

**Job/Role Analysis and Planning:
A Workbook**

by

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JOB/ROLE ANALYSIS AND PLANNING: A WORKBOOK*

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* This exercise and conceptual material is based on research that was first reported in Schein, E. H. Career Dynamics: Matching Individual and Organizational Needs. Reading, Ma.: Addison-Wesley, 1978. The methodology has been elaborated and tested since then in frequent workshops in a variety of organizations.

PART I. INTRODUCTION

Most managers and employees will agree that the rate of change in organizations is dizzying and that the management of surprise is the order of the day. One of the main elements of this rapidly accelerating change is that jobs themselves are becoming less clear and less bounded. If the predictions about less hierarchy and more horizontal project based work are at all accurate, most managerial, professional, and technical employees will find themselves switching roles frequently. Job descriptions will become increasingly useless because 1) they are designed to create and maintain stability, and 2) they do not put enough emphasis on how jobs and roles are related to each other. In their place we need a dynamic process that:

1) Allows job holders to rapidly define and redefine their changing role as the network around them changes to adapt to a turbulent environment;

2) Allows executives and managers to figure out how roles in their organizations are changing, and to communicate those changes to future job holders.

Job/role analysis and planning, as described here, is such a dynamic process.

WHO NEEDS JOB/ROLE ANALYSIS AND PLANNING?

1) Any technical, professional, or managerial employee and any executive who is in an organization that is experiencing change.

2) Any manager who is involved in succession planning and/or career counseling of his subordinates.

3) Any employee who is uncertain or confused about his/her job responsibilities, or who is entering a new assignment.

AS AN INDIVIDUAL EMPLOYEE, WHAT WILL JOB/ROLE ANALYSIS AND PLANNING DO FOR ME?

1) Enrich your understanding of the social network in which your job is embedded.

2) Enable you to decipher what others in your organization expect of you, and who the key “stakeholders” of your job are.

3) Enable you to obtain a deeper understanding of your organization and its dynamics.

4) Enable you to analyze the change process that your organization is undergoing, especially the impact of those changes on your own and others' jobs.

AS A MANAGER, WHAT WILL JOB/ROLE ANALYSIS AND PLANNING DO FOR ME?

1) Enable you to understand how your job relates to your subordinates and what their expectations of you might be.

2) Enable you to explain to your subordinates what the dynamic elements of their job are and how they should think about their job in the future.

3) Enable you to relate your own and your subordinates' work to the mission and strategy of the organization.

4) Enable you to do more effective organizational and human resource planning, as you look into an uncertain and dynamic future.

**HOW DOES JOB/ROLE ANALYSIS AND PLANNING WORK?
WHAT DO I HAVE TO DO?**

The process described in this booklet can be used in two ways. You as an individual can go through the steps to analyze your own job/role. However, it is preferable to go through the steps with several others because the kind of information you will need to achieve maximum insight is often easier to elicit in a group context.

The job/role analysis and planning exercise leads you through a series of steps that enable you to figure out how your job relates to various others, what their expectations are, who the key

stakeholders of your job are, what they expect of you, what changes you anticipate in the environment, how that will affect the stakeholders and their expectations, and what the implications are for your job. This should take no more than two hours of your time, though it can take longer if you desire to dig deeper into some of the issues you will surface.

You do not need any materials except this booklet. If you are working in a group, access to a flipchart on which you can draw diagrams that your whole group can see will be helpful. A room in which you can hang flipchart pages that you have filled out is also desirable.

WHY IS JOB/ROLE ANALYSIS AND PLANNING SO IMPORTANT?

Job/role analysis and planning is a new technique designed to overcome some of the weaknesses of traditional methods of job analysis and the attendant processes of human resource planning and job design. It acknowledges not only that the nature of work is changing rapidly, but that work is increasingly embedded in a complex set of relationships. One cannot adequately design or describe a job without explicitly considering those relationships, what can be thought of as the “role network” that surrounds any given job. In that role network there will always be key stakeholders whose expectations define the essence of the job. The identification of those stakeholders, a description of their particular expectations, and a projection of how those expectations may change as one analyzes changes in the environment thus become crucial elements both in designing work and in human resource planning.

Most human resource planning processes short-circuit job/role planning by going directly to the question of "what kinds of people and how many will we need to fulfill our plans?" The hidden and dangerous assumption in this approach is that the work to be done will remain more or less the same, implying that one only needs to look at the potential and performance of the available people.

Yet in example after example of succession planning that I have been involved with, the key questions turned out to be:

- 1) Over the next few years will the job itself change?
- 2) In what ways will the content of the job and the role network around the job change?
- 3) What new motives, skills, and attitudes will be required to do the new kind of work?
- 4) What do these changes imply for the kind of person who should be promoted or transferred into the job?
- 5) What do these changes imply for the kind of training and development that need to be designed for job incumbents?

The need to answer these questions applies both at the organizational and the individual level. The organization needs the information in order to do its human resource planning, and the individual needs the information in order to structure his or her own priorities. **The individual side is especially important as the boundaries of jobs and roles become more fluid and as organizations increasingly are giving people more autonomy and freedom to design and structure elements of their own jobs.**

This exercise and the reading material focuses both on the **content of the job itself** and on the **network of relationships** in which the job is embedded. Typically both of these change as the organization's strategy and plans change in its efforts to adapt to a changing dynamic environment. Therefore I call this **JOB/ROLE ANALYSIS AND PLANNING**.

Every manager and employee should conduct an annual job/role analysis of his or her own job, and should participate with others in analyzing the jobs of all subordinates, key peers, and superiors with whom organizational relationships exist. An organization cannot achieve its strategic objectives until these have been translated into concrete goals. Those goals cannot be operationalized until they have been translated into desired activities on the part of members of the organization. And those activities will not be accomplished until they have been clearly understood by the job holder. Such understanding requires not only self-insight, but clear communication of expectations on the part of managers, peers, and subordinates. Joint job/role analysis and planning through the application of the open systems planning methodology to specific jobs is the proposed means of achieving such understanding and insight.

APPLYING OPEN SYSTEMS PLANNING TO JOBS/ROLES

Most organizations recognize that some form of open systems planning is necessary to understand strategic options and to formulate concrete plans. Logically the same kind of planning should be done for all major jobs/roles in the organization, taking

into account what new strategic directions may have been formulated at top management levels and what changes may have occurred in the context in which a given job/role operates.

Only by doing systematic job/role planning and by clearly communicating to each job incumbent the results of this analysis can a manager meet the needs of the organization to fulfill its basic mission. In addition, the information generated by job/role planning is needed to improve human resource plans for staffing, for succession, for employee and management development, for determining the critical dimensions to be used in performance appraisal and in the judgment of potential, for inventorying human resources, and for the design of appropriate reward and control systems.

