

---

# Of Boxes, Bubbles, and Effective Management

David K. Hurst



Harvard Business Review

No. 84305

---

# HBR

MAY-JUNE 1984

## Of Boxes, Bubbles, and Effective Management

David K. Hurst

Harvard Business Review  
Soldiers Field Road  
Boston, Massachusetts 02163

Dear Editors:

We are writing to tell you how events from 1979 on have forced us, a team of four general managers

---

*One day in 1980 a group of four managers in a large Canadian steel company found their company acquired by another that had essentially no managerial ranks and few resources. The executives, traditional men accustomed to working with hard facts and solid numbers, found that their "hard box" way of managing did not fit their new topsy-turvy world where financiers were banging on the door, previously healthy divisions were faltering, plants had to be closed down, and the worst recession in years loomed on the horizon. To deal with their new circumstances, the management team, as they came to call themselves, had to adopt another managerial mode as well: the soft bubble of process.*

*They found that some aspects of business lend themselves to hard box solutions, others to soft bubble resolutions. The difference between the two is great, and the key to effective management is the ability both to determine which context is appropriate for the effort at hand and to "jump out of the box," or rigid belief structures, if necessary. With their new approach the team saved their company from certain disaster. In good times, they now "create a crisis" when one is necessary and infuse even routine activities with importance.*

*Mr. Hurst is an executive vice president of Russelsteel Inc., a subsidiary of Federal Industries, Ltd., Canada. The other mem-*

*ber of the management team involved in the turnaround are Wayne P.E. Mang, president and chief operating officer; Al Shkut, executive vice president; and Michael J. Greene, vice president and secretary-treasurer.*

indistinguishable from thousands of others, to change our view of what managers should do. In 1979 we were working for Hugh Russel Inc., the fiftieth largest public company in Canada. Hugh Russel was an industrial distributor with some \$535 million in sales and a net income of \$14 million. The organization structure was conventional: 16 divisions in four groups, each with a group president reporting to the corporate office. Three volumes of corporate policy manuals spelled out detailed aspects of corporate life, including our corporate philosophy. In short, in 1979 our corporation was like thousands of other businesses in North America.

During 1980, however, through a series of unlikely turns, that situation changed drastically. Hugh Russel found itself acquired in a 100% leveraged buyout and then merged with a large, unprofitable (that's being kind!) steel fabricator, York Steel Construction, Ltd. The resulting entity was York Russel Inc., a privately held company except for the existence of some publicly owned preferred stock which obliged us to report to the public.

As members of the acquired company's corporate

---

*bers of the management team involved in the turnaround are Wayne P.E. Mang, president and chief operating officer; Al Shkut, executive vice president; and Michael J. Greene, vice president and secretary-treasurer.*

*Editor's note:* All references are listed at the end of the article.

Copyright © 1984 by the President and Fellows of Harvard College. All rights reserved.

This document is authorized for use only by HUNTER HASTINGS (HHHASTINGS@GMAIL.COM). Copying or posting is an infringement of copyright. Please contact customerservice@harvardbusiness.org or 800-988-0886 for additional copies.

office, we waited nervously for the ax to fall. Nothing happened. Finally, after about six weeks, Wayne (now our president) asked the new owner if we could do anything to help the deal along. The new chairman was delighted and gave us complete access to information about the acquirer.

It soon became apparent that the acquiring organization had little management strength. The business had been run in an entrepreneurial style with hundreds of people reporting to a single autocrat. The business had, therefore, no comprehensive plan and, worse still, no money. The deal had been desperately conceived to shelter our profits from taxes and use the resulting cash flow to fund the excessive debt of the steel fabrication business.

Our first job was to hastily assemble a task force to put together a \$300 million bank loan application and a credible turnaround plan. Our four-member management team (plus six others who formed a task force) did it in only six weeks. The merged business, York Russel, ended up with \$10 million of equity and \$275 million of debt on the eve of a recession that turned out to be the worst Canada had experienced since the Great Depression. It was our job then to save the new company, somehow.

Conceptual frameworks are important aids to managers' perceptions, and every team should have a member who can build them. Before the acquisition, the framework implicit in our organization was a "hard," rational model rather like those Thomas Peters and Robert Waterman describe.<sup>1</sup> Jay Galbraith's elaborate model is one of the purest examples of the structure-follows-strategy school.<sup>2</sup> The model clearly defines all elements and their relationships to each other, presumably so that they can be measured (see the *Exhibit*).

Because circumstances changed after the acquisition, our framework fell apart almost immediately. Overnight we went from working for a growth company to working for one whose only objective was survival. Our old decentralized organization was cumbersome and expensive; our new organization needed cash, not profits. Bankers and suppliers swarmed all over us, and the quiet life of a management-controlled public company was gone.

Compounding our difficulties, the recession quickly revealed all sorts of problems in businesses that up to that time had given us no trouble. Even the core nuggets offered up only meager profits, while interest rates of up to 25% quickly destroyed what was left of the balance sheet.

In the heat of the crisis, the management team jelled quickly. At first each member muddled in his own way, but as time went by, we started to gain a new understanding of how to be effective. Even now

we do not completely understand the conceptual framework that has evolved, and maybe we never will. What follows is our best attempt to describe to you and your readers what guides us today.

Yours truly,

The management team

## Two models are better than one

The hard, rational model isn't wrong; it just isn't enough. There is something more. As it turns out, there is a great deal more.

At York Russel we have had to develop a "soft," intuitive framework that offers a counterpart to every element in the hard, rational framework. As the exhibit shows and the following sections discuss, in the soft model, roles are the counterparts of tasks, groups replace structure, networks operate instead of information systems, the rewards are soft as opposed to hard, and people are viewed as social animals rather than as rational beings.

That may not sound very new. But we found that the key to effective management of not only our crisis but also the routine is to know whether we are in a hard "box" or a soft "bubble" context. By recognizing the dichotomy between the two, we can choose the appropriate framework.

