Chapter One

A Personal Prologue: Discovering Theories X and Y

Behavior speaks louder than words.
—— The Selected Wisdom of New Jersey, *1975, no. 99*

I had my first experience with significant employee involvement in the mid-1960s. I was executive vice-president of a firm built on printing technology and direct mail marketing. We had achieved national distribution for our more than 200 products. My father had founded the business on the eve of World War II. Like all entrepreneurs, he did everything himself, hiring "pairs of hands" to run machines, keep books, write ad copy, and print and ship, all under his close direction. The late 1950s saw the development of cheap methods for interleaving business forms with carbon paper and crash-printing names and addresses. This led to an explosion of potential markets. Expensive multicopy forms became mass consumer items anyone could afford.

You could hardly invent a more fertile environment for workplace experimentation. When a market expands 25 percent a year, people have secure jobs and plenty of growing room — a fertile arena for productive workplaces. Even in the 1950s my dad, much to his credit, eagerly sought out new technologies. For many years he had worked in a staid Philadelphia brokerage firm. Now, in his own business, he could indulge his inordinate, even naive faith in modern technology. It would make life better, he felt certain, which meant easier, more cost-effective, and above all Depression-proof. This suited my experimental nature perfectly. We quarreled over

many decisions, but never whether something new was worth trying. Together we made a lot of mistakes. We also enjoyed a great deal of success.

Long before equal employment opportunity became the law of the land, for example, we accepted the tensions associated with hiring blacks into our office. From lily-white in 1959, our work force became by 1966 one-third minority. We also retained an industrial engineer to do a new plant layout based on the inventory required by rapid growth. We upgraded our advertising as many new competitors entered a market our firm had pioneered.

We were among the early computer users in our industry, starting about 1960 when the state of the art was quite primitive. Our first service bureau was the Franklin Institute, a science museum in Philadelphia that operated an ancient Univac, direct offspring of Eniac, the first computer, developed at the nearby University of Pennsylvania in the mid-1940s. Its massive vacuum tubes required a room the size of a tennis court and forty tons of air conditioning. But it organized our mailing lists and customer records and spit out printed reports that told us a great deal about our business we didn't know before. That it had less computing capacity than the obsolete desktop computer on which I now write astonishes me. It also had the frustrating capacity to shape business policy. Among my indelible memories is the first time a system analyst said of a customer decision I wished to make, "You can't do that. The machine isn't programmed to handle it." In short, while the economics were favorable, we had a full platter of social and technological problems.

Crisis Management. Despite my ignorance of management concepts — I had never been to a workshop or read a management book — I was learning a lot about business. My thoughts focused on crisis, however, not learning. I conceived my work life as "going to war every day" (my dad's metaphor). Each day brought new battles to be fought and won. Would the truckers strike and interrupt our supply lines? Would the employees start a guerrilla operation in the shipping department? Would paper company

negotiations break down, causing chaos in the pressroom? Would Congress raise postal rates? What awful crunch would inflation create this week? Could the traffic bear another 4 percent price hike?

I was fighting a war, all right, but only at the level of daily skirmishes. I had never heard of strategy. All I knew were tactics. I had not met up with concepts like management development or supervisory training. Business schools were like the planet Jupiter — remote, inaccessible, vaguely forbidding. Yet by osmosis I had assimilated what social scientists David Bradford and Allan Cohen would later call "the heroic style" of management. "Middle and upper managers," they wrote in a passage that knocked me back twenty years, "are almost invariably preoccupied with control" (1984, p. 28).

In those days I knew nothing about the human relations movement, then washing like a tidal wave over the shores of U.S. industry. The T-group phenomenon, for example, was the subject of intense involvement and research in such companies as TRW Systems, Esso Research and Engineering, and Union Carbide. Thousands of managers were learning in these groups to listen more effectively, take initiative, cooperate, and modify their behavior to have more influence. They also learned that despite formidable improvements in self-awareness and personal skill, they could not alter the policies, procedures, systems, and unwritten rules of behavior at their work sites. Years later I would discover how this research had stimulated many other social innovations — team building, intergroup problem-solving meetings, and other applications of training theory more closely attuned to organizational goals and structures.

None of this did I know in the mid-1960s. My teachers in those years were salespeople, trade journals, competitors, suppliers, my father, who was full of practical wisdom, and our employees, some of whom were mechanical wizards. Jimmie Lee Jones, for example. One day Jimmie Lee showed up on our doorstep from a small North Carolina town, high school diploma neatly folded in his back pocket, looking for a job, any job. I hired him to wrap packages.