The essential elements of open systems planning as applied to jobs/roles are to:

- 1) Identify the role network and the major stakeholders surrounding a given job/role in the organization;
- 2) Analyze the current expectations, demands, and constraints of each stakeholder;
- 3) Project what environmental changes will occur in the near future (one to five years out);
- 4) Analyze the major impacts that these environmental changes will have on each of the stakeholders, and determine whether the role network itself will change;
- 5) Analyze how these changes will affect stakeholder expectations, demands, and constraints pertaining to the job/role;

6) Determine what the implications are for job/role incumbents in terms of the qualifications and experience they should have to fulfill the job/role.

This kind of analysis stands in sharp contrast to the typical job evaluation exercise that asks the individual to list job requirements, and then asks for a self-analysis of skills, preferred activities, areas of enjoyment, etc. Job/role analysis and planning puts each job into its appropriate organizational context and assumes 1) that the major stakeholders surrounding a given job will change, and 2) that the expectations of given stakeholders will change as the environment changes. What is most important to understand about a job/role, then is how the **future expectations** pertaining to it will change. Only when that is understood can one do a self analysis of how one's own skills and preferences fit with a given job. Too often we take jobs that fit us today without realizing that the job in the future will make demands on us that we may not be able to meet.

SOME CONCRETE EXAMPLES

Case 1. The Changing Nature of Plant Management.

The clearest example of the need for job/role planning that I have observed has been in the chemical industry where the job of plant manager has, in some settings, undergone an almost total transformation. I have done job/role planning exercises with teams of plant managers both in the U. S. and in Europe. The typical assumption when we initially looked at the job descriptions was to treat the job as primarily a technical one and to ensure that the pool

of future plant managers would be technically able to handle the increasing complexity involved. The dominant trend was perceived to be the increasing technological complexity of the manufacturing process, leading to the assumption that technical competence was the critical future skill for plant management.

When these groups were asked to identify all of the stakeholders that have expectations of a plant manager and to analyze how those expectations may be changing in the future, a somewhat different picture emerged. First of all, the analysis revealed that the technical content of the typical plant manager's job had already become so heavy that the plant manager needed a technical staff. He or she could no longer stay on top of the technology, and key technical decisions were made primarily by the staff.

More importantly, with the advent of occupational safety concerns, community environmental concerns, and growing union concerns about employment security, the plant managers found themselves increasingly negotiating with various interest groups around issues that had virtually nothing to do with the technology of the plant. The stakeholder analysis revealed that there were powerful changes occurring in the attitudes of the unions, the community, and the relevant government agencies that had little to do with technological niceties of the production process, except where it specifically impacted safety, quality of work life, or the environment.

In each relationship with a stakeholder, what the plant manager was perceived to be doing more and more

was negotiating in a complex political environment. As a result of this insight, one company realized that what it needed in its future plant managers was not technocrats but very talented negotiators who were willing and able to spend time working on the plant's various **external interfaces**. Internal relations and technical matters were increasingly handled by the manager's staff and subordinates.

The job had been changing for a number of years, but this had not been explicitly observed or analyzed, hence little provision was made in the human resource planning and development processes to identify and develop such future negotiators. Individual plant managers experienced a sudden insight into the causes of their frustrations in that they felt unprepared to do things that were outside of their formal job description. As a result of these insights, the company immediately instituted a different system of appraising performance and potential in the manufacturing management area, and started up new development programs to insure that its vision of what the job of the future would be could be fulfilled.

Plant managers who participated in the exercise had a sense of relief that what they were increasingly experiencing was valid, not simply an indication that they were doing a bad job or concentrating on the wrong things. They were able to clarify in their own minds the importance of managing the external interfaces and, more importantly, now found it legitimate to ask for training and advice in these more "soft" and political areas.

Case 2. Spontaneous Redesign of a Job/Role.

The power of job/role analysis and planning was illustrated in a company that had recently lost its Vice President for Administration. I was working with them on career development in a one-day workshop. During lunch the President and his other key subordinates said they had some business to attend to, and that I could hang around but would have to excuse them while they worked on who should replace the lost executive.

It turned out that they had one candidate in mind, Joe, but they had some reservations about him. I listened for roughly a half hour during lunch while they discussed all the pros and cons of giving Joe the job, citing Joe's strengths and weaknesses in general personality terms and in terms of past job history--he was a good manager, but not so good in his external relations, he handled people well, he knew the technical areas of the company well, etc. On the whole the picture was very positive, but somehow the group could not agree that he was right for the job.

At this point I became curious about the job itself and asked quite innocently what the Vice President for Administration did, who the major stakeholders were surrounding that job, and how they saw the job in the future. In answer, the group started to list things like Personnel, Legal, Purchasing, Information Systems, and Public Relations. When they came to this last item, someone interrupted and said: "You know as I think about it, Joe is good in all of those areas except public relations. He is just not good with outsiders and, as we look ahead, those outsider relationship are going to become much more important."

This comment produced immediate agreement from the whole group and led one of them to a big insight. He asked the group whether Public Relations had to be part of this job? After only a few moments thought, the group agreed that Public Relations did not have to be part of the job of VP of Administration, that, in fact, the other parts of the job were growing so rapidly that there was already enough in the job, and that they could easily shift Public Relations to one of the other Senior Vice Presidents until a permanent person could be found to do solely Public Relations. Once they had redesigned the job, they quickly reached complete consensus on Joe's appropriateness for it, and, incidentally, discovered that Public Relations was going to become so important in the future that they needed a full time person to do it.

This example illustrates the importance of doing job/role analysis and planning for key executive positions in a group that has the power to redesign the management system. We often assume that the present structure of jobs is appropriate and only re-examine individual jobs when major reorganizations occur. But restructuring of the sort that this group did will become more and more common as the environment becomes more dynamic and stakeholder expectations change.

Case 3. Discovering the Complexity of Human Resource Management.

Many human resource managers complain that they are not clear about how to do their jobs--are they professional experts, counselors, servants of power helping top management implement policies, helpers to line managers to handle their human problems

for them, legal advisers to keep management from getting sued on affirmative action violations, or what? Job/role analysis and planning with groups of such managers has typically revealed that there are several sets of key stakeholders and that the complexity of the job results from changing expectations on the part of those stakeholders.

Senior management as a set of stakeholders is increasingly expecting the human resource function to participate in strategic discussions by helping to forecast human resource requirements and issues and, at the same time, to administer all of the human resource systems such as compensation, benefits, performance appraisal, and other systems more and more efficiently.

Line managers as stakeholders expect their human resource managers to solve “people problems” for them and to be a supportive helper in running their operation. Some line managers expect the human resource manager to be an advisor, others expect him or her to actually do the hiring, firing, appraisal, counseling, career planning, etc. Many line managers also expect their human resource manager to be a competent organization development professional who can facilitate meetings, design team-building programs, and in other ways help to make the organization more effective.

Projecting into the future revealed that the “servicing the line” function was declining as more line managers saw their own responsibilities for human resource management increasing, and, at the same time, the “organization development” function was

increasing as line managers saw the growing need for collaborative relationships, team building, and organizational learning.

A third stakeholder that is playing an increasingly important role is the professional community of human resource management that expects the individual manager to run a "professional" operation, to be an expert in those functions that are clearly at the heart of human resource management such as compensation, employee development, counseling, etc.