---

<input type="checkbox"/> <b>Tasks</b>	. . . & . . .	<input type="radio"/> <b>Roles</b>
<input type="checkbox"/> <i>Static</i>		<input type="radio"/> <i>Fluid</i>
<input type="checkbox"/> <i>Clarity</i>		<input type="radio"/> <i>Ambiguity</i>
<input type="checkbox"/> <i>Content</i>		<input type="radio"/> <i>Process</i>
<input type="checkbox"/> <i>Fact</i>		<input type="radio"/> <i>Perception</i>
<input type="checkbox"/> <i>Science</i>		<input type="radio"/> <i>Art</i>

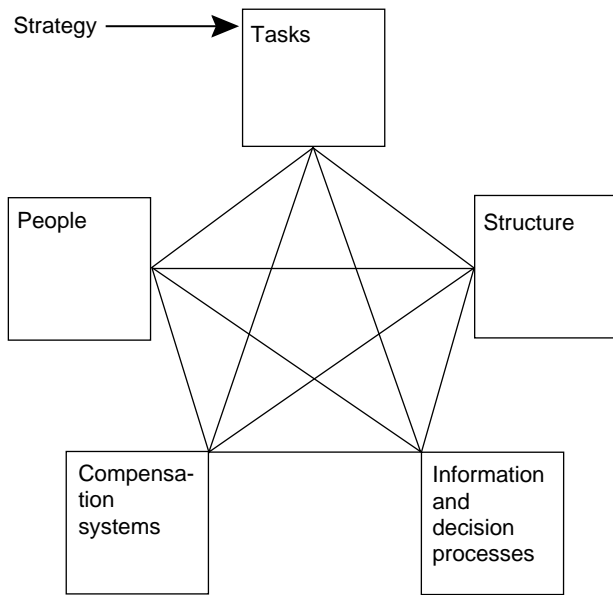
These are some of our favorite words for contrasting these two aspects of management. Here's how we discovered them.

The merger changed our agenda completely. We had new shareholders, a new bank, a new business (the steel fabrication operations consisted of nine divisions), and a new relationship with the managers of our subsidiaries, who were used to being left alone to grow. The recession and high interest rates rendered the corporation insolvent. Bankruptcy loomed large. Further, our previously static way of operating became very fluid.

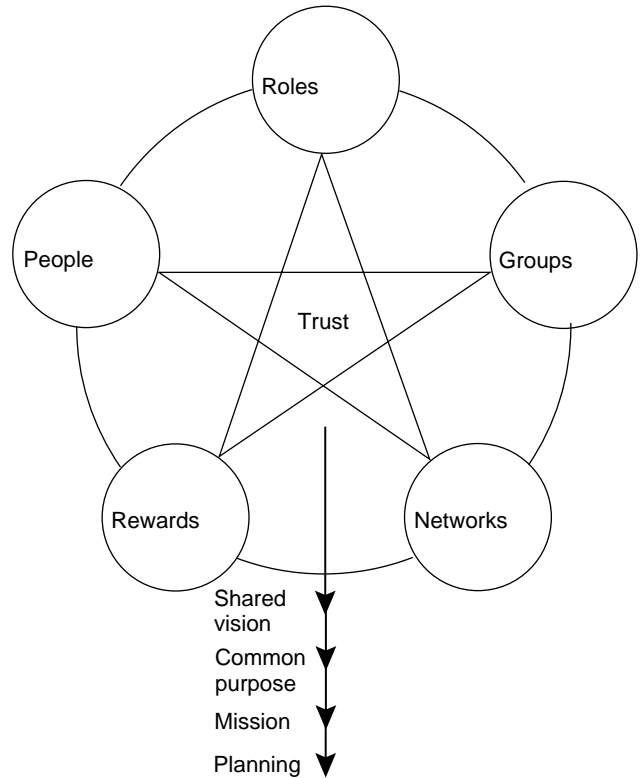
In general, few of us had clear tasks, and for the

**Exhibit The hard and soft model and how they work together**

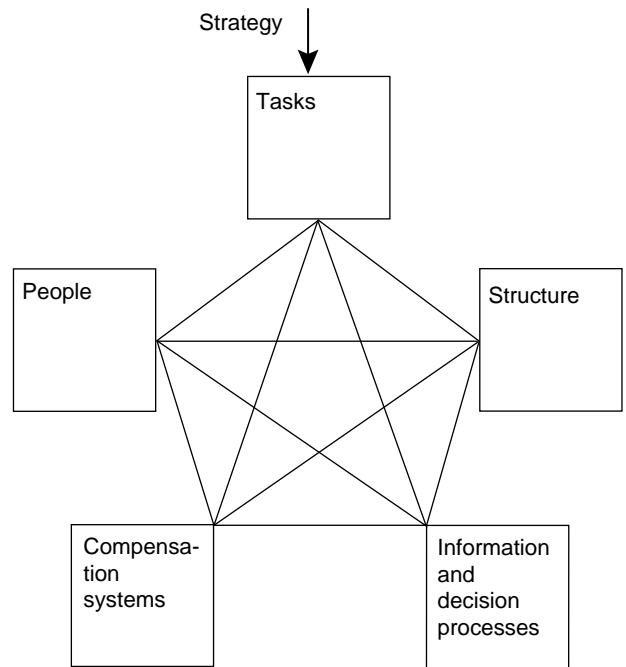
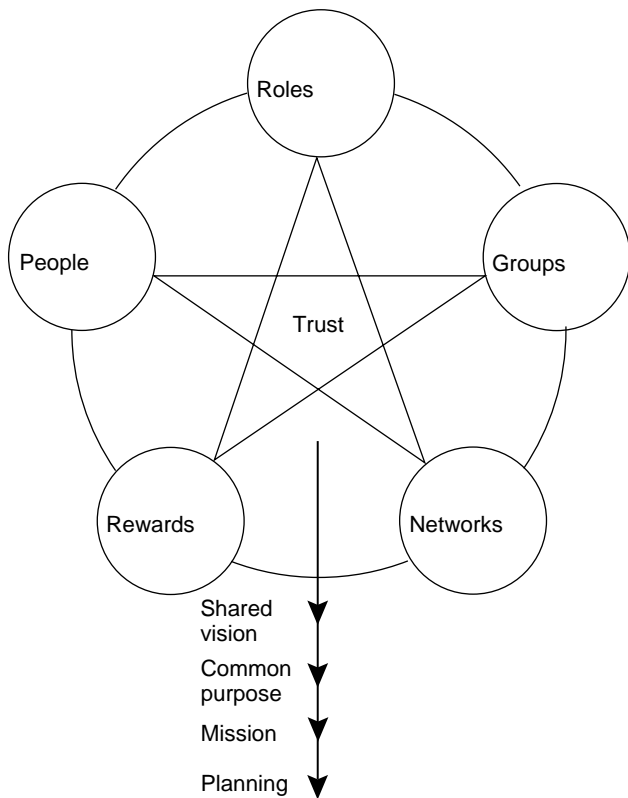
**A hard, rational model**



