The Corporate Rain Dance

Most planners ride into the future facing the past. It’s like trying to drive a train from its caboose.

By Russell L. Ackoff

Our attitude toward planning in the United States has gone through a major transformation in the last 10 years. Until then planning was associated with Communism and, therefore, was considered to be a bad thing. Since then it has been put into the category of what Winnie-the-Pooh called “good things.” But the fact that planning probably has become the most frequently discussed topic in management literature does not mean that a lot of it is being done. Instead, a lot of what is being done is called planning. These are two very different things.

Recently, a prominent business magazine featured an article on how a corporation I have worked in makes its planning decisions. The article was based on interviews with the corporation’s executives. It was a fascinating piece — of fiction! It had absolutely nothing to do with the way decisions were actually made; it described how the executives would like to have made their decisions. I find such public deception about corporate planning objectionable on two counts. First, it reinforces the shaky, unsuitable (but undisclosed) basis on which most planning is done. Second, I think it’s unethical because it leads shareholders and investors to expectations which are ill-founded: they — and the employees — have a right to know how executives actually plan.

Most of the planning that I have seen in about 250 American and foreign corporations is like a ritual rain dance performed at the end of the dry season to which any rain that follows is attributed. Rain dancing has no effect on the weather even though it may have therapeutic effects on the dancers. Despite this, I find that as a so-called professional planner I’m repeatedly asked to help improve corporate dancing, not to help control the weather.

The rain dancing is usually led by Chief Bottom-Up or Chief Top-Down. Bottom-up planning is often initiated by a chief executive officer who hears a lecture about the necessity of planning and decides to do something about it. He calls for the senior vice presidents and says, “Gentlemen, it’s about time we had a corporate plan. I want a five-year plan for the corporation one year from now. So you should each give me plans for your area of responsibility 11 months from today.” They salute, say, “Yes, sir,” and withdraw. Then they call a meeting with the junior vice presidents and say much the same thing as the chief executive officer did, but they give their subordinates 10 months to submit their plans, leaving a month to coordinate and integrate the plans. This process continues down the line until the lowest level managers are called. If there are more than 12
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levels in the organization they may be directed to submit their plans six months ago.

Because the lowest level managers have little if any time for planning they usually make a list of projects that have been hanging around for a while. These are seldom treated in any systematic way.

They are merely described and their cost and expected return are estimated. Then they are passed up to the next level where a little filtering and combining is done; also costs and expected returns have safety, or fudge, factors added to them. And so on up until a massive collection of unrelated projects reaches the chief executive officer. He deals with the whole as his subordinates dealt with their unrelated parts.

The result is a hodge-podge, not a plan. Fortunately, the output is taken no more seriously than promises made in church. The so-called plan is seldom if ever consulted. It is used occasionally to impress visitors who do not examine its content.

Top-down planning is usually initiated when the senior executives go into hiding in the Bahamas or some reasonable facsimile and prepare a “white paper” laying out corporate objectives and the broad strategies by which they are to be pursued. This becomes the corporate sermon from the mount. It is passed down to the next level for translation into terms relevant to that level, and so on to the bottom. But it is no more effective than the bottom-up hodge-podge.

NOW I want to look more closely at why there is so much rain dancing and then suggest a program for corporate weather control.

Most managers and management educators say the essential activity of management is “decision making” and “problem solving.” For this reason management education increasingly focuses on developing the ability to make decisions and solve problems. In the last 10 years, however, some of us involved in planning have come to realize two rather surprising things about all this: first, problems do not exist — they are a figment of our imaginations; second, if they did actually exist they would have no solutions.

These assertions obviously require some explanation.

Consider the nature of textbooks for a moment. They present students with a set of clearly-labeled subject headings. At the end of each chapter students are given a set of well-formulated problems that usually have only one correct solution. As a result, students tend to think of life as a series of clearly-defined episodes at the end of which they are given well-formulated problems to solve. But no manager ever has a regular and guaranteed supply of well-formulated problems.

Instead, as William James, the great American philosopher-psychologist of the turn of this century, observed, life presents us with “great big buzzing confusions.” His student, John Dewey, who became an equally great philosopher, analyzed such buzzing confusions and tried to identify the ultimate elements of which they were made. He discovered that the ultimate element of confusion is what we call a “problem.”

Dewey’s discovery has a very important implication for planning: it implies that problems are related to great big buzzing confusions as atoms are related to objects. In other words, problems, like atoms, are conceptual abstractions — we cannot experience them directly. But we can experience confusion which is made up of problems, just as we can experience tables and chairs which are made up of atoms. It is in this sense that problems cannot be said not to exist.

A few years ago I coined a term to replace the awkward expression “great big buzzing confusion.” I called it a “mess” because I couldn’t resist the pun: mess-management.