A fourth set of stakeholders are the employees who expect the human resource function to be a champion, ombudsman, and protector of their rights and privileges. The whole grievance process in employee relations reflects the potentially conflicting expectations of top management who want to solve problems without strikes or other inconveniences and the employees who want protection and improvements in the quality of their working life.

As groups of human resource managers examine how the expectations of these four groups impact on them, they become clearer about the ambiguity of their jobs, the "role overload" they often feel, and the role conflicts that are inherent in the job. More importantly, as they analyze how the environment is impacting the stakeholders, they get increasing insight into what will be demanded of them in the future. For example, as companies are becoming more global, top management is expecting more expertise in the management of overseas assignments, cultural diversity, and other issues that derive from working in multi-cultural environments. As the world is becoming more conscious of ethical and value issues,

employees increasingly expect more autonomy and flexibility in their working situations. As the boundaries of line manager's jobs are becoming more fluid and as hierarchy is increasingly being supplemented with other coordination mechanisms such as complex matrices and rotating project management, the line managers will expect more help of an as yet unspecified nature. One possibility is that anxiety levels in the organization will increase dramatically and that human resource managers will have to play a bigger role as individual counselors.

In summary, job/role analysis and planning reveals not only how jobs will change but also why jobs feel the way they do, why sometimes one feels overloaded or in conflict. The insights obtained by this means help in managing one's feelings and in negotiating a situation that may be more compatible with one's skills and preferences. Part 3 of this booklet will explore some of the ways that you can deal with such issues.

Case 4. Job/Role Planning Output as Job Description.

The above analysis focuses on using job/role planning as a tool for understanding one's job. The importance of this was illustrated in a group of senior managers who were analyzing their own roles as part of a general strategy process. They carefully assessed the stakeholders, the environmental changes that would occur, the changing expectations of the stakeholders, the impact those changes would have on the job, and the qualifications that were, therefore, crucial in any future holder of such a job. All of this was summarized on five flipchart pages as output from the group discussion.

At the end of the two hours of so of work, one of the group members said: "You know, when I received my promotion into this job I wish someone had handed me something like those five pages. That would have been infinitely more helpful to me in figuring out what I was supposed to do than the job description which was dry, dated, and static. If I could have had the benefit of this kind of thinking I would have become productive much faster."

SUMMARY

To summarize so far, I am arguing that for any job in the organization, it is necessary once a year or so to review what is happening to that job, and to project those changes into the future. Only when that is done explicitly do we have the basis for human resource planning and for determining explicitly what the organization needs to fulfill its strategic objectives. And only then do job holders have an accurate sense of what their own priorities must be as they look ahead. The rest of this booklet is devoted to helping you to do this job/role analysis and planning.

PART II. JOB/ROLE ANALYSIS AND PLANNING: AN OVERVIEW OF THE STEPS

Step 1. Analyzing one's own present job/role

This analysis can be done by oneself, but it is preferable to gather together two or three colleagues, peers, subordinates, or supervisors all of whom are part of the role network of the job. The analysis involves the identification of one's complete stakeholder/role network, and the key dimensions of one's job. The role network is all of the people who have some expectations of the person whose job is being analyzed. The key stakeholders are those members of the role network whose own work will be severely affected if the job holder does not meet their expectations. The proposed process for carrying out this analysis is provided in Part III.

Step 2. Analyzing changes in the environment

Every job/role and the stakeholders who have expectations of the job holder exist within an environment that is partly provided by the organization and partly by outside forces. Environments can be analyzed from a technological, economic, political, interpersonal, or socio-cultural point of view. A systematic scan of each of these environmental aspects will reveal some probable changes that will impact the stakeholders and their expectations. Changes in those expectations will in turn impact the job being analyzed. This analysis is described in Part IV.

Step 3. Analyzing the impact of the identified environmental changes on stakeholders and the job

Given the environmental changes that have been identified in step 2, what impact will those have on the expectations of each set of stakeholders. For each of these impacts the analysis then asks you to rate the impact on the job/role itself. For each such impact identified, the analysis asks you to rate the impact as crucial or only peripheral and, therefore, unimportant. The tools for doing this analysis are described in Part V.

.Step 4. Redefining the job/role

In this step you must summarize and analyze more globally the impacts identified and redefine the job/role accordingly. What will be most different in this job in the future? What dimensions will change and how? Part VI describes the procedure to be used.

Step 5. Redefining the requirement for doing the job and fulfilling the role

What are the implications of the step 4 analysis for the kinds of people who should be considered for this job/role? What kinds of skills, motives, talents, attitudes will be needed in future occupants of the job/role? If you are analyzing your own job, what are the implications for yourself? Will you need some new training or experience? Are you mismatched to the job? Should you attempt to restructure the job? Part VII provides guidelines for doing this analysis.

Step 6. Extending the planning activity

Since every job is part of a network, the basic analysis should reveal what other jobs are also changing, thereby identifying the next steps in the job/role planning process. Once the process has

been used successfully by some employees or managers, they can teach others in group settings. Part VIII offers a way of doing this.

PART III. MY CURRENT JOB/ROLE

1. BASIC DIMENSIONS OF MY JOB

Using your job description and anything else such as performance appraisal forms try to identify the main dimensions of your job. A good way to start is to list your basic responsibilities, then your resources such as subordinates, budget, equipment, etc. and then the main skills, talents, attitudes, you need to do the job.

- 1) List your basic responsibilities below

- 2) List your main resources for getting the job done

- 3) What skills, talents, attitudes, etc. do you need to get the job done?

2. JOB/ROLE PROFILE

If you are in a managerial or project role or have some managerial responsibilities, you may wish to rate your job as it currently exists on the dimensions below. These dimensions are especially designed to highlight areas where work is changing. The ratings will provide you a baseline against which to compare how this job may look in the future.

Rate your present behavior in your present job on the 5 point scale next to each item where 1 is low and 5 is high. (*Editor--add numbers next to each item*)

1. Degree to which I work in and with groups of various sorts (committees, task forces, meetings, etc.). 1 2 3 4 5
2. Degree to which I operate as a consultant/catalyst in my day to day role.
3. Degree to which I integrate the efforts of others who are technically more competent in their specialities than I am.
4. Degree to which I have to rely on second hand information that is gathered by others.
5. Degree to which I have to monitor the thinking and decision making of others rather than doing the thinking and decision making myself.
6. Degree to which I facilitate the processes of management and decision making rather than making the decisions myself.
7. Degree to which I identify the relevant problems and make sure that the right problems are worked on.
8. Degree to which I am dependent on others (i.e. subordinates, peers, etc.) for total performance (rather than it being within my own control).
9. Degree to which my level of responsibility (accountability) is greater than my direct degree of control.
10. Degree to which I spend time considering the long range health of the organization rather than its day to day performance.

3. MY CURRENT ROLE NETWORK AND KEY STAKEHOLDERS

The purpose of this part of the exercise is to help you to identify the people who expect things of you (your role network) and within that network to identify who are your key stakeholders (whose own work or life would be upset if you do not meet their expectations).