**The two models working together**



**A soft, intuitive model and how it works**



**Source:** The hard, rational model is from J.R. Galbraith, *Organization Design* (Reading, Mass.: Addison-Wesley, 1977).

most part we saw the future as ambiguous and fearful. We found ourselves describing what we had to do as roles rather than as tasks. At first our descriptions were crude. We talked of having an “inside man” who deals with administration, lawyers, and bankers versus an “outside man” who deals with operations, customers, and suppliers. Some of us were “readers,” others “writers,” some “talkers,” and others “listeners.” As the readers studied the work of behavioral science researchers and talked to the listeners, we found some more useful classifications. Henry Mintzberg’s description of managers’ work in terms of three roles—interpersonal (figurehead, leader, liaison), informational (monitor, disseminator, spokesperson), and decisional—helped us see the variety of the job.<sup>3</sup> Edgar Schein’s analysis of group roles helped us concentrate on the process of communication as well as on what was communicated.<sup>4</sup>

The most useful framework we used was the one Ichak Adize developed for decision-making roles.<sup>5</sup> In his view, a successful management team needs to play four distinct parts. The first is that of producer of results. A *producer* is action oriented and knowledgeable in his or her field; he or she helps compile plans with an eye to their implementability. The *administrator* supervises the system and manages the detail. The *entrepreneur* is a creative risk taker who initiates action, comes up with new ideas, and challenges existing policies. And the *integrator* brings people together socially and their ideas intellectually, and interprets the significance of events. The integrator gives the team a sense of direction and shared experience.

According to Adize, each member must have some appreciation of the others’ roles (by having some facility in those areas), and it is essential that they get along socially. At York Russel the producers (who typically come out of operations) and administrators (usually accountants) tend to be hard box players, while the entrepreneurs tend to live in the soft bubble. Integrators (friendly, unusually humble MBAs) move between the hard and the soft, and we’ve found a sense of humor is essential to being able to do that well.

The key to a functioning harmonious group, however, has been for members to understand that they might disagree with each other because they are in two different contexts. Different conceptual frameworks may lead people to different conclusions based on the same facts. Of the words describing tasks and roles, our favorite pair is “fact” versus “perception.” People in different boxes will argue with each other over facts, for facts in boxes are compelling—they seem so tangible. Only from the bubble can one see them for what they are: abstractions based on the logical frameworks, or boxes, being used.

- 
- |  |               |                                       |
|--|---------------|---------------------------------------|
| <input type="checkbox"/> <b>Structure</b>    | . . . & . . . | <input type="radio"/> <b>Groups</b>   |
| <input type="checkbox"/> <i>Cool</i>         |               | <input type="radio"/> <i>Warm</i>     |
| <input type="checkbox"/> <i>Formal</i>       |               | <input type="radio"/> <i>Informal</i> |
| <input type="checkbox"/> <i>Closed</i>       |               | <input type="radio"/> <i>Open</i>     |
| <input type="checkbox"/> <i>Obedience</i>    |               | <input type="radio"/> <i>Trust</i>    |
| <input type="checkbox"/> <i>Independence</i> |               | <input type="radio"/> <i>Autonomy</i> |

Our premerger corporation was a pretty cold place to work. Senior management kept control in a tight inner circle and then played hardball (in a hard box, of course) with the group presidents. Managers negotiated budgets and plans on a win-lose basis; action plans almost exclusively controlled what was done in the organization. Top managers kept a lot of information to themselves. People didn’t trust each other very much.

The crises that struck the corporation in 1980 were so serious that we could not have concealed them even if we had wanted to. We were forced to put together a multitude of task forces consisting of people from all parts of the organization to address these urgent issues, and in the process, we had to reveal everything we knew, whether it was confidential or not.

We were amazed at the task forces’ responses: instead of resigning en masse (the hard box players had said that people would leave the company when they found out that it was insolvent), the teams tackled their projects with passion. Warmth, a sense of belonging, and trust characterized the groups; the more we let them know what was going on, the more we received from them. Confidentiality is the enemy of trust. In the old days strategic plans were stamped “confidential.” Now we know that paper plans mean nothing if they are not in the minds of the managers.

Division managers at first resented our intrusion into their formal, closed world. “What happened to independence?” they demanded. We described the soft counterpart—autonomy—to them. Unlike independence, autonomy cannot be granted once and for all. In our earlier life, division personnel told the corporate office what they thought it wanted to hear. “You’ve got to keep those guys at arm’s length” was a typical division belief. An autonomous relationship depends on trust for its nourishment. “The more you level with us,” we said, “the more we’ll leave you alone.” That took some getting used to.