Within a year, he was training on printing equipment. Within two years he had suggested a modification to the vaunted Jet Press that the manufacturer declared unequivocally would not work. I insisted the change be made anyway, promising that I would relieve the engineers of responsibility for the (inevitable, to hear them tell it) failure. Not only did the idea work, but the company, without credit to the innovator, incorporated it on future models because it significantly improved output and quality.

Taylor's Legacy. Engineering prejudice against technical problem solving by hourly workers goes back to the turn of the century and Frederick W. Taylor, known as the father of scientific management. Taylor's system called for trained industrial engineers to figure out the one best way to do things. All others — including managers and supervisors — were to keep their hands off. What is not generally recognized today is that Taylor's intent was to increase labor-management cooperation by reducing costs and giving workers greater equity in their output (Chapters Two and Three).

Newer principles that confounded some of Taylor's notions already existed in the mid-1960s but were not widely known until U.S. industry discovered Japanese management and quality circles in the late 1970s. They certainly were not known to me. In the 1960s I was learning the same way Jimmie Lee did — by doing. In short, I muddled through. On one particular day, a significant one for my present career, I became conscious of incentives — not incentives in general, but specific ways to motivate imprinting machine operators to run more jobs each day. I had heard about piecework systems, so I called my friend Don Kirchhoffer, a compensation specialist with a giant corporation, and asked him how they got people to produce more.

Introduction to Theory

Don referred me to compelling research findings: people who work together tend to level off production at a rate that is comfortable for the majority. To most factory workers, the good opinion of

fellow employees is as important as money. Even the best individual incentive schemes rarely result in the highest possible output. He referred me to William E Whyte's research (1955), which showed that if you really want high output, you have to consider the operators' many needs besides money. So saying, Don handed me Douglas McGregor's *The Human Side of Enterprise* (1960), the "Theory X, Theory Y" book written half a dozen years before. I devoured it in one weekend. To use language I did not know then but would learn soon enough, it blew my mind.

Management's assumptions, said McGregor, determine management's behavior. McGregor advocated Theory Y — that most people will take responsibility, care about their jobs, wish to grow and achieve, and, if given a chance, do excellent work. What stops them is managerial behavior based on Theory X, which assumes that most people are lazy, irresponsible, passive, and dependent, and must have their work broken into tiny pieces, tightly controlled, and supervised lest they make a mess of things. This was the theory that Taylor's scientific management had reinforced for decades.

Before I finished the first chapter, I knew which assumptions fit my values. Yet when I looked around our company, I saw Theory X everywhere: time clocks, narrow work rules, jobs so subdivided even an idiot would be bored, grown people treated like children, never let in on decisions, having no consequential information about the business or even their own work, expected to deliver for management and not to reason why, all in return for a $5 raise every six months, a turkey at Christmas, and a chance, if they didn't die of boredom in the meantime, to become supervisors. This title, I observed, gave people who had been treated like children the license to make decisions for *other* people. More, it required that they pretend they knew how. After all, that's what their boss did. Taylor's legacy, unbeknownst to me, influenced every aspect of our company.

The Wall. I had inherited "Taylorism" without knowing it. Now, actively stimulated by McGregor, I decided to reorganize order processing into work teams, a task I estimated would take a few

weeks. Actually it took many months of anxiety and excitement. Meanwhile the supervisors, encouraged by my new accessibility, requested that a wall be built down the center of the large order processing area.

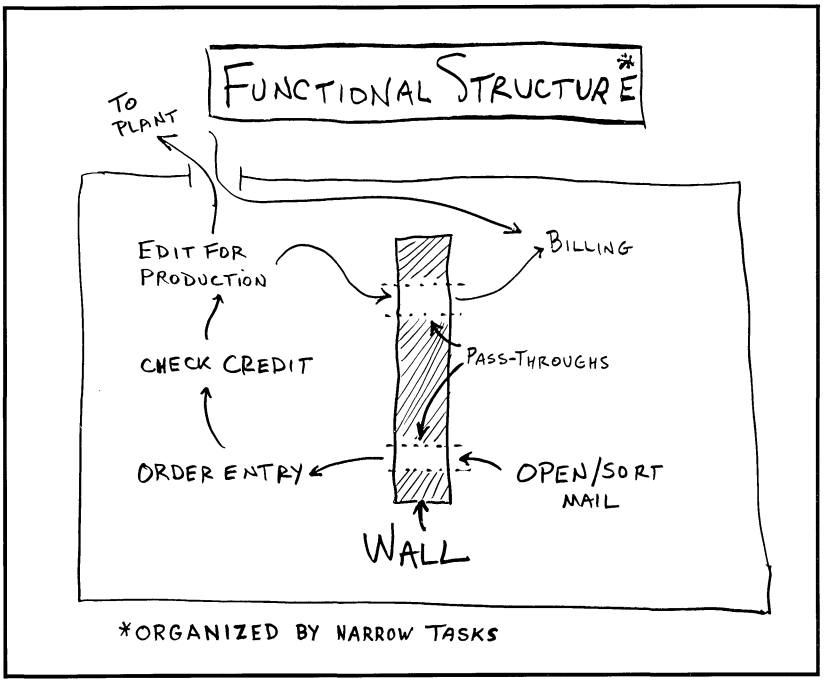
"A what?" I asked, wondering if I'd heard right.