A mess is not merely an aggregation of problems; it is a system of problems. This means that the problems interact. Therefore, if we do the usual thing and break up a mess into its component problems and try to solve each one separately, we will not solve the mess. For every time we solve a problem, we create new ones. Example: if my son presses me because he wants an automobile, and if his pressure constitutes a problem for me, and if I finally relent and decide to get rid of that problem by giving him an automobile — then I create a whole new sequence of problems.

On a larger scale, in the public sector, an urban mess is decomposed into problems labeled transportation, housing, health, education, utilities, and so on. In corporations, the same is done for problems labeled finance, production, marketing, research and development, and so on. These are usually planned separately.

But problems aren’t entities which can be destroyed; they are simply part of a sequence: problem/solution, problem/solution, and so on beyond the horizon. Problems are also linked in parallel; again, they are interactive. So how do we solve one problem affects the solubility of others.

That’s what I mean when I say we must deal with “messes,” not problems. Only when you have viewed a mess as a system of problems can you explain how it is possible to “improve” every part of a city (or corporation) separately and still have the whole get worse.

Planning has to do with the future. But planners can look at the future with entirely different perspectives. Over the past 20 years, most planning I have observed represents these basic points of view.

The first is the reactive or retrospective point of view. It accounts for nearly all of what is called planning. It is preoccupied with identifying and fixing up bad situations. It expresses a desire to return to a previous state, one which is considered preferable either to the current state or to the state toward which the future seems to be taking us. The reactive planner tries to buck the tide and swim back to a familiar shore.

This type of planning tries to get rid of deficiencies in an organization one by one. It takes messes apart, identifies their component problems, and designs sepa-
rate projects to solve them. There are usually more projects than available resources can support. Therefore, this type of planning concentrates on selecting "top priority" projects and allocating most resources to them.

The reactive planner walks into the future facing the past. He has a good view of where the organization has been and is, but no view of where it is going. Such planning is like trying to drive a train from its caboose. It is preoccupied with tactical questions, ignoring strategic issues. It is 

satisficing (satisfactory plus sufficeing) -

trying to do good enough, but not as well as possible.

In reactive planning the principal tactic for removing a deficiency is to try to identify a simple cause and suppress or repress it. For example, when an "alcohol problem" developed in the United States earlier in this century, alcohol was identified as its cause and prohibition followed. (Recall that this created more serious problems than it solved.) Today we have what is called a "narcotics problem." What's our solution? Repress narcotics. We don't learn much from our previous mistakes.

The second type of planning (most prevalent among professional planners) can be called proactive or prospective planning. It consists of "predicting and preparing." It is based on the belief that things are getting better all the time. Therefore, it is concerned with accelerating the approach of the future. It doesn't try to buck the tide, but rides on its leading edge, so as to get to where the tide is going before anyone else does. Then it plans to collect a toll from all who arrive later.

Forecasting plays a fundamental role in such prospective planning. It tries to predict accurately both the problems and opportunities that the future will bring, so that it can minimize the one and maximize the other.

Proactive planning focuses on programs - sets of interconnected projects directed at producing a desired future state. Such planning tends to be strategically oriented: it deals with longer-range objectives than reactive planning does.

Also, it deals with more of the organization - not just with its deficient parts taken separately. But the external environment in which an organization operates is beyond the planner's boundaries. If he knows yellow-fever mosquitoes are on the way, he tries to inoculate everyone against malaria rather than to divert or destroy the mosquitoes.

The proactive planner tries to optimize, to do as well as possible, not merely to do well enough. Unlike the reactive planner whose principal tools are judgment, intuition, and experience, his are science, technology, and experimentation.

However, proactive planners are confronted by a dilemma that they are reluctant to face, one that arises from their preoccupation with forecasting. They will buy or support almost any effort to produce a better view of the future whether it involves use of the Delphi method, econometric models, time series analysis, or what not. But they do not ask a fundamental question about forecasting: Under what conditions can we forecast the future accurately? The answer, unfortunately, is: Only where the future is completely determined by the past.

It is clearly not consistent to assume that the future of the environment is determined but not the future of the organization engaged in planning. It turns out, then, that the only conditions under which the future can be predicted accurately are the determined ones that nothing can be done about. Then why forecast?

This dilemma has recently given rise to a new approach to planning which can be called interactive or introspective. It is fundamentally different than the other two approaches.

The basic approach of the interactive planner is "make it happen." He is unwilling either to return to a previous state, settle for his current state, or accept the way things are going. Unlike the other two types of planners he believes that the future is largely under an organization's control. It depends more on what we do between now and the future than on what has happened up until now. Therefore, he conceives of planning as the design of a desirable future and the invention of ways to bring it about.