But in the end autonomy worked. We gave division managers confidential information, shared our hopes and fears, and incorporated their views in our bubble. They needed to be helped out of their boxes, not to abandon them altogether but to gain

a deeper appreciation of and insight into how they were running their businesses. Few could resist when we walked around showing a genuine interest in their views. Because easy access to each other and opportunities for communication determine how groups form and work together, we encouraged managers to keep their doors open. We called this creation of opportunities for communication by making senior management accessible “management by walking around.” Chance encounters should not be left to chance.

Although the primary objective of all this communication is to produce trust among group members, an important by-product is that the integrators among us have started to “see” the communication process.<sup>6</sup> In other words, they are beginning to understand why people say what they say. This ability to “see” communication is elusive at times, but when it is present, it enables us to “jump out of the box”—that is, to talk about the frameworks’ supporting conclusions rather than the conclusions themselves. We have defused many potential confrontations and struck many deals by changing the context of the debate rather than the debate itself.<sup>7</sup>

Perhaps the best example of this process was our changing relationship with our lead banker. As the corporation’s financial position deteriorated, our relationship with the bank became increasingly adversarial. The responsibility for our account rose steadily up the bank’s hierarchy (we had eight different account managers in 18 months), and we received tougher and tougher “banker’s speeches” from successively more senior executives. Although we worried a great deal that the bank might call the loan, the real risk was that our good businesses would be choked by overzealous efforts on the part of individual bankers to “hold the line.”

Key to our ability to change the relationship was to understand why individuals were taking the positions they were. To achieve that understanding, we had to rely on a network of contacts both inside and outside the bank. We found that the bank had as many views as there were people we talked to. Fortunately, the severity of the recession and the proliferation of corporate loan problems had already blown everyone out of the old policy “boxes.” It remained for us to gain the confidence of our contacts, exchange candid views of our positions, and present options that addressed the corporation’s problems in the bank’s context and dealt with the bank’s interests.

The “hard” vehicle for this was the renegotiation of our main financing agreement. During the more than six month negotiating process, our relationship with the bank swung 180 degrees from confrontation to collaboration. The corporation’s problem became

a joint bank-corporation problem. We had used the bubble to find a new box in which both the corporation and the bank could live.

- 
- |   |               |   |
|---|---------------|---|
| <input type="checkbox"/> <b>Information processes</b> | . . . & . . . | <input type="radio"/> <b>Networks</b>       |
| <input type="checkbox"/> <i>Hard</i>                  |               | <input type="radio"/> <i>Soft</i>           |
| <input type="checkbox"/> <i>Written</i>               |               | <input type="radio"/> <i>Oral</i>           |
| <input type="checkbox"/> <i>Know</i>                  |               | <input type="radio"/> <i>Feel</i>           |
| <input type="checkbox"/> <i>Control</i>               |               | <input type="radio"/> <i>Influence</i>      |
| <input type="checkbox"/> <i>Decision</i>              |               | <input type="radio"/> <i>Implementation</i> |

Over the years our corporation has developed some excellent information systems. Our EDP facility is second to none in our industry. Before the acquisition and merger, when people talked about or requested information, they meant hard, quantitative data and written reports that would be used for control and decision making. The crisis required that we make significant changes to these systems. Because, for example, we became more interested in cash flow than earnings per share, data had to be aggregated and presented in a new way.

The pivotal change, however, was our need to communicate with a slew of new audiences over which we had little control. For instance, although we still have preferred stock quoted in the public market, our principal new shareholders were family members with little experience in professional management of public companies. Our new bankers were in organizational turmoil themselves and took 18 months to realize the horror of what they had financed. Our suppliers, hitherto benign, faced a stream of bad financial news about us and other members of the industry. The rumor mill had us in receivership on a weekly basis.

Our plant closures and cutbacks across North America brought us into a new relationship with government, unions, and the press. And we had a new internal audience: our employees, who were understandably nervous about the “imminent” bankruptcy.

We had always had some relationship with these audiences, but now we saw what important sources of information they were and expanded these networks vastly.<sup>8</sup> Just as we had informed the division managers at the outset, we decided not to conceal from these other groups the fact that the corporation was insolvent but worthy of support. We made oral presentations supported by formal written material to cover the most important bases.

To our surprise, this candid approach totally disarmed potential antagonists. For instance, major

suppliers could not understand why we had told them we were in trouble before the numbers revealed the fact. By the time the entire war story was news, there was no doubt that our suppliers' top managers, who tended not to live in the hard accounting box, were on our side. When their financial specialists concluded that we were insolvent, top management blithely responded, "We've known that for six months."

Sharing our view of the world with constituencies external to the corporation led to other unexpected benefits, such as working in each other's interests. Our reassurance to customers that we would be around to deliver on contracts strengthened the relationship. Adversity truly is opportunity!

Management by walking around was the key to communicating with employees in all parts of the company. As a result of the continual open communication, all employees appreciated the corporation's position. Their support has been most gratifying. One of our best talker-listeners (our president) tells of a meeting with a very nervous group of employees at one facility. After he had spent several hours explaining the company's situation, one blue-collar worker who had been with the company for years took him aside and told him that a group of employees would be prepared to take heavy pay cuts if it would save the business. It turns out that when others hear this story it reinforces *their* belief in the organization.

We have found that sharing our views and incorporating the views of others as appropriate has a curious effect on the making and the implementing of decisions. As we've said, in our previous existence the decisions we made were always backed up by hard information; management was decisive, and that was good. Unfortunately, too few of these "good" decisions ever got implemented. The simple process of making the decision the way we did often set up resistance down the line. As the decision was handed down to consecutive organizational levels, it lost impetus until eventually it was unclear whether the decision was right in the first place.

Now we worry a good deal less about making decisions; they arise as fairly obvious conclusions drawn from a mass of shared assumptions. It's the assumptions that we spend our time working on. One of our "producers" (an executive vice president) calls it "conditioning," and indeed it is. Of course, making decisions this way requires that senior management build networks with people many layers down in the organization. This kind of communication is directly at odds with the communication policy laid down in the premerger corporation, which emphasized direct-line reporting.