"A wall," one of them said, "between order entry and billing. We don't care which side credit and mail go on."

"Why?"

"The groups fight a lot. Bad feelings are building up. If they don't have to look at each other they won't fight. We supervisors get along okay, but the people distract each other."

By now I was Theory Y all the way. If people needed a wall to do better work, they would get a wall. I called in the carpenters. Next morning an eight-foot-high partition divided the room, with space at each end to walk around. The place was quiet, people bent over their desks. I thought they looked depressed.



The supervisors were waiting for me. "There's a small detail," one said sheepishly. "We need passthroughs so work can go from one group to the other." That same day openings were cut in the wall, below eye level to minimize contact. The "Functional Structure" sketch shows how the wall functioned to reduce conflict in our order processing department.

Despite a nagging uneasiness, I remembered I had determined to change the way I managed. I believed the wall was a good example of my new management style. After all, it was the employees' idea, not mine. People no longer fought openly. They just flashed hostile glances across the continent that divided them, a vast psychological distance it would take me years to appreciate. The wall was a tangible metaphor for the separation of functional specialties, the passthroughs a symbol of the integration required to make such a divided structure work. In their studies of several industries, Harvard Business School's Paul Lawrence and Jay Lorsch (1967) highlighted the subtle ways in which structure influences behavior. Among other things they showed that avoiding conflict (by building walls, for example) hurts output. I have no doubt that our considerable absenteeism and turnover during this period were directly connected to the narrow jobs, formal and informal status differences, and utter lack of trust embodied in our policies, procedures, and control systems.

Under functional structures it's hard for people to discover one another's capabilities. Narrow jobs diminish all workers, including those sentenced to supervise them. This story also reveals the paradoxes inherent in working on one part of what is after all a whole system. I improved my "management style" by becoming a better "listener," and made a participative decision that did not really solve the problem. Had I been more sophisticated at organization development then, I might have called for an "intergroup confrontation meeting" — solving problems and building trust by getting both sides to put their cards on the table. Fortunately, my ignorance freed me to make an important discovery: the subtle connection between relationships and division of labor and responsibility.

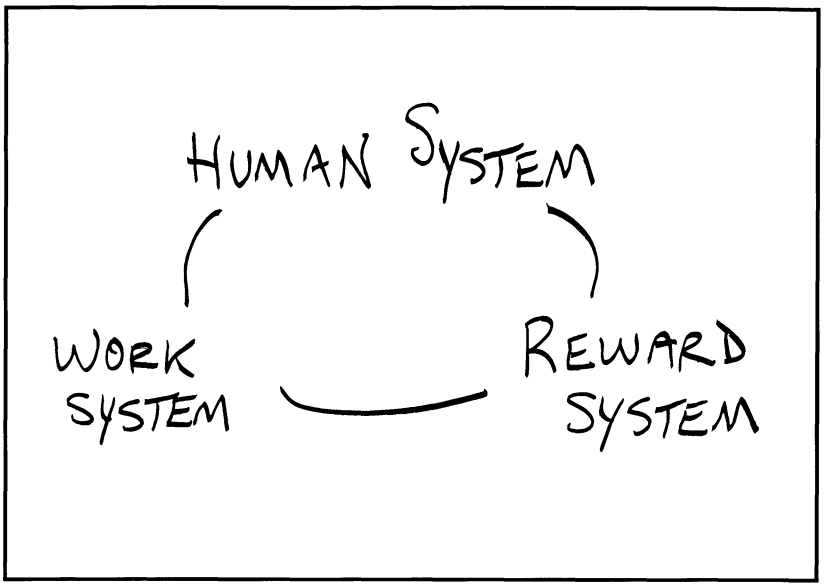
Hiring Consultants. At about this time Don Kirchhoffer, who had given me McGregor's book, offered to moonlight as my personnel consultant. He and Bob Maddocks, a training specialist with the same company, met with us each Saturday morning to teach us how to implement Theory Y. For several months it was nonstop anxiety and excitement — the most intense learning laboratory of my life. At one of these sessions Maddocks introduced me to systems thinking. He suggested I stop building long lists of undifferentiated problems and instead think of myself as managing three related systems, which he wrote on a flip chart with "Human System" at the top.