Notice that though your job is the focus of this analysis, the role network will probably include your family, friends, and some members of the community. They also expect things of you--some of your time, effort, and commitment. In terms of key stakeholders, some of them may be more central than some of the people at your place of work. An example of a role network is provided on the next page.

Put yourself into the circle at the center of the following page and then draw in all around you the members of your role set either by name or title. Draw an arrow from each of them to you and you to them, making the arrow more or less thick to represent how important those links are or how extensive the expectations of those people are.

Think broadly about all possible categories of stakeholders:
1) Superiors; 2) Subordinates; 3) Peers; 4) Customers; 5) Suppliers; 6) Vendors; 7) Your spouse; 8) Your children; 9) Special friends or others in the community to whom you are connected.

It is important that you do this thoroughly so that you can appreciate the complexity of the context in which your job is embedded.

SAMPLE ROLE NETWORK OF A FIRST LINE SUPERVISOR

4. DRAW YOUR OWN ROLE NETWORK ON THIS PAGE

5. WHO ARE MY CRITICAL STAKEHOLDERS AND WHAT ARE THEIR EXPECTATIONS OF ME?

Go back over your diagram and pick out the five or six stakeholders whose expectations influence you the most. To identify them ask yourself who would be most upset if you failed to meet their expectations. Remember that you also have a concept of your own job and role and are, therefore, one of the major stakeholders with expectations of yourself. Therefore, include yourself in the analysis. For each of the stakeholders write down as best you can the most important expectations they hold. If you are not sure of what their expectations are put down your best guess.

Stakeholder 1:

Major Expectations:

Stakeholder 2:

Major Expectations:

Stakeholder 3:

Major Expectations:

Stakeholder 4:

Major Expectations:

Stakeholder 5:

Major Expectations:

Stakeholder 6:

Major Expectations:

If you need to list additional stakeholders use the back of this page.

6. ANALYZING ROLE AMBIGUITY, ROLE OVERLOAD, AND ROLE CONFLICT

Once you have identified your role network and the major stakeholders within it, you will notice that if you scan the various expectations you have identified, three kinds of issues will surface. One of the first things you will notice is that with respect to some stakeholders you will have had some trouble figuring out what their expectations of you actually are or will be in the future. This has been labelled “role ambiguity” and is an increasingly important issue in organizations.

If you are experiencing such role ambiguity with respect to selected stakeholders you have basically two choices: 1) you can develop a communication process to reduce the ambiguity (i.e. go the stakeholders and ask them to share their expectations or give them your perceptions and ask them to modify them); or 2) you may decide to “live with the ambiguity” (i.e. watch carefully how their future behavior provides clues until you have deciphered what they want. Obviously, alternative 1 is the better way to cope if you have access and opportunity to obtain “role clarification.” But you have to take the initiative because the stakeholder may not be aware that he or she is sending ambiguous signals.

A second issue is “role overload.” Role overload occurs when you realize that the sum total of what your critical stakeholders expect of you far exceeds what you are able to do. If the stakeholders are not equally important to you, role overload is typically handled by ignoring the expectations of the less important stakeholders, but this manner of coping often creates difficulties

because the ignored stakeholders may react powerfully to being ignored. A second coping mechanism for overload is to compromise on each of the stakeholders' expectations by doing only a part of what each of them expects. Unfortunately this may make you look relatively less competent in each of their eyes.

The best way of coping with overload is to communicate that fact to your key stakeholders and involve them in the process of setting priorities so that you do not have to guess what is important to others. The stakeholders may not even be aware of each others' expectations. Once you communicate to them that they have overloaded you, they can decide between themselves what is most important, or they can choose to empower you to make the decision.

"Role conflict" occurs when you realize that two or more stakeholders expect things of you that are in conflict with each other. This occurs most often in three forms: 1) What your superiors want is opposite to what your subordinates want, 2) What one of your peer stakeholders wants is in conflict with another peer, or 3) What one of your critical stakeholders wants is in conflict with your expectations of yourself. Each of us is a stakeholder in our own job/role and we have expectations of ourselves. Often we find that we are unwilling for any of a number of reasons to do what is expected of us, leading to ethical, moral, and motivational dilemmas.

In each of these instances role renegotiation with the stakeholders is essential so that the emotional cost of conflict can be minimized. What this means in practice is that you must find a

way to communicate to the various stakeholders how their expectations create conflict so that they can become involved in the resolution, or else decide to empower you to resolve the conflict. If you act unilaterally to resolve the conflict, you run the risk of disappointing a given stakeholder and giving the impression either that you are not motivated or not competent to meet his or her expectations.

A special case of overload or conflict occurs when the expectation of your family or friends conflict with the expectations of your work stakeholders. This type of “work/family overload and/or conflict” is becoming more prevalent and will become an ever bigger problem as organizational boundaries loosen. For example, overload may be reduced if more work is done at home. But work at home may involve assumptions about responsibility and commitment that are out of line with current assumptions about organization/ employee relationships. To solve this kind of problem requires not only an understanding of the future form of organizations, but may involve complex negotiations with both the work organization and the family, and ultimately some change in cultural assumptions about the nature of work.

When you have finished analyzing the current state of affairs in your role network, go on to the next step of projecting into the future.

PART IV. ANALYZING CHANGES IN THE ENVIRONMENT

Before completing this section you may wish to read Part IX that discusses some of the changes that are likely to occur as we look ahead. In that section I attempt to summarize the major trends as they apply to job/roles in organizations. Feel free to use this material or any other material you may be aware of to help you think through how the environment will change as you look ahead. Take a five to ten year horizon as your frame of reference, but don't ignore trends that may have a more immediate impact. It is useful to think of the "the environment" in terms of four separate dimensions and to analyze changes in each dimension:

1) Changes in the technological environment--for example, the rapid evolution of information technology and biotechnology, etc.

2) Changes in the economic environment--for example, the globalization of markets and manufacturing processes, the growth of large trading blocks and increased global competition, etc.

3) Changes in the political environment--for example, the collapse of communism, the fractionation of countries like the Soviet Union, Yugoslavia, and Czechoslovakia into smaller ethnic units, etc.

4) Changes in the socio-cultural environment--for example, the growing desire for democracy, the growth of human rights movements, environmentalism, etc.

It is recommended that this analysis especially be done in a group because different people with different perceptions trigger each others' thought, leading to a deeper analysis. You may wish to just brainstorm and sort the changes you project into the categories above at a later time. You may also wish to keep in mind that your ultimate goal in doing this analysis is to understand better how stakeholder expectations will change.

TECHNOLOGICAL TRENDS:

ECONOMIC TRENDS:

POLITICAL TRENDS:

SOCIO-CULTURAL TRENDS:

ANY OTHER RELEVANT TRENDS:

PART V. ENVIRONMENTAL IMPACTS ON STAKEHOLDER EXPECTATIONS

For each of the major stakeholders you identified in Part III, try to think through how the changing environmental trends you have identified will affect them, and how those effects will, in turn, change their expectations of you in your job/role.