A consequence of this network information pro-

cess is that we often have to wait for the right time to make a decision. We call the wait a "creative stall." In the old organization it would have been called procrastination, but what we're doing is waiting for some important players to come "on-side" before making an announcement.<sup>9</sup> In our terms, you "prepare in the box and wait in the bubble."

Once the time is right, however, implementation is rapid. Everyone is totally involved and has given thought to what has to be done. Not only is the time it takes for the decision to be made and implemented shorter than in the past but also the whole process strengthens the organization rather than weakening it through bitterness about how the decision was made.

- 
- |  |               |                                      |
|--|---------------|--------------------------------------|
| <input type="checkbox"/> <b>People</b>   | . . . & . . . | <input type="radio"/> <b>People</b>  |
| <input type="checkbox"/> <i>Rational</i> |               | <input type="radio"/> <i>Social</i>  |
| <input type="checkbox"/> <i>Produce</i>  |               | <input type="radio"/> <i>Create</i>  |
| <input type="checkbox"/> <i>Think</i>    |               | <input type="radio"/> <i>Imagine</i> |
| <input type="checkbox"/> <i>Tell</i>     |               | <input type="radio"/> <i>Inspire</i> |
| <input type="checkbox"/> <i>Work</i>     |               | <input type="radio"/> <i>Play</i>    |

In the old, premerger days, it was convenient to regard employees as rational, welfare-maximizing beings; it made motivating them so much easier and planning less messy.

But because the crisis made it necessary to close many operations and terminate thousands of employees, we had to deal with people's social nature. We could prepare people intellectually by sharing our opinions and, to some extent, protect them physically with severance packages, but we struggled with how to handle the emotional aspects. Especially for long-service employees, severing the bond with the company was the emotional equivalent of death.

Humor is what rescued us. Laughter allows people to jump out of their emotional boxes, or rigid belief structures. None of us can remember having laughed as much as we have over the past three years. Although much of the humor has inevitably been of the gallows variety, it has been an important ingredient in releasing tension and building trust.

Now everyone knows that people are social as well as rational animals. Indeed, we knew it back in the premerger days, but somehow back then we never came to grips with the social aspect, maybe because the rational view of people has an appealing simplicity and clarity. Lombard's Law applied to us—routine, structured tasks drove out nonroutine, unstructured activities.<sup>10</sup>

- 
- |  |               |   |
|--|---------------|---|
| <input type="checkbox"/> <b>Compensation systems</b> | . . . & . . . | <input type="radio"/> <b>Rewards</b>    |
| <input type="checkbox"/> <i>Direct</i>               |               | <input type="radio"/> <i>Indirect</i>   |
| <input type="checkbox"/> <i>Objective</i>            |               | <input type="radio"/> <i>Subjective</i> |
| <input type="checkbox"/> <i>Profit</i>               |               | <input type="radio"/> <i>Fun</i>        |
| <input type="checkbox"/> <i>Failure</i>              |               | <input type="radio"/> <i>Mistake</i>    |
| <input type="checkbox"/> <i>Hygiene</i>              |               | <input type="radio"/> <i>Motivator</i>  |
| <input type="checkbox"/> <i>Managing</i>             |               | <input type="radio"/> <i>Caring</i>     |

In our premerger organization, the “total compensation policy” meant you could take your money any way you liked—salary, loans, fringes, and so forth. Management thought this policy catered to individual needs and was, therefore, motivating. Similarly, the “Personnel Development Program” required managers to make formal annual reviews of their employees’ performances. For some reason, management thought that this also had something to do with motivation. The annual reviews, however, had become a meaningless routine, with managers constrained to be nice to the review subject because they had to work with him or her the next day.

The 1981 recession put a stop to all this by spurring us to freeze all direct compensation. Profit-based compensation disappeared; morale went up.

The management team discussed this decision for hours. As the savings from the freeze would pay for a few weeks’ interest only, the numbers made no sense at all. Some of us prophesied doom. “We will lose the best people,” we argued. Instead, the symbolic freeze brought the crisis home to everyone. We had all made a sacrifice, a contribution that senior management could recognize at a future time.

Even though the academics say they aren’t scientifically valid, we still like Frederick Herzberg’s definition of motivators (our interpretations of them are in parentheses):<sup>11</sup>

- Achievement (what you believe you did).
- Recognition (what others think you did).
- Work itself (what you really do).
- Responsibility (what you help others do).
- Advancement (what you think you can do).
- Growth (what you believe you might do).

## The new framework at work

The diagram of the soft model in the exhibit shows our view of how our management process seems to work. When the motivating rewards are applied to people playing the necessary roles and working to-

gether in groups that are characterized by open communication and are linked to networks throughout the organization, the immediate product is a high degree of mutual trust. This trust allows groups to develop a shared vision that in turn enhances a sense of common purpose. From this process people develop a feeling of having a mission of their own. The mission is spiritual in the sense of being an important effort much larger than oneself. This kind of involvement is highly motivating. Mission is the soft counterpart of strategy.