This introduction to conceptual thinking enormously expanded my ability to manage. For the first time I could see which problems I was likely to solve with, say, a new conveyor system in the factory, and which problems I was likely to increase.

The Initial Project: Multiskilled Teams

At one of these Saturday meetings it struck me that our major business problem was not in printing production. It was in order processing, the department with the wall. There was a very practical reason for starting there: the department was extremely vulnerable to absenteeism. Picture this situation: four or five people staffed each of five narrow functions through which orders flowed on their way to production. One group did nothing but sort mail and send out samples. Another group entered orders, a third checked credit, a fourth made up production orders. A fifth typed and mailed invoices and matched incoming checks with unpaid bills. Each person had a few, simple, specialized tasks, little discretion, and no knowledge of the whole.

About 200 to 300 orders arrived each day by mail or phone. They could become bottlenecked at any point. One absentee in any function could put the whole system down 20 percent. Two people absent from, say, order entry, cut order flow nearly in half, even though 90 percent of the work force was present! This cost overtime dollars and hurt morale because people hate to fall behind in their work.



Reading McGregor on teamwork, talking with Don and Bob, I had an insight. If order processing were reorganized into *teams* of four or five, each with its own customers, a few absentees would hardly matter. People could acquire many skills. Teams could set their own goals and priorities, based on total work load. The entire work force would develop greater flexibility and become more productive. How much more would prove extraordinary — 40 percent, it turned out (a number not unusual, I have since learned, in sociotechnical design projects).

But how to do it? I needed help. Again I approached my friend Don. After twenty years with an international giant, he was excited at the prospect of total systems change in a small company, and he quit his job and joined us. Determined to institute work teams, we called in the supervisors and enlisted their help. Two out of five were enthusiastic, two thought it wouldn't work, and one was neutral. We charged ahead. New teams were formed that included people from each of the five functions with experience in each specialty. The enthusiastic supervisors became floating coordinators and coaches. They did tasks in support of the entire

office — linking with production, for example, buying supplies, interviewing potential new-hires. The reluctant ones chose to work on a team together.

Our model was Non-Linear Systems, a California maker of electronic voltmeters mentioned by McGregor in one of his books (McGregor, Bennis, and McGregor, 1967). At Non-Linear, teams made the entire product and team members put their names on it — so the customer could call them if something went wrong. In our adaptation we gave each team its own customers — about 17,000 of them, arranged geographically — and its own typewriters and telephones. My instructions were succinct, encompassing everything I knew about team management and training. "Teach each other your jobs," I said.

Endless Problems. It soon became apparent this simple dictate wasn't enough. We had problems, endless problems. Team A didn't know what to do when Carrier B shipped to the wrong city. Team D misunderstood the production order sequence. Team C's samples person, three weeks on the job, didn't know all the products. I was appalled at the number of problems we had that previously could be solved only by supervisors or, more frequently, me.

I realized that the flow of crises to my desk resulted from the fact that most employees didn't know what needed to be done or why. For years we had played "blind men and the elephant." Each of us saw a tiny piece of the puzzle — a payment record to be checked, a number to be corrected. Few pictured a customer on the other end wanting fast service and quality products.

I was blind, too. I could picture the customer, but I hadn't the least inkling why it was so hard to reduce our error rate and improve our service. None of us was stupid. We were just ignorant of how many moving parts a business has and how impossible it is for any one person to track them all. With more than 200 inventory items, tens of thousands of customers, and 25 order processors — each of whom had a good working knowledge of only one-fifth of the order processing stream — there was a great deal that could go wrong.

What the Boss Doesn't Know

What I experienced accidentally as a manager in the 1960s has since been demonstrated systematically. Max Elden (1983a, 1983b) in his participative research projects in Norway has shown that people at the bottom have a much deeper appreciation of the range and origin of operating problems than do middle or upper managers. In a bank where a new on-line computer system was being installed, Elden found that top management thought its peak load problem was related to uneven distribution of work and too few backup people. People lower down could relate the problem to organizational structure and practice — overload on the vice-president, centralized decisions, too little flexibility in the work force. In work-design projects this is a predictable phenomenon: top managers sit in on a design team that includes staff and workers. Invariably they are taken aback at their own ignorance of how the system actually works and how little operator knowledge is being used.