Stakeholder 1:

Stakeholder 2:

Stakeholder 3:

Stakeholder 4:

Stakeholder 5:

Stakeholder 6:

Other stakeholders who may not have been identified as critical before, but whose expectations will become critical in the future:

PART VI. HOW WILL THE JOB/ROLE BE IMPACTED?

1. General impact on my job/role

Go back to your original analysis of your job in Part III (p.) and review your self-analysis in the light of your assessment of stakeholder changes. List below the main impacts you perceive.

2. Impact on job/role dimensions

Review the job/role dimensions in the light of the above analysis and mark for each dimension what the job/role will be like as you look ahead. Do this without looking at your previous ratings so that you can compare with minimum bias how you look at the job now and how you perceive it in the future. Rate each dimension on the 5 point scale next to each item (1 is low, 5 is high).

1. Degree to which I work in and with groups of various sorts (committees, task forces, meetings, etc.). 1 2 3 4 5
2. Degree to which I operate as a consultant/catalyst in my day to day role.
3. Degree to which I integrate the efforts of others who are technically more competent in their specialities than I am.
4. Degree to which I have to rely on second hand information that is gathered by others.
5. Degree to which I have to monitor the thinking and decision making of others rather than doing the thinking and decision making myself.
6. Degree to which I facilitate the processes of management and decision making rather than making the decisions myself.
7. Degree to which I identify the relevant problems and make sure that the right problems are worked on.
8. Degree to which I am dependent on others (i.e. subordinates, peers, etc.) for total performance (rather than it being within my own control).
9. Degree to which my level of responsibility (accountability) is greater than my direct degree of control.
10. Degree to which I spend time considering the long range health of the organization rather than its day to day performance.

3. My job/role as I now see it

Redo on this page your description of your job in the light of the open systems planning you have done.

1) List your basic responsibilities as you now see them:

2) List your main resources for getting the job done as you now see them:

3) Before assessing what skills, talents, attitudes, etc. you will need to get the job done, complete the next section to stimulate your thinking.

PART VII. REQUIREMENTS FOR FULFILLING THE JOB/ROLE

To fulfill the job/role as you now have defined it, what are the special requirements in the way of skills, attitudes, and values that you will need? To stimulate your thinking in this area fill out the job characteristics profile provided below, and then add any other dimensions that occur to you. If you are not a manager fill out those items that would pertain to all employees and ignore the specifically managerial ones.

The items below reflect the four major categories of motives, attitudes, abilities, and skills that have been found to be relevant to effective organizational performance. I have emphasized those items that are particularly relevant to the rapidly changing environment in which future job/roles will exist.

For each of the below items, put an X through the number that represents your perception of yourself in the present, and put a circle around the number that represents what you think you ought to be in the future in the light of your job/role planning analysis.

A. Motives and Values

1. My desire to get a job done, my need for accomplishment..1 2 3 4 5
2. My commitment to my organization and its mission
3. My career aspirations and ambitions
4. My degree of involvement with my career
5. My desire for high levels of responsibility
6. My desire to take risks
7. My desire to make tough decisions
8. My desire to work with and through people
9. My desire to exercise power and authority
10. My desire to monitor and supervise the activities of others

11. My desire to delegate and help others to succeed
12. My desire to function as a general manager free of functional and technical constraints
13. My desire to work collaboratively rather than competitively with others
14. My desire to learn
15. My desire to take risks even if that lead to errors

B. Analytical Abilities and Skills

16. My ability to identify problems in complex, ambiguous situations
17. My ability to sense quickly what information is needed in relation to a complex problem
18. My ability to obtain needed information from others
19. My ability to assess the validity of information that I have not gathered myself
20. My ability to learn quickly from experience
21. My ability to detect errors in my own actions
22. My flexibility, my ability to think of and implement different solutions for different kinds of problems
23. My creativity, ingenuity
24. My breadth of perspective--insight into a wide variety of situations
25. My degree of insight into myself (strengths and weaknesses)

C. Interpersonal and Group Skills

26. My ability to develop open and trusting relationships with peers
27. My ability to develop open and trusting relationships with superiors

28. My ability to develop open and trusting relationships with subordinates
29. My ability to listen to others in an understanding way
30. My ability to communicate my own thoughts and ideas clearly and persuasively
31. My ability to communicate my feelings clearly
32. My ability to influence people over whom I have no direct control
33. My ability to influence my peers
34. My ability to influence my superiors
35. My ability to influence my subordinates
36. My ability to diagnose complex interpersonal and group situations
37. My ability to develop processes that ensure high quality decisions without having to make the decision myself
38. My ability to develop a climate of collaboration and teamwork
39. My ability to design processes to facilitate intergroup and interfunctional coordination
40. My ability to create a climate of growth and development for my subordinates

D. Emotional Abilities and Skills

41. The degree to which I am able to make up my own mind without relying on the opinions of others
42. The degree to which I am able to share power with others
43. The degree to which I am able to tolerate and acknowledge errors
44. My degree of tolerance for ambiguity and uncertainty

- 45. My ability to take risks, to pursue a course of action even if it may produce negative consequences
- 46. My ability to pursue a course of action even if it makes me anxious and uncomfortable
- 47. My ability to confront and work through conflict situations (versus suppressing or avoiding them)
- 48. My ability to keep going after an experience of failure
- 49. My ability to confront my stakeholders if there is role ambiguity, overload, or conflict
- 50. My ability to continue to function in the face of continued environmental turbulence

List below other items that occur to you

What are the developmental implications for you?

First look at those items above where there is the greatest discrepancy between your present rating and where you feel you should be. For each area where you feel there is a significant discrepancy figure out a development plan for yourself, or figure out how to restructure the job so that your present capacity will be sufficient to do the job.

If you conclude that you must restructure your job, think that through in terms of renegotiating with the requisite stakeholders and insure that the new expectations are realistic both from your point of view and their point of view.

List below the various developmental or restructuring actions you plan to take and keep that list as a point of reference to be reviewed at various times.

Item No. _____

Developmental Plan:

Item No. _____

Developmental Plan:

Item No. _____

Developmental Plan:

Continue on the next page

Item No. _____

Developmental Plan:

Item No. _____

Developmental Plan:

Item No. _____

Developmental Plan:

Item No. _____

Developmental Plan:

Item No. _____

Developmental Plan:

Item No. _____

Developmental Plan:

Developmental Summary:

Given all of the above plans, what are the next steps that you will take. Try to be specific and give a time table for each step.

Step 1.

Time Table:

Step 2.

Time Table:

Step 3.

Time Table:

PART VIII. EXTENDING JOB/ROLE ANALYSIS AND PLANNING

The final step in the exercise is to think through who else could benefit from the job/role planning activity and expose them to the idea and the process. This could be subordinates, peers, or superiors. Most likely you will have discovered in your stakeholder analysis that some of them have unrealistic expectations and that they should therefore engage in this kind of exercise.