- 
- |  |               |   |
|--|---------------|---|
| <input type="checkbox"/> <b>Strategy</b>   | . . . & . . . | <input type="radio"/> <b>Mission</b>    |
| <input type="checkbox"/> <i>Objectives</i> |               | <input type="radio"/> <i>Values</i>     |
| <input type="checkbox"/> <i>Policies</i>   |               | <input type="radio"/> <i>Norms</i>      |
| <input type="checkbox"/> <i>Forecast</i>   |               | <input type="radio"/> <i>Vision</i>     |
| <input type="checkbox"/> <i>Clockworks</i> |               | <input type="radio"/> <i>Frameworks</i> |
| <input type="checkbox"/> <i>Right</i>      |               | <input type="radio"/> <i>Useful</i>     |
| <input type="checkbox"/> <i>Target</i>     |               | <input type="radio"/> <i>Direction</i>  |
| <input type="checkbox"/> <i>Precise</i>    |               | <input type="radio"/> <i>Vague</i>      |
| <input type="checkbox"/> <i>Necessary</i>  |               | <input type="radio"/> <i>Sufficient</i> |

Listed are some of our favorite words for contrasting these two polarities. We find them useful for understanding why clear definition of objectives is not essential for motivating people. Hard box planners advocate the hard box elements and tend to be overinvested in using their various models, or “clockworks” as we call them. Whether it’s a Boston Consulting Group matrix or an Arthur D. Little life-cycle curve, too often planners wind them up and managers act according to what they dictate without looking at the assumptions, many of which may be invalid, implicit in the frameworks.

We use the models only as take-off points for discussion. They do not have to be right, only useful. If they don’t yield genuine insights we put them aside. The hard box cannot be dispensed with. On the contrary, it is essential—but not sufficient.

The key element in developing a shared purpose is mutual trust. Without trust, people will engage in all kinds of self-centered behavior to assert their own identities and influence coworkers to their own ends. Under these circumstances, they just won’t hear others, and efforts to develop a shared vision are doomed. Nothing destroys trust faster than hard box attitudes toward problems that don’t require such treatment.

Trust is self-reproductive. When trust is present in a situation, chain reactions occur as people share frameworks and exchange unshielded views. The closer and more tightly knit the group is, the more



likely it is that these reactions will spread, generating a shared vision and common purpose.

Once the sense of common purpose and mission is established, the managing group is ready to enter the hard box of strategy (see the right-hand side of the exhibit). Now the specifics of task, structure, information, and decision processes are no longer likely to be controversial or threatening. Implementation becomes astonishingly simple. Action plans are necessary to control hard box implementation, but once the participants in the soft bubble share the picture, things seem to happen by themselves as team members play their roles and fill the gaps as they see them. Since efforts to seize control of bubble activity are likely to prove disastrous, it is most fortunate that people act spontaneously without being "organized." Paradoxically, one can achieve control in the bubble only by letting go—which gets right back to trust.

In the hard box, the leadership model is that of the general who gives crisp, precise instructions as to who is to do what and when. In the soft bubble, the leadership model is that of the shepherd, who follows his flock watchfully as it meanders along the natural contours of the land. He carries the weak and collects the strays, for they all have a contribution to make. This style may be inefficient, but it is effective. The whole flock reaches its destination at more or less the same time.<sup>12</sup>

<input type="checkbox"/> <b>Boxes</b>	. . . & . . .	<input type="checkbox"/> <b>Bubbles</b>
<input type="checkbox"/> <i>Solve</i>		<input type="checkbox"/> <i>Dissolve</i>
<input type="checkbox"/> <i>Sequential</i>		<input type="checkbox"/> <i>Lateral</i>
<input type="checkbox"/> <i>Left brain</i>		<input type="checkbox"/> <i>Right brain</i>
<input type="checkbox"/> <i>Serious</i>		<input type="checkbox"/> <i>Humorous</i>
<input type="checkbox"/> <i>Explain</i>		<input type="checkbox"/> <i>Explore</i>
<input type="checkbox"/> <i>Rational</i>		<input type="checkbox"/> <i>Intuitive</i>
<input type="checkbox"/> <i>Conscious</i>		<input type="checkbox"/> <i>Unconscious</i>
<input type="checkbox"/> <i>Learn</i>		<input type="checkbox"/> <i>Remember</i>
<input type="checkbox"/> <i>Knowledge</i>		<input type="checkbox"/> <i>Wisdom</i>
<input type="checkbox"/> <i>Lens</i>		<input type="checkbox"/> <i>Mirror</i>
<input type="checkbox"/> <i>Full</i>		<input type="checkbox"/> <i>Empty</i>
<input type="checkbox"/> <i>Words</i>		<input type="checkbox"/> <i>Pictures</i>
<input type="checkbox"/> <i>Objects</i>		<input type="checkbox"/> <i>Symbols</i>
<input type="checkbox"/> <i>Description</i>		<input type="checkbox"/> <i>Parable</i>

Thought and language are keys to changing perceptions. Boxes and bubbles describe the hard and soft thought structures, respectively. Boxes have rigid,

opaque sides; walls have to be broken down to join boxes, although if the lid is off one can jump out. Bubbles have flexible, transparent sides that can easily expand and join with other bubbles. Bubbles float but can easily burst. In boxes problems are to be solved; in bubbles they are dissolved. The trick is to change the context of the problem, that is, to jump out of the box. This technique has many applications.

We have noticed a number of articles in your publication that concern values and ethics in business, and some people have suggested that business students be required to attend classes in ethics. From our view of the world, sending students to specific courses is a hard box solution and would be ineffective. Ethical behavior is absent from some businesses not because the managers have no ethics (or have the wrong ones) but because the hard "strategy box" does not emphasize them as being valuable. The hard box deals in objectives, and anyone who raises value issues in that context will not survive long.

In contrast, in the "mission bubble" people feel free to talk about values and ethics because there is trust. The problem of the lack of ethical behavior is dissolved.

We have found bubble thinking to be the intellectual equivalent of judo; a person does not resist an attacker but goes with the flow, thereby adding his strength to the other's momentum. Thus when suppliers demanded that their financial exposure to our lack of creditworthiness be reduced, we agreed and suggested that they protect themselves by supplying goods to us on consignment. After all, their own financial analysis showed we couldn't pay them any money! In some cases we actually got consignment deals, and where we didn't the scheme failed because of nervous lawyers (also hard box players) rather than reluctance on the part of the supplier.