The Meetings. At Don's urging, we instituted a radical innovation — meetings. I knew nothing about meetings. My academic training had been in journalism and the social sciences. Before McGregor I had never read a management book. Don, however, understood meetings. Large corporations, he assured me, held them all the time. There was nothing in them I couldn't learn to do. How, I asked naively, did people make up the enormous time lost? (I believed that if you weren't producing something tangible, you weren't working.) They didn't, Don said soothingly; meetings were a part of the job.

Each team would save up its problems and send one member to a weekly meeting. The problems piled up and poured out. The meetings dragged on interminably. I could not believe that such a little business could generate such a long list of problems, or that so many people knew so little about what they were doing — including me. I realized with a pang that the supervisors, now eliminated, had for years been making every decision. Every one, that is, except those (and I suddenly was appalled by the number) that they used to delegate upward to me.

The hourly employees had been what the computer people call peripherals, hooked up like accessories to the phones, typewriters, and copy machines. Now I thought I saw why. They simply didn't have the brains or experience to solve the endless parade of problems. Old Fred Taylor understood this a lot better than I did. After four weeks I was ready to quit. The work team experiment had fizzled. Theory Y was okay in principle but not in the workplace. Maybe business school graduates or psychologists could implement these far-out notions. Not me. I had a war to win. Don was disappointed. Give it more time, he pleaded.

Frustrated, we held our fifth and (I planned to reveal) final meeting. I sat at one end of the table, palms cold and wet. Don sat at the other end. The troops filed in and sat down. Nobody said anything. I still recall that scene: the square office, the small rectangular table with the walnut-grain laminate top, the high ceilings, the tiny windows at one end of the room, the eerie white fluorescent bulbs throwing a shadowless pallor over a depressing tableau.

"Where," I asked, halfheartedly, "are the problems?" I would build the case that the work teams were not time-efficient. My voice wavered at the thought of the speech I must deliver. We had blown it.

"We don't have any this week," one woman said sheepishly.

"What do you mean you don't have any?" I asked.

"Well," said another bravely, sensing my surprise, "nothing new came up. We knew how to handle all the problems from our other meetings." She looked crestfallen, as if wondering what sort of screwup *that* could be.

From our other meetings! (Those long, unproductive, time-wasting meetings?) I could hardly believe my ears. Suddenly I thought of the words of flight instructor Wolfgang Langewiesche (1944), whose writings had comforted me when, as a fledgling pilot, I had convinced myself I would never master three-point landings. "When you really understand something," he wrote, "a little spark jumps. Watch for it!" In that moment, in the fifth meeting, a little spark jumped for me.

Discovering Learning. I understood, really understood, that the essence of effective organization was learning, not coercing and controlling output. I realized that it took time; required real problems to be solved; involved trial, error, give, take, and experimentation. Above all, it generated tremendous anxiety. I also had my first hint of what good managers do instinctively: involve people in setting important goals, structure the chance to learn, offer feedback and support, provide tools and ideas, and stay out of the way.

With a shock I realized that the way we had been running our business was anti-learning. We had no tolerance for mistakes. I wanted everything done right the first time, including solving problems nobody had ever faced before. Naturally, only I could handle such problems. Naturally, only I knew what a fraud I was, appearing to be the only one who invariably knew the right answers. Instead of giving people learning time, I leaped to solutions. I did not understand the subtle connections among learning, self-esteem, and productivity. I thought the work team was simply a structure, another "solution." Suddenly I had a glimmer of the link between structure and process. Team members had learned — almost by accident — how to be self-correcting. But until they knew that was what they had learned, it was not really usable knowledge. In short, we had stumbled on a *process* essential to the success of our structure.

When I attended my first T-group a few years later and heard the expression "learning how to learn," I understood it because of the work teams. For most managers this concept remains very abstract until linked to something they consider important. Without Don and Bob's help I could not have conceived the notion of stopping the movie in the middle of the best part to ask, "Now what — really — did we learn from that?" Instead of dropping the work teams, we decided to cut out meetings unless something affected the whole department.

Within a week the teams called an ad hoc meeting. "We want the wall taken down," said one person.

"Why?" I asked.

"Easy," replied another. I waited. "We don't need it anymore. We like talking to each other." Back came the carpenters; down came the wall.