PART IX. WHY IS JOB/ROLE ANALYSIS AND PLANNING CRITICAL TO THE FUTURE?

Job/role analysis and planning are becoming increasingly important activities because work and organizations are changing at an ever more rapid rate, and all the indications are that work will become more fluid and will involve more complex relationships with others in superior, peer, and subordinate roles. I will begin by describing what I see to be some of the most important trends and their consequences for the nature of work. These trends all interact in complex ways and must be treated as a single system of forces even though they are described one at a time.

1. Organizations worldwide are re-examining their structures and are engaging in various kinds of "downsizing" or "rightsizing."

In order to remain competitive in an increasingly global world, organizations are discovering the need to be concerned about perpetual improvement and stringent control of their costs. This has led to a wave of layoffs and restructuring of organizations such that many of the jobs have simply disappeared and work has been reallocated and redesigned so that a smaller number of people could perform it. The possibilities inherent in the creative use of information technology, especially "groupware," have opened up new ways of thinking about work and jobs (Johansen et al, 1991; Savage, 1990). The way in which people will be connected to each other will vary and will require all kinds of new relationships.

Job/role analysis and planning will be a primary tool for assessing and reassessing those relationships.

2. Globalization, new technology, and "rightsizing" have loosened the boundaries of organizations, jobs and roles.

At the organizational level we see in many industries a loosening of the boundaries between suppliers, manufacturers, and customers (Scott-Morton, 1991; Kochan & Useem, 1992). By using sophisticated information technology tools customers can directly access a company's sales organization, specify in detail what kind of product or service they require, and get an immediate price and delivery date from the computer (Davis & Davidson, 1991). As such systems become more common, not only do the roles of purchasing agent and salesperson become much more ambiguous, but their role change creates a chain reaction throughout the organization requiring redefinition of order processing, marketing, and even design and manufacturing.

At the same time, the automation of everything from secretarial work to complex production processes makes all kinds of jobs from secretary to production worker much less manual and more conceptual (Zuboff, 1988). Operators who work in automated refineries, nuclear plants, paper mills, and other such organizations know as much about the running of the plant as the managers do, thereby creating new power relationships. The role of management becomes more ambiguous as managers no longer have the power of knowing things that their subordinates do not know. It is especially important for managers to discover that their relationship to their

production workers has fundamentally changed, and that workers have come to occupy a much more central position in the role network.

3. As work becomes technically more complex, fewer people will work in operational roles and more people will work in service and staff roles supporting the operation.

The goal of automation is generally to reduce headcount, but the result is typically more of a redistribution of workers. Fewer operators are needed but more support services are needed. The total cost of the operation ultimately may not change all that much but the kinds of work that are performed change radically. The relationships between sets of workers will therefore change in as yet unknown ways. Operators have greater immediate responsibility for doing things right, but the programmers, systems engineers, and maintenance engineers have greater ultimate responsibility to keep the systems running, to keep the computers from "going down." Management becomes more of a coordinating and liaison function and less of a monitoring and control function. Peers in service roles come to be seen as much more central in the role network than they had been previously.

4. As conceptual work increases and job/role boundaries loosen, anxiety levels will increase.

The human organisms depend upon certain levels of predictability and stability in their environment. Though we all have needs for creativity and stimulation, we forget that those motives

operate against a background of security, stability, and predictability (Schein, 1992)

. As organizations face increasing competitive pressures, as jobs become more conceptual, and as responsibility levels in all jobs increase, we will see stress and anxiety levels increase at all levels of the organization (Hirschhorn, 1988; Zuboff, 1988). Formalization and bureaucracy has been one kind of defense against such anxiety, but the kind of work that needs to be done in the information and knowledge age requires more flexibility and innovation, thus making more anxiety an inevitable result.

An increasing role for management will be the containment and working through of anxiety levels, though it is not at all clear by what individual or group mechanisms this will occur. When people are anxious, they want to be with others and one of the most important functions of groups in organizations is the management of shared anxiety. The increasing emphasis on groups and teams that we hear about constantly may be the result not only of the growing complexity of work, but the growing anxiety levels attending work.

The concept of socio-technical systems has been promulgated for several decades, but as we project ahead it would appear that it becomes a more important concept than ever (Ketchum & Trist, 1992). One cannot separate the technical elements of a job from the social elements, as the network analysis in job/role analysis and planning is intended to illustrate. It should also be noted that job/role analysis and planning when carried out regularly in a group setting can itself be an anxiety reducer in that employees and

managers can share their concerns about the loosening of boundaries, role overloads and conflicts, while, at the same time beginning to resolve them.

5. In the process of “rightsizing,” organizations are 1) re-examining their hierarchical structures, 2) moving toward flatter organizations, 3) relying more on coordination mechanisms other than hierarchy, and 4) “empowering” their employees in various ways.

In the flat project based organization of the future, power and authority will rotate among different project leaders, and individual project members will have to coordinate their own activities across a number of projects with different leaders. Operational authority will shift rapidly from one project leader to another, and individual employees may find themselves working for several bosses simultaneously. At the same time, as knowledge and information is more widely distributed, employees become de facto empowered because increasingly they will know things that their bosses will not know.

However, hierarchy is fairly intrinsic to human systems, so we will probably not see the abandonment of hierarchical structures so much as a change in their function (Schein, 1989). For example, broad hierarchical categories such as civil service grades or degrees of partnership in a law firm or levels of professorial rank may continue to serve broad career advancement functions, but may not be a good guide as to who will have operational authority over a given task or project. Respect for people and the amount of

influence they exert will have more to do with their operational performance than their formal rank, and hierarchy will increasingly be viewed as a necessary adjunct to organizational life rather than its prime principle.

Power and authority will derive from what a given person knows and what skills he or she has demonstrated. But since conceptual knowledge is largely invisible, the opportunities for misperception or conflicting perception of who knows what and who should be respected for what will increase, making the exercise of authority and influence much more problematic. This in turn will increase anxiety levels in organizations. By bringing groups together to do job/role analysis one can help to contain this anxiety and, more importantly, overcome the limitations of traditional job analysis that attempts to evaluate the level of each job. One can speculate, in this regard, that pay will be tied more to formal rank, length of service, and number of skills that an employee has, not the particular job he or she is doing at any given moment.

6. Organizations Are Becoming More Differentiated and Complex.

With the rapid growth of technology in all fields of endeavor, the number of products and services available is increasing. At the same time growing affluence and more widely distributed information about products and services is making consumers more demanding. Organizations are therefore having to respond by becoming more able to deliver more different kinds of products and

services faster, in greater variety, and in more different places all over the globe (Davis & Davidson, 1991).