Bubble thought structures are characterized by what Edward de Bono calls lateral thinking.<sup>13</sup> The sequential or vertical thought structure is logical and rational; it proceeds through logical stages and depends on a yes-no test at each step. De Bono suggests that in lateral thinking the yes-no test must be suspended, for the purpose is to explore not explain, to test assumptions not conclusions.

We do the same kind of questioning when we do what we call "humming a lot." When confronted with what initially appears to be an unpalatable idea, an effective manager will say "hmm" and wait until the idea has been developed and its implications considered. Quite often, even when an initial idea is out of the question, the fact that we have considered it seriously will lead to a different, innovative solution. We have found it useful to think of the action opposite to the one we intend taking. When selling busi-

nesses we found it helpful to think about acquiring purchasers. This led to deeper research into purchasers' backgrounds and motives and to a more effective packaging and presentation of the businesses to be sold. This approach encourages novel ideas and makes the people who generate them (the entrepreneurs) feel that their ideas, however "dumb," will not be rejected out of hand.

In hard box thought structures, one tends to use conceptual frameworks as lenses, to sit on one side and examine an object on the other. In bubble structures, the frameworks are mirrors reflecting one's own nature and its effect on one's perceptions; object and subject are on the same side. In the hard box, knowledge is facts, from learning; in the bubble, knowledge is wisdom, from experience.

Bubble thought structures are not easily described in words. Language itself is a box reflecting our cultural heritage and emphasizing some features of reality at the expense of others. Part of our struggle during the past three years has been to unlearn many scientific management concepts and develop a new vocabulary. We have come up with some new phrases and words: management by walking around, creative stall, asking dumb questions, jumping out of the box, creating a crisis, humming a lot, and muddling. We have also attached new meanings to old words such as fact and perception, independence and autonomy, hard and soft, solve and dissolve, and so forth.

## Three years later

What we have told you about works in a crisis. And we can well understand your asking whether this approach can work when the business is stable and people lapse back into boxes. We have developed two methods of preventing this lapse.

*1. If there isn't a crisis, we create one.* One way to stir things up is familiar to anyone who has ever worked in a hard box organization. Intimidation, terror, and the use of raw power will produce all the stress you need. But eventually people run out of adrenalin and the organization is drained, not invigorated.

In a bubble organization, managers dig for opportunities in a much more relaxed manner. During the last three years, for instance, many of our divisions that were profitable and liquid were still in need of strategic overhaul. During the course of walking around, we unearthed many important issues by asking dumb questions.

The more important of the issues that surface this way offer an opportunity to put a champion (someone

who believes in the importance of the issue) in charge of a team of people who can play all the roles required to handle the issue. The champion then sets out with his or her group to go through the incremental development process—developing trust, building both a hard box picture and a shared vision, and, finally, establishing strategy. By the time the strategy is arrived at, the task force disciples have such zeal and sense of mission that they are ready to take the issue to larger groups, using the same process.

Two by-products of asking dumb questions deserve mention. First, when senior management talks to people at all levels, people at all levels start talking to each other. Second, things tend to get fixed before they break. In answering a senior manager's casual question, a welder on the shop floor of a steel fabrication plant revealed that some critical welds had failed quality tests and the customer's inspector was threatening to reject an entire bridge. A small ad hoc task force, which included the inspector (with the customer's permission), got everyone off the hook and alerted top management to a potential weakness in the quality control function.

Applying the principles in other areas takes years to bear fruit. We are now using the process to listen to customers and suppliers. We never knew how to do this before. Now it is clear that it is necessary to create an excuse (crisis) for going to see them, share "secrets," build trust, share a vision, and capture them in your bubble. It's very simple, and early results have been excellent. We call it a soft revolution.

*2. Infuse activities that some might think prosaic with real significance.* The focus should be on people first, and always on caring rather than managing. The following approach works in good times as well as bad:

Use a graphic vocabulary that describes what you do.

Share confidential information, personal hopes and fears to create a common vision and promote trust. Seize every opportunity (open doors, management by walking around, networks) to make a point, emphasize a value, disseminate information, share an experience, express interest, and show you care. Recognize performance and contribution of as many people as possible. Rituals and ceremonies—retirements, promotions, birthdays—present great opportunities.

Use incentive programs whose main objective is not compensation but recognition.

We have tried to approach things this way, and for us the results have been significant. Now, three years

after the crisis first struck our corporation, we are a very different organization. Of our 25 divisions, we have closed 7 and sold 16. Five of the latter were bought by Federal Industries, Ltd. of Winnipeg. Some 860 employees including us, the four members of the management team, have gone to Federal. These divisions are healthy and raring to go. Two divisions remain at York Russel, which has changed its name to YRI-YORK, Ltd.

Now we face new questions, such as how one recruits into a management team. We know that we have to help people grow into the team, and fortunately we find that they flourish in our warm climate. But trust takes time to develop, and the bubble is fragile. The risk is greatest when we have to transplant a senior person from outside, because time pressures may not allow us to be sure we are compatible. The danger is not only to the team itself but also to the person joining it.

Our new framework has given us a much deeper appreciation of the management process and the roles effective general managers play. For example, it is clear that while managers can delegate tasks in the hard box rather easily—perhaps because they can define them—it’s impossible to delegate soft bubble activities. The latter are difficult to isolate from each other because their integration takes place in one brain.

Similarly, the hard box general management roles of producer and administrator can be formally taught, and business schools do a fine job of it. The soft roles of entrepreneur and integrator can probably not be taught formally. Instead, managers must learn from mentors. Over time they will adopt behavior patterns that allow them to play the required roles. It would seem, however, that natural ability and an individual’s upbringing probably play a much larger part in determining effectiveness in the soft roles than in the hard roles; it is easier to teach a soft bubble player the hard box roles than it is to teach the soft roles to a hard box player.