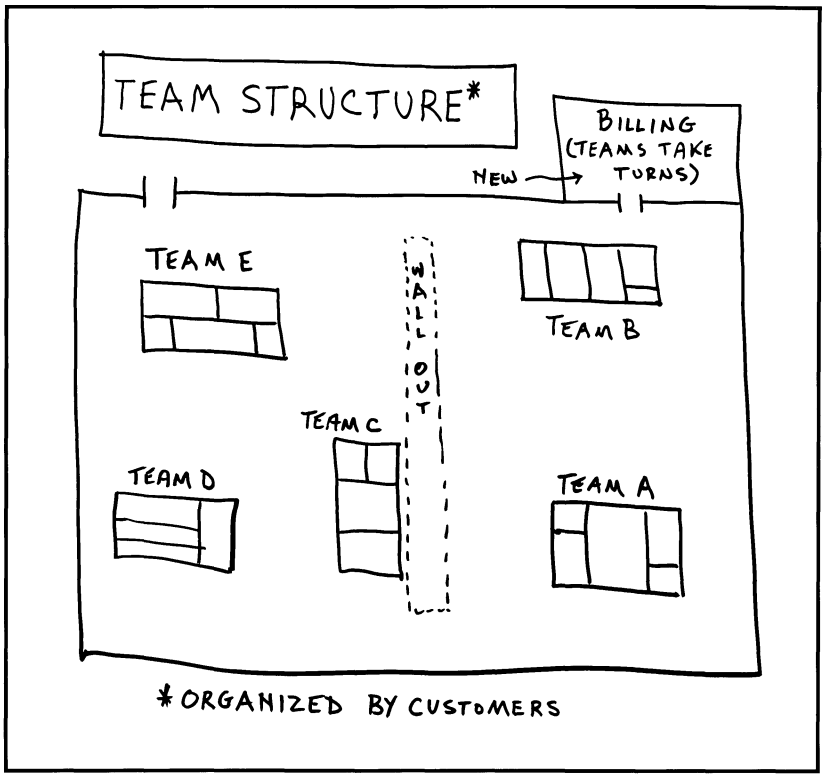
Successes

In a learning organization, of course, you don't need walls. When everybody has a chance to learn, grow, and achieve, when mistakes become okay, when a lot of people get in on the action, there is a great deal more control in the system. It's called self-control. It's the strongest kind, and it can't be bought, legislated, or behavioral-scienced in.

I learned a great deal more about these dynamics in T-groups in the early 1970s, especially the extent to which I liked to do it all myself — and how this kept others dependent, blind, and unskilled — though these outcomes were far from my intentions.

"Pay for Knowledge." "Team Structure" shows our new department layout with the wall gone. Now each team had its own customers, typewriters, and telephones. All team members had a chance to learn every job. Teams began to interview and hire new members. Inevitably, compensation came up. How would we administer wages when people were no longer functional specialists? A committee was formed to recommend a new compensation scheme. The group deliberated for several weeks, helped by Don, who had been a compensation expert. At last they presented a matrix. Increases, they said, should be given for new skills. "Pay for Skills" illustrates the plan.

They noted skills required at each level in each function. Raises, they said, should be granted for movement in any direction — broad knowledge across functions, or in-depth knowledge of any one. The highest-paid people should be those who could do everything. "You mean," I said, a bit taken aback, "that if everybody learns all the skills, everybody gets the highest rate?"



"Right," said a committee member.

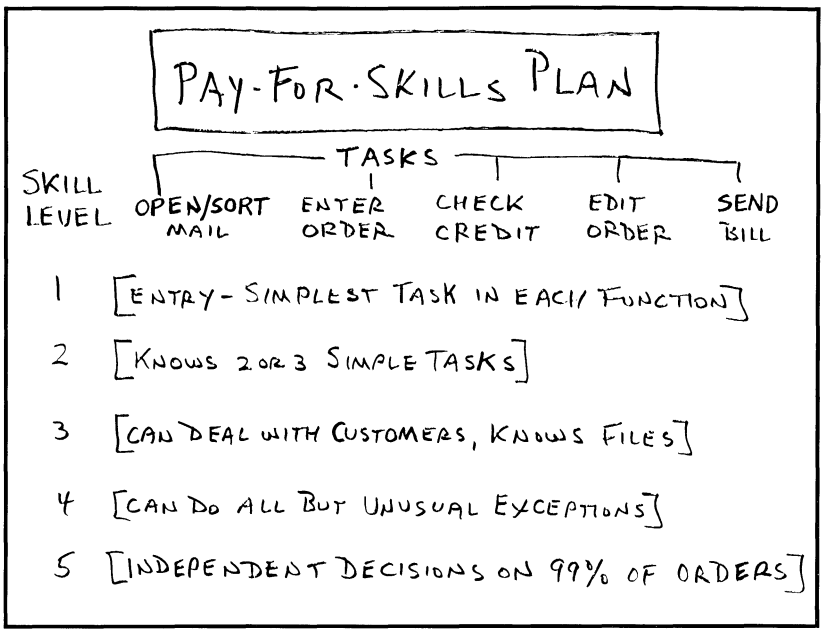
"How can we afford that?"