This planning posture has important consequences. First, since politics is often defined as the art of the possible, most planners are really concerned with finding out what is possible in the minds of people who wield power, in the private sector as well as the public sector. So they actually play politics but call it planning. Instead, planning should be the art of the impossible. Planning ought to convert what is initially considered to be impossible into what is subsequently accepted as possible. The interactive planner tries to do more than optimize - he tries to idealize, that is, do better in the future than the best that is conceived of now.

Second, the interactive planner does not believe that most of the relevant future can be accurately predicted because he believes it depends on choices yet to be made. Therefore, the only useful way of preparing for a largely unpredictable future is to design organizations, institutions, and societies that are capable of rapid, effective learning and adaptation to changing internal and external conditions. For this reason, interactive planning emphasizes organizational design and management.

Third, the interactive planner focuses on all three aspects of an organization - the parts (but not separately), the whole, and the environment. He believes that often the most effective way of influencing the future of an organization is to change its environment. He may not have as much control over the environment as he has over the organization, but he uses as much as he has up to the hilt.

To illustrate, I will compare planning to the practice of medicine:

□ Reactive planners try to treat symptoms where they occur, mistaking symptoms for causes. They act like a
doctor who always tries to treat headaches with brain surgery.

**D** Preactive planners look at the whole system, and interpret a difficulty as a symptom of a systemic deficiency, not of an isolated part. So they might first try to treat headaches by changing diet or prescribing new eye-glasses.

**D** Interactive planners focus on the interaction of the system and its environment. They are like a doctor who considers treating a patient's persistent headaches by having him take a new job in a different environment.

A S interactive planning has developed in the past few years, my colleagues and I have identified a set of basic principles and specific steps for the planning process. It is beyond the scope of an article to detail the whole process, so I want to focus on two elements which I believe make interactive planning unique: the first entails moving from the past to the future in a very special way; the second entails starting in the future and working back to the present.

The first unique element is what I call a "reference projection" – an extrapolation from the past into the future, based on the assumptions that neither the system nor its environment will change in any fundamental way. The planner knows these assumptions are false. Therefore, a reference projection is not a forecast in the usual sense. We will soon see what type of forecast it is.

First, consider an example. In 1960 we prepared a reference projection for an automobile manufacturer based on the assumption that the company could continue to grow in the future as it had in the past without any fundamental change in what it was doing. We projected that by the year 2000, the cost of maintaining the 1960 level of urban traffic congestion would be more than 12 times the largest amount ever spent in one year on all modes of urban transportation. Such expenditures, we felt sure, were not going to be made. Furthermore, we determined that if they were made, more than 100 percent of the cities' surfaces would be covered by streets and parking lots.

Now we can say what a reference projection is: it is a forecast of what cannot happen. Its usefulness lies in pointing out where changes must occur in the future. Such projections do not tell us what will happen because that depends on decisions that have yet to be made; but by telling us what won't happen, they focus attention on critical aspects of the future. They identify where the creative opportunities are.

In a projection prepared for the Fourth District Federal Reserve Bank headquartered in Cleveland, we extrapolated the amount of hand-processed paper work it handles, using data from 1946 to 1973. We also estimated the number of people required to handle it. By the year 2000 the required space would exceed the total amount of commercial space available in Cleveland. Therefore, something in the system must change. What will change depends on what the Bank plans to do, but it had better do something, and quickly.

Now let's turn to the second unique element, the most critical step in interactive planning: idealized redesign of the organization. To start, I'll describe it by example.

In the early 1950's I was doing some work with a friend in the R&D laboratory of a public utility. When I got there one morning he said to me, "Russ, you're going to have to keep yourself busy for an hour or two because the boss called a meeting I have to attend. I don't know what it's about or how long it will last." Then, as an afterthought, he added, "Why don't you come with me? No one said that visitors aren't allowed." I said "OK" and went along with him to a small auditorium where about 20 or 30 people had gathered.

The boss entered, went to the podium, and with a very serious look on his face said, "Gentlemen, our entire system was destroyed last night." People looked at him as though he were crazy. After a pause, the boss continued, "I know what you're thinking – that the system has not been destroyed. But from now on, in this laboratory we're going to act as though it has been. One year from today I want a design of a system to replace the one we now have, assuming it has been wiped out completely. There will be no financial, legal, or other types of restrictions on the design. But it must be technologically feasible. I don't want a piece of science fiction. And it must be capable of supporting itself if it were built. It must be operationally viable."

Then he explained, "I've been here for a long time. When I look back on what's been done here during that time, much of it has been unimaginative and uncreative because we've been constrained by what we have in place. Most of our work has been directed at removing its deficiencies, not to developing the system we would like to have." That meeting started a process that produced designs of almost every major innovation that has occurred in the system since then, and many more yet to come.