In the three-year period when we had to do things so differently, we created our own culture, with its own language, symbols, norms, and customs. As with other groups, the acculturation process began when people got together in groups and trusted and cared about each other.<sup>14</sup>

In contrast with our premerger culture, the new culture is much more sympathetic toward and supportive of the use of teams and consensus decision making. In this respect, it would seem to be similar to oriental ways of thinking that place a premium on the same processes. Taoists, for instance, would have no trouble recognizing the polarities of the hard box and the soft bubble and the need to keep a balance between the two.<sup>15</sup>

- 
- |                                 |               |                              |
|---------------------------------|---------------|------------------------------|
| <input type="checkbox"/> Heaven | . . . & . . . | <input type="radio"/> Earth  |
| <input type="checkbox"/> Yang   |               | <input type="radio"/> Yin    |
| <input type="checkbox"/> Father |               | <input type="radio"/> Mother |
| <input type="checkbox"/> Man    |               | <input type="radio"/> Woman  |

These symbols are instructive. After all, most of us grew up with two bosses: father usually played the hard box parts, while mother played the soft, intuitive, and entrepreneurial roles. The family is the original team, formed to handle the most complex management task ever faced. Of late, we seem to have fired too many of its members—a mistake we can learn from.

## Toward a managerial theory of relativity

The traditional hard box view of management, like the traditional orientation of physics, is valid (and very useful) only within a narrow range of phenomena. Once one gets outside the range, one needs new principles. In physics, cosmologists at the macro level as well as students of subatomic particles at the micro level use Einstein’s theory of relativity as an explanatory principle and set Newton’s physics aside.<sup>16</sup> For us, the theory in the bubble is our managerial theory of relativity. At the macro level it reminds us that how management phenomena appear depends on one’s perspective and biases. At the micro level we remember that all jobs have both hard and soft components.

This latter point is of particular importance to people like us in the service industry. The steel we distribute is indistinguishable from anyone else’s. We insist on rigid standards regarding how steel is handled, what reporting systems are used, and so forth. But hard box standards alone wouldn’t be enough to set us apart from our competitors. That takes service, a soft concept. And everyone has to be involved. Switchboard operators are in the front line; every contact is an opportunity to share the bubble. Truck drivers and warehouse workers make their own special contribution—by taking pride in the cleanliness of their equipment or by keeping the inventory neat and accessible.

With the box and bubble concept, managers can unlock many of the paradoxes of management and handle the inherent ambiguities. You don’t do one or the other absolutely; you do what is appropriate. For instance, the other day in one of our operations the biweekly payroll run deducted what appeared to be random amounts from the sales representatives’ pay packets. The branch affected was in an uproar.

After taking some hard box steps to remedy the situation, our vice president of human resources seized the opportunity to go out to the branch and talk to the sales team. He was delighted with the response. The sales force saw that he understood the situation and cared about them, and he got to meet them all, which will make future contacts easier. But neither the hard box nor soft bubble approach on its own would have been appropriate. We need both. As one team member put it, "You have to find the bubble in the box and put the box in the bubble." Exactly.

The amazing thing is that the process works so well. The spirit of cooperation among senior managers is intense, and we seem to be getting "luckier" as we go along. When a "magic" event takes place it means that somehow we got the timing just right.<sup>17</sup> And there is great joy in that.

## References

1. Thomas J. Peters and Robert H. Waterman, *In Search Of Excellence* (New York: Harper and Row, 1982), p. 29.
2. For the best of the hard box models we have come across, see Jay R. Galbraith, *Organization Design* (Reading, Mass.: Addison-Wesley, 1977).
3. Henry Mintzberg, "The Manager's Job: Folklore and Fact," HBR July–August 1975, p. 49.
4. Edgar H. Schein, *Process Consultation: Its Role in Organization Development* (Reading, Mass.: Addison-Wesley, 1969).
5. Ichak Adize, *How to Solve the Mismanagement Crisis* (Los Angeles: MDOR Institute, 1979).
6. Edgar H. Schein's *Process Consultation*, p. 10, was very helpful in showing us how the process differs from the content.
7. Getting consensus among a group of managers poses the same challenge as negotiating a deal. *Getting to Yes* by Robert Fisher and William Ury (Boston: Houghton Mifflin, 1981) is a most helpful book for understanding the process.
8. For discussion of the importance of networks, see John P. Kotter, "What Effective General Managers Really Do," HBR November–December 1982, p. 156.
9. For discussion of a "creative stall" being applied in practice, see Stratford P. Sherman, "Muddling to Victory at Geico," *Fortune*, September 5, 1983, p. 66.
10. Louis B. Barnes, "Managing the Paradox of Organizational Trust," HBR March–April 1981, p. 107.
11. In "One More Time: How Do You Motivate Employees?" HBR January–February 1968, p. 53.
12. For another view of the shepherd role, see the poem by Nancy Esposito, "The Good Shepherd," HBR July–August 1983, p. 121.
13. See Edward de Bono, *The Use of Lateral Thinking* (London: Jonathan Cape, 1967), and *PO: Beyond Yes and No* (New York: Simon and Schuster, 1972).
14. To explore the current concern with creating strong organizational cultures in North American corporations, see Terrence E. Deal and Alan A. Kennedy *Corporate Cultures* (Reading, Mass.: Addison-Wesley, 1982).
15. For discussion of Tao and some applications, we highly recommend Benjamin Hoff, *The Tao of Pooh* (New York: E.P. Dutton, 1982), p. 67; also Allen Watts, *Tao: The Watercourse Way* (New York: Pantheon Books, 1975).
16. Fritjof Capra, *The Tao of Physics* (London: Fontana Paperbacks, 1983).
17. Carl Jung developed the concept of synchronicity to explain such events. See, for example, Ira Progoff, *Jung, Synchronicity and Human Destiny—Non-Causal Dimensions of Human Experience* (New York: Julian Press, 1973). For an excellent discussion of Jung's work and its relevance to our times, see Laurens van de Post, *Jung and the Story of Our Time* (New York: Random House, 1975).