"Well," said another, "we figure when we all know how to do everything we can handle a lot more work without adding people."

Nowadays, it's called a pay-for-knowledge plan. In the early 1970s the former General Foods pet food plant at Topeka, Kansas, installed a widely publicized example with help from the Harvard Business School. Reading that tickled me because I knew the scheme was dreamed up by a handful of high school graduates, assisted by Don Kirchhoffer, in a North Philadelphia printing plant in 1967. Who knows how it got to Harvard? (Later I found out. It came by way of Norway, where it was first used in the pioneer design of Norsk Hydro's new fertilizer plant in the 1960s.)

As a solution to equitable compensation, you can't beat pay for knowledge in any system where multiskilling is feasible. Yet relatively few managers have been willing to try it. It strongly contradicts traditional compensation and job evaluation schemes. Of course, as the lady said, when everybody does everything, you don't need so many people — including direct supervisors, middle managers, and staff specialists.

In his seminal writings on sociotechnical design, Fred Emery (1967) pointed out that there are essentially only two work-design strategies: redundant parts or redundant skills. In the first strategy, people are treated as interchangeable cogs, in the second as capable learners. This astounding breakthrough in human thought had somehow got from Norway to Non-Linear Systems to McGregor to me. I did not realize at the time that I was implementing an idea literally inconceivable only a few years earlier. Pay for knowledge is a way of compensating under Emery's second design principle. Individuals earn more because they are more productive and require less supervision.



Good News and Bad News. Another task force took on the computer. Working with a systems analyst, they revised order processing procedures to fit the work teams, integrating a new computer billing machine to be run by volunteer team members. We had changed the office structure significantly. What I could not envision were the significant changes in behavior to follow. Our social system slowly, invisibly, informally altered in dramatic ways. People spent more time together. Spontaneous parties sprang up at lunch and after work. People began celebrating co-workers' birthdays during coffee breaks. They started visiting one another's homes. We had become productive. Now we were becoming a community.

We were not without casualties, however. Two former supervisors, looking miserable, stuck it out for three months in a team, complaining bitterly that "this system will never work." Meanwhile, not fifteen feet away, another team, made up mainly of recent hires, put out more orders than the most results-driven supervisor could have imagined a year earlier. Indeed, the newcomers performed tasks that the old unwritten status rules, zealously enforced by supervision, would not have allowed them to do for months, and maybe never.

The reluctant former supervisors soon left for traditional places they could understand. At the time I hated that outcome. Now I know it was unavoidable. Both morality and practicality dictate that all those involved in this kind of change be offered jobs at their former pay. What cannot be offered are jobs that are no longer needed. I also believe strongly in a point made by Marshall Sashkin (1984). It is irresponsible for managers to knowingly maintain work systems that punish, diminish, and may even injure many of the work force simply to preserve status and perks for a handful who, it often turns out, don't get much job satisfaction anyway.

Nor could I get much going in the shipping department. Our best shipper, Sidney, a world-class miracle of efficient distribution, had about as much interest in participation as a gourmet chef would have in a fast-food joint. Sid liked time clocks and had no need to influence policy. "I don't want more responsibility," he said.

"Why can't I just pack orders?" When it was pointed out that he couldn't expect to advance very far in the kind of place we were becoming, he pointed right back to the fact that he already had advanced as far as he wanted to. He never missed a day, and as long as I had my job, Sid's was secure too. I thought I would find a way to reach him. Of course I never did.

A High-Performing System. Our order processing operation, however, boomed. The literature called it high motivation or commitment. My friend Peter Vaill (1982) called it a "high-performing system." I didn't know what to call it then, but it looked very good to me. McGregor, I decided, was a pretty sharp fellow after all. Without any training, without any official team building, without any social technology except flip charts, we had gotten remarkable results. Our order processing capability went from under 300 to more than 400 orders a day. Absenteeism and turnover, with the exceptions noted, went down nearly to zero. Teams finished work early and prowled the office looking for new things to do. We commissioned them to test photocopiers and select the best one for us.

Our first formal training program was a free offer from the telephone company to coach people in collecting overdue accounts by phone. This led to reductions in past-due receivables and bad debts, and higher self-esteem for some former "clerks" who found they could make significant contributions to the business. (It's hard to overrate the symbolism here. In the old days, calling up large past-due accounts had been my father's personal province. He hated to let go of it — until he saw the checks roll in.)