One of the major consequences is that the organizations which make these products and/or deliver the services themselves have to be more differentiated and complex. That, in turn, means that there will be more different kinds of occupational specialists who must be managed and whose efforts must somehow be tied together into a coherent organizational whole. Many of these specialists are neither motivated nor able to talk to one another, creating special problems of integration of effort (Schein, 1992). The highly specialized design engineer or computer programmer working in the research and development end of the company or in manufacturing often has little in common with the financial analyst whose specialty is the management of the company's investment portfolio or the personnel specialist concerned with the most recent interpretation of the affirmative action legislation. Yet all of these and many other specialists contribute in major ways to the welfare of the total organization, and their efforts have to be integrated. Such integration cannot take place unless all of the specialists and managers involved become conscious of each other as stakeholders and begin to make an effort to respond to each others' expectations.

Beyond this, senior management must begin to worry about and plan for the specific career development of such specialists in that many of them would be neither able nor willing to go into managerial positions (Schein, 1990). Such developmental planning cannot occur without a clear understanding of the role network

within which these specialists operate, and the involvement of those employees in planning their own development.

7. The Subunits of Organizations Are Becoming More Interdependent.

In order to produce a complex product or service effectively over a period of time, the many subspecialties of the organization will have to be coordinated and integrated, because they are simultaneously and sequentially interdependent in a variety of ways. For example, if the financial department does not manage the company's cash supply adequately, there is less opportunity for capital expansion or R&D; on the other hand, if an engineering design sacrifices some elements of quality for low cost, the result may be customer complaints, a lowered company reputation, and a subsequent decreased ability of the company to borrow money for capital expansion. In this sense, engineering and finance are in fact highly interdependent, even though each may be highly specialized and neither may interact with the other directly.

Sequential interdependence is the more common situation. The engineering department cannot design a product or service if R&D has not done a good job of developing the concept or prototype; in turn, manufacturing cannot build the product if engineering has produced unbuildable designs; and sales and marketing cannot get their job done if they have poor products to sell. But, of course, R & D cannot get its concepts right if marketing has not given them clear pictures of future customer needs or possibilities, and the process innovations that occur within

manufacturing often influence both marketing and engineering in terms of the types of products that are thought to be conceivable and feasible (Thomas, 1993).

These types of interdependence have always existed within organizations. But as specialization increases, interdependence also increases because the final product or service is more complex and more vulnerable to any of its parts malfunctioning. Nowhere is this clearer than in computer products or services. The hardware and software have to be designed properly in the first place and then implemented by a variety of specialists who serve as the interface between the final user and the computer system. If any of the specialists fails to do his or her job, the entire service or product may fail.

Job/Role analysis and planning is designed to reveal these interdependencies through analysis of the role network and the identification of the key stakeholders. As one does the analysis, what is often most surprising is the large number of stakeholders that one must simultaneously take into account. And, as one looks ahead, that number is growing, so the skills involved in dealing with multiple stakeholder expectations become more and more central to organizational performance (Rosell, 1992).

8. Organizational Climates Are Becoming More Collaborative/ Cooperative.

One major effect of the recognition of increased interdependence is that competition between organizational units

or individuals is perceived as potentially destructive. Team work and collaborative/cooperative relations are increasingly being touted as necessary to get the job done. This trend runs counter to the external marketplace philosophy that competition is a good thing, but is increasingly seen to be a necessary adaptation within organizations, even if inter-organizational relations continue to be competitive.

If this trend is worldwide, one will begin to see more evidence of inter-organizational collaboration as well, not for political reasons but for practical reasons of technological necessity. Increased levels of coordination will not be achieved by more centralized planning, as had been attempted in the socialist economies, but by more distribution of information and decentralization that will permit the various units to coordinate among themselves. However, for this self-managed coordination to occur, not only must information be widely available, but all of the actors in the system must be able to decipher their role in it. The same information can be framed and interpreted in many different ways. For collaboration and cooperation to work, common frames of reference must be established and that process will involve organizational members in much more group and team activity. Building shared frames of reference will also increasingly become a primary task of leadership (Rosell, 1992; Schein, 1992).

This trend poses a particular dilemma for managers whose own careers have developed in very dog-eat-dog, competitive environments and who simply do not have the interpersonal competence to redesign their organizational processes to be more

supportive of collaborative relations. I have met many a manager who pays lip service to "teamwork," but whose day-to-day style sends clear signals of not really understanding or supporting the concept, with the predictable consequence that this person's "team" does not function as a team at all. Unfortunately, both the manager and the subordinates may draw the erroneous conclusion that it is the teamwork concept which is at fault rather than locating the problem in their failure to implement the concept. Once they understand the nature of the network they are in, they can do a better job of implementation. Thus the very activity of job/role analysis and planning, when carried out in a team, becomes an important team building function.

9. Organizations Are Becoming More Dependent on Lateral Communicating Channels.

Closely connected with the need for more collaborative, teamwork relations is the need for information to flow laterally between technical specialists rather than going through a hierarchy. For example, some companies are putting the R&D and marketing departments closer to each other geographically and stimulating direct contact between them rather than having higher levels of management attempt to translate marketing issues for the R&D people (Allen, 1977). The customer, the salesperson, and the marketing specialist in a complex industry such as electronics all probably know more about the technical side of the business than the general manager does and therefore must be brought into direct

interaction with the designer and engineer if a viable product or service is to result.

Jay Galbraith (1973) has argued very convincingly that the information-processing needs of organizations based on task complexity and environmental uncertainty are, in fact, the major determinants of organization structure and that hierarchical structures work only so long as task complexity and uncertainty are fairly low. Lateral structures such as project teams, task forces, ad hoc committees, cross-functional organizational units, and matrix management become more common with increased complexity and uncertainty (Davis & Lawrence, 1977).

It is technological possibilities and consumer demands that are driving to greater complexity and it will be information technology that will make it possible for organizations eventually to adapt by creating the kinds of lateral communication that will make coordination, integration, and genuine teamwork possible.

Here again, managers face a novel situation because of the likelihood that their own careers have been spent in organizational settings dedicated to principles of hierarchy and chains of command. In such "traditional" organizations the tendency to communicate with people outside the chain of command is actually discouraged and punished. Not only will the organizational reward system and climate have to shift to encourage lateral communication, but in addition, managers will have to be trained to create lateral structures and to make them work. Job/role analysis and planning will facilitate this trend by highlighting how many of the key stakeholders are neither superiors nor subordinates, but are

in various kinds of peer relationships in which various kinds of interdependencies exist.

10. Socio-cultural Values Around Family, Self, and Work are Changing

In this category I will be referring mostly to trends that have been observed in the U.S.

1) People are placing less value on traditional concepts of organizational loyalty and the acceptance of authority based on formal position, age, or seniority, and are placing more value on individualism and individual rights vis-a-vis the large organization. Increasingly, people are demanding that the tasks they are asked to perform make sense and provide them with some challenge and opportunity to express their talents. Increasingly, people are demanding that the rights of individuals be protected, especially if they are members of minority groups or are in danger of being discriminated against on some arbitrary basis such as sex, age, religion or ethnicity. Increasingly, people are demanding some voice in decisions which affect them, leading to the growth of various forms of industrial democracy, participative management, and worker involvement in job design and corporate decision making.

