doesn't occur to me, however, that maybe I ought to be building some of this into my organization, so you'd have a chance to make it operate for both of us.

OK - take your subordinate hats off now and put your managerial hats on. Ask yourself if you've ever done any of these things to the people who work for you. Sure you have. So have I, many times. Not because anybody sets out to manage badly, but because we haven't challenged our assumptions in this area. We learn by osmosis, and sometimes we learn under naturally good managers, and sometimes under naturally bad managers. Don't misunderstand me. I don't know any manager who does all these things. But we all do enough of them. We cause ourselves a great many problems in management of people.

Now, let's keep you involved, and let's see if there is another way to go at this thing. Suppose you put your subordinate hats on again and pretend I'm your manager, and suppose I make a different set of assumptions about you. Suppose my assumptions now about you are the same about you as they are about me. We do have integrity. We do like and need work - meaningful work. We need it just as much as we need love or faith or any of the other aspects of a balanced life. We're perfectly capable of assuming responsibility (we have to do it everyday, outside the work situation). We do want to achieve. Not only do we want to achieve, we must achieve. The whole process of living demands this of everybody -- at different levels, to be sure, but achieve we must. We can control our own behavior. We must do this most of our waking hours, most of our lifetime outside the industrial organization. We can become committed to and work hard for meaningful objectives, things that make sense to us and in which we have a part and a commitment. We respect leadership, but we're not sheep. We don't need to be directed and hammered down the road. We're not by nature submissive or

purposeless. We can accept both the freedom to decide and the responsibility for the decision. With our families, our friends, and our associates outside of industry, we have to do this every day of our lives. We're not stupid. We don't need to be protected from problems. Nobody protects us outside the organization from the problems that are generated simply by living or from those we create for ourselves.

We have individual differences, of course. We are individually unique, but we're also interdependent. No man is an island. We can learn to work together, to work through our differences, and to respect our differences. As a matter of fact, we can learn to protect each other's differences while collaborating on difficult tasks. We know the door to development is locked from the inside - that all anybody can do for the other man is to help him hold the door open. We can become committed to the growth of each other rather than the control of each other. Our job, then, is to learn to build an organization, a structure, a set of conditions, some policies, some objectives, some ways of going at the job. These are Theory "Y" assumptions -- the opposite of those which underlie much of our organizational and managerial philosophy.

I haven't time today to describe to you the organizations that are experimenting in this area, but I can assure you there are a lot of them, and the data is pretty unmistakable. The possibilities of performance improvement are up in the several hundred per cents -- not just minor increments.

Put in a nutshell, research on organized human effort in the industrial setting tells us a simple thing: that a manager's fundamental assumptions about human nature are going to govern the way he organizes and manages and are, in many ways, going to dictate the kinds of problems he has. It also indicates that the technological aspects of the job are not a variable here. Beyond this, whether you take R and D or engineering or computers or

clerks or hourly people or almost any kind of organization, the nature of the work is not the complicating problem. The problem lies in the nature of the assumptions governing organization and management. I don't know if you have these kinds of problems or not, but everything we know so far says that these basic problems of management are not unique -- they are fundamental.

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If you want to take another half minute, I think I can tell you some things to look for in terms of organizational improvement. There are some responsibilities to assume as a manager if you are at all interested in getting at this problem. Basically the job is to enhance human interdependence and there are some variables that go with human interdependence. Let me say very quickly that there's an old piece of folklore that says committees set out to build greyhounds and end up building camels. Now there's enough truth in this to make people very weary of groups, but I don't know any way to get at these problems except by the group method. "Common sense" says that groups are ineffective, but I'm fond of an analogy of McGregor's who says common sense also tells us that the world is flat while research says it's round.

Research tells us that if you have the right variables in your group, you can solve a lot of these problems on a face-to-face basis. It takes some guts, particularly on the part of a manager. What are some of these variables? One of them is mutual trust. This is strictly a group variable; it has nothing to do with individuals. This can be measured in a way by the degree of open, authentic communication you have with your people. How many secrets do you keep from them, and how many do they keep from you? When you have a communications session, is it guarded?

Is it cautious? Are people afraid to speak up? Or do you get pretty much the straight dope? This, too, is a group variable and never an individual variable. Communication can never be a one-way thing. Listening is another characteristic of an effective group. The next time you are in a meeting with your own people or others, look around the room and see how many people you think are listening to the speaker, and how many are just marshalling arguments to clobber him when he's through talking.

Without listening, without open communication, you can't get at some of these problems and you can't possibly get open, authentic communication and listening unless you have a very high-degree of mutual trust. Much of the mutual trust in an organization will depend on how willing you are to level with your people and they with you and with each other. I don't mean individually, I mean as groups. Another thing you might look for is how many conflicts in your organization get buried? I think we've been brought up and hooked on harmony -- on the notion that everything should be peaceful. In an organization that has high mutual trust and open, authentic communications, conflicts are an asset if you bring them up and work them through. You might also take a little data from your people on how well they understand the team or organizational objective, and a little data on how well they're committed to it.

All these things can be measured, and the data can be taken in a way that doesn't threaten people. In any event, creating these variables in your organization is not an easy job.