The Transformation of a Family Enterprise (2003)

I left the direct mail printing business in 1968, having decided that I needed to be on my own. Rare is a family business passed on smoothly down the generations. Fathers and sons have conflicting agendas, one desperately wanting power, the other desperately holding onto it. Four years later my dad invited me to lunch one

day and announced that he was selling his business. He offered it first to me, a gesture of reconciliation that earned my respect and gratitude. By then I had a solid consulting practice and said "no."

In 1972 my father sold to a venture capital group. The company grew more than tenfold under its new owners. They in turn sold it in the 1990s to a mail order conglomerate making forms, greeting cards, stationery, and work clothes. In 2000 I found the phone number from a website and called a vice president who sent me the latest catalogs. The collective businesses now filled more than 100,000 orders a week for 2.5 million customers. What had been a 32-page business forms catalog in 1968 was now a 148-page wish book of office specialties. Buried inside I even found a few business forms that I had designed forty years earlier!

I arranged for a tour and soon found myself in a rental car with my son Dano in rural Massachusetts. I was curious to see how customer service functioned all these years later in the face of the computer revolution. What had become of the work teams who had among them all the skills needed to do the whole job? We were ushered into a large, brightly lit space in which perhaps 150 people sat in their own cubicles. Plants and greenery hung in baskets from the ceiling and filled planters near the door. Each cubicle reflected its owner. Some had family photos, children's art, or favorite cartoons.

I met Bill, a service rep, who pulled a second chair up to his desk. Would I like to hear what happens when customers call? Most orders now came in by phone, fax, or the Internet. Relatively few people ordered by mail. Bill gave me headphones and patched me into his line. He pointed out a large display board hanging high over the middle of the room. It showed the number of incoming calls waiting, and the longest wait time. A light flashed and the numbers changed with each call.

Because all had access to the same database, any service person could serve any customer. They had no reason to organize teams by geography or customer groups. Bill took the next call. As the incoming phone number appeared on his screen, he hit a button.

Instantly, he had the customer's buying history in front of him. It was a small retailer in Baton Rouge, Louisiana. When he picked up the phone and heard a woman's voice, he said, "Hi, this is Bill. Am I speaking to Marie?" For a second there was silence, then a laugh, followed by "Yes! And I need to reorder invoices."

Bill went on to review with Marie her buying practices, offer her savings on larger quantities, check to see whether she needed envelopes, and remind her to fax the exact wording for her imprint. He asked for her billing information and checked her credit history. Then he thanked her for the business. The exchange took ten minutes. I looked up at the board. There were six calls in the queue, the longest on hold for less than a minute.

From Work Team to Team of One

I was impressed by Bill's product knowledge and phone presence. In the 1960s it would have taken a skilled person half a year or more to achieve his capability. Many never did. He was at once salesperson, order taker, credit checker, customer relations' manager, and data base updater. I was watching a one-person multiskilled work team. "How long have you been doing this?" I asked, expecting to hear about the extended learning curve. "About a month," said Bill. "It took a couple of weeks to learn the system. Now it's a piece of cake." This was technology undreamed of in the 1960s, friendly to employees and customers alike.

People were organized in teams, Bill said. It seemed to me this was largely an administrative convenience. The teams met mainly to share information. Each person did the whole job. Supervisors were available for troubleshooting and training. Mostly, they left people alone. Customer service reps spent their time on the phone, interacting mainly with customers.

What could I recognize from my 1960s experience? The most obvious thing was that paperwork was largely a thing of the past. The keyboard was king, the terminal a form of empowerment

nonexistent during my tenure. I also noted that the company promised that they would do whatever you wanted if you weren't satisfied with an order.

In the 21st Century the customer was king or queen, and "delighting" royalty had become an inviolable norm for direct marketing firms. (While writing this, I called a credit card company and was asked, "How may I delight you today?" I laughed aloud, delighted by this zany inanity.)

The forms company office seemed to me relaxed, orderly, and effective, a good place to work. Computers gave people feedback so they could control their own work. In electronic sweatshops I had seen computers used to monitor bathroom breaks, personal phone calls, and emails. Here I saw computers in service of employees and customers rather than the other way around. Old cynic that I had become, I felt reassured that my father's legacy was in good hands.

The visit stirred up all sorts of memories in me. Those years in the forms business started me on a learning trip from which I have never recovered. Without my dad's technology bug and Don Kirchoffer's interest in humane work structures and Jimmie Lee Jones's persistence with printing machinery and Bob Maddock's three systems and the incredible adventure with the wall, I would not appreciate the utter simplicity and astonishing economic benefits of involving employees in designing their own work. Nor would I appreciate how much patience and hard work it takes. You can't write anybody off in productive workplaces. Even Sidney the shipper taught me something important: every management theory has its limits; not one of them fits everybody.