So an idealized design is a picture of the system its designers would build now if they were free to replace the current system with whatever they wanted most. It is subject to only two constraints: technological feasibility and operational viability.

Why engage in a process as fantastic as this? For a number of reasons. In general terms it turns the planning process around 180 degrees – instead of planning away from a current state we start planning toward a desired state. That means planning from the future to the present in contrast to conventional planning which goes from the present to the future. The eyes of the planners are focused on ultimate objectives – ideals – throughout.

Idealized redesign has specific benefits. First, it facilitates widespread participation in the planning process. No one is an expert on what ought to be; everyone's opinion is relevant. Arthur Burns has no special knowledge of what the banking system ought to be, however much he knows about what it is and is not. He can't tell me what my local bank ought to be.
Bottom-up planning is taken no more seriously than promises made in church.

doing for me. My opinion on that is just as relevant, if not more so, than his. The president of a company may have more useful opinions than a janitor on how the company ought to finance its growth, but the situation is reversed when it comes to keeping the company facilities clean.

The second advantage of idealized design lies in its focus on the processes of learning and adaptation to change. This becomes clear when we consider how an idealized design differs from a utopian design. To begin with, it does not pretend to be a perfect state. Rather it is built on the realization that our concept of the ideal is subject to continuous change in light of new experience, information, knowledge, understanding, wisdom, and values. Furthermore, the designers engaged in idealization cannot answer all the questions they have about what the system ought to be. Therefore, they must design a capability for answering these questions experimentally. So it is an ideal-seeking system, unlike a utopia which pretends to be beyond improvement.

A third advantage of the idealization process lies in its stimulation of creativity. Creativity is normally inhibited by conscious or unconscious self-imposed constraints based on what seems feasible and acceptable to others. The idealized design removes consideration of feasibility (except technological), acceptability, and the usual financial, legal, and other types of constraints. Therefore, it releases our imagination from the bonds that keep it from roaming creatively.

Finally, and perhaps most important, is the impact idealized design has on our concept of feasibility. It can convert the impossible into the possible.

Now, if interactive planning is so useful, why isn’t more of it being done?

For one thing, there are not many people who consider themselves to be professional planners. Of those who do, not many use this conception of planning. Over time, I hope this will change through the education process. But the more basic reason is that very large numbers of people in management are essentially in the reactive, the inactive, or particularly in the proactive mode. They feel they can deal with the future, and thereby the present, by predicting and preparing.

Some of them are actually succeeding. So the ones who aren’t look at the successful ones and say: “We’re not succeeding because we’re not doing it as well as they’re doing it.” They ignore the fact that proactive planning works best in high-technology corporations such as IBM, Xerox, and Polaroid. These companies tend to be optimistic about the future because the future of their technology seems to be good. In other words, the future is going to be better than the present, let’s predict what it’s going to be, identify the opportunities, and exploit the hell out of it.

ACCEPTANCE of interactive planning is largely a matter of intellectual unrest in individuals. Where they are in positions of authority they can do something about it. But there are a lot of enthusiastic people who are in positions where they can’t do anything about it. People in positions of authority normally will turn to it only as a last resort when faced with a problem that’s critical to their survival.

Today there are corporations threatened by long-run problems of unemployment, too much manpower. They are in a bind because the cost of efforts to reduce unemployment is extremely great, including a threat to the survival of an organization. It is increasingly difficult, particularly as a result of union and legal activities, to get rid of unnecessary people. And since society isn’t taking care of them very adequately, there is also a question of justice and conscience. I have run into this problem in at least 10 different contexts in the last year; people are tremendously worried about it. But no standard approach to planning will “solve” this “problem.”

Another contemporary survival problem is the corporations based on classes of products whose consumption cannot continue to grow in the future as they have in the past, nor even grow as rapidly as the economy. They must change the nature of their business in a very fundamental way. Food companies are a good example. General Mills has diversified into toys and Anheuser-Busch is strong in family entertainment. This last quarter of the 20th century has its equivalents of the buggy whip manufacturers who disappeared in its first quarter.

A final word. People often ask me how I know when things are going well in interactive planning. My answer always is, if you have to ask that question once you’re in the process, then it’s not going well. If it succeeds, there is no need to make fine measurements. Basically it is, and ought to be, a crusade. It’s not solely an intellectual activity. Planning becomes a way of life, the essential activity in management, and everybody in the organization has an opportunity to contribute. When an organization passes, through the planning threshold, people begin to get a sense of their capacity to design and create a future. Ultimately, it is far more gratifying than rain dancing.

Suggested Reading

C. W. CHURCHMAN, The Systems Approach, Delacote, 1968. A seminal work on the strengths and weaknesses of this approach, particularly as it applies to planning.

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