As noted above in point 5, from the point of view of the employing organization, worker involvement also makes sense to the extent that the trend toward specialization of tasks is occurring. For many kinds of decisions, it is the worker who has the key items of information and therefore must be involved if the decision is to be a

sound one. Thus employee "empowerment" has taken on almost fad status.

2) People are placing less value on work or career as a total life concern and less value on promotion or hierarchical movement within the organization as the sole measure of "success" in life. Instead, more value is being placed on leading a balanced life in which work, career, family, and self-development all receive their fair share of attention, and "success" is increasingly being defined in terms of the full use of all one's talents and contributing not only to one's work organization, but to family, community, and self as well. Careers are built on different kinds of career anchors and the measure of success and advancement varies with whether or not one is oriented around the managerial, technical/functional, security, autonomy, entrepreneurial, service, pure challenge, or life style anchor (Schein, 1990).

3) People are placing less value on traditional concepts of male and female sex roles with respect to both work and family roles. Thus in the career and work area we are seeing a growing trend toward equal employment opportunities for men and women, a breaking down of sex-role stereotypes in regard to work (e.g., more women are going into engineering and more men are going into nursing), and a similar breaking down of sex-role stereotypes in regard to the proper family roles (more women are becoming the primary "breadwinner," and more men are staying home to take care of children, do the cooking, and clean the house). Our society is opening up the range of choices for both men and women to pursue new kinds of work, family roles, and life-styles (Bailyn,

1978,1992). One of the major consequences has been the "dual-career" family in which both husband and wife are committed to career development, thus forcing organizations to develop new personnel policies and forcing social institutions to develop new alternatives for childcare.

One of the most important elements of job/role planning and analysis is to determine the position of spouses, children, and friends in the role network and as key stakeholders. As dual careers become more common, one will see complex overlapping role networks in couples, requiring more complex adaptive solutions both at work and at home.

4) People are placing less value on economic growth and are placing relatively more value on conserving and protecting the quality of the environment in which they live. Assessing the impact of technology is becoming a major activity in our society, and we see growing evidence of a willingness to stop progress—e.g., reluctance to build the supersonic transport or even allow our airports to use existing SSTs; highway construction which comes to an abrupt halt in the middle of a city; refusal to build oil refineries, even in economically depressed areas, if the environment would be endangered. However, as we have seen in the early 1990's if a recession continues, economic growth values resurface strongly and conflict between the need to protect the environment and the need for jobs grows.

These value changes and conflicts have created a situation in which the incentives and rewards offered by the different parts of our society have become much more diverse and consequently

much less integrated. We see this most clearly in the organizational "generation gap"—older managers or employees who are still operating from a "Protestant ethic" attitude toward work versus young employees who question arbitrary authority, meaningless work, organization loyalty, restrictive personnel policies, and even fundamental corporate goals and prerogatives.

As options and choices have opened up and as managers have begun to question the traditional success ethic, they have become more ready to refuse promotions or geographical moves, more willing to "retire on the job" while pursuing family activities or off-the-job hobbies more actively, and have even resigned from high-potential careers to pursue various kinds of "second careers" seen to be more challenging and/or rewarding by criteria other than formal hierarchical position or amount of pay.

What all this means for the managers of tomorrow is that they will have to manage in a much more "pluralistic" society, one in which employees at all levels will have more choices and will exercise those choices. Managers will not only have to exhibit more personal flexibility in dealing with the range and variety of individual needs they encounter in subordinates, peers, and superiors, but will also have to learn how to influence organizational policies with respect to recruitment, work assignment, pay and benefit systems, working hours and length of working week, attitudes toward dual employment of husband and wife, support of educational activities at a much higher scale, development of child-care facilities, etc.

With respect to all of these issues, the manager will be caught in the middle among several key stakeholders: (1) government agencies around sex, age, racial, and any other form of discrimination, environmental issues, and occupational safety issues; (2) community interest groups concerned with equal rights, protection of the environment, product quality and safety, and other forms of consumerism; (3) stockholders eager to maintain an efficient and profitable operation and a fair return on their investment; (4) competitors; (5) employees, whether unionized or not, anxious to improve the quality of working life, create flexible corporate policies, provide challenging and meaningful work, and be responsible "corporate citizens;" and (6) family and self in terms of a need to maintain a balanced life.

Role ambiguity, role overload, and role conflict are likely to be chronic conditions, and the processes of setting priorities and negotiating with different stakeholders are likely to be perpetual rather than one time activities. Boundaries of all kinds will be perpetually defined and redefined, and anxiety levels around those activities will periodically be very high. We see this at the national level in the tension around globalization, on the one hand, and fractionation into ethnic or cultural units, on the other hand, even if those units have a difficult time surviving economically as nations.

THE FUTURE AS SEEN IN 1993.

The trends identified above are themselves not stable. In fact, if there is anything to be learned from the last few decades it is that our ability to predict is declining rapidly. The management of

“surprise” is the order of the day. For example, we cannot really predict the future economic impact of the Asian bloc of countries (especially China) or the future behavior of the European Economic Community. We cannot predict the rate at which the formerly socialist countries will become politically or economically viable, and when they do what impact that will have on the global scene.

We cannot predict the rate at which information and biotechnology will evolve low cost products and services that will further fundamentally change the nature of work, the nature of organizations, and the nature of life itself. The potential ethical issues implicit in bioengineering boggle the mind.

On the political front we cannot predict the outcome of the simultaneous trend toward globalization and fractionation into smaller ethnically pure countries. As of this writing the role of the U.S. and the U.N. in the conflict between Serbians and Bosnians, between Israelis and Palestinians, and in aid to starving nations remains unclear and unpredictable.

Within the U.S. we cannot predict the impact of the Clinton presidency, what will happen to the deficit, how health care costs will be brought under control while health care delivery is improved, how our educational system will be revitalized, and how we will solve the racial problems in our inner cities. Our current systems of governance are strained and possibly not up to the tasks facing us.

What all of this means is that we must become **perpetual learners**. As a growing number of observers and analysts of the current scene have noted, it will be the ability to learn that will

make the difference in the future (Michael, 1992; Rosell, 1992; Peters, 1987; Senge, 1990). If we cannot cope with surprise and develop new ways of framing problems and new responses, we will lose out. Ultimately this puts more emphasis on dynamic processes, on learning to live with perpetual change and to develop the diagnostic skills that permit us to see what is needed. And it is this need for dynamic processes that leads us back to job/role analysis and planning. Projecting this to the extreme suggests that job/role planning should become virtually a perpetual activity integral to the management process itself. Every time there is a new project or a new assignment, the manager and her subordinate should do truncated version of job/role planning to insure that there is consensus on what will need to be done and who will need to be involved. Job descriptions will become dynamic documents, perpetually renegotiated as the work of the organization changes in response to changing environmental circumstances.

Perpetual job/role planning will require much higher levels of interaction among members of the organization, especially between managers and their subordinates. On the one hand such an increase in meetings will increase frustration because of the time it will take, but, paradoxically, people will discover that such meetings are the best way of coping with the increasing anxiety levels that future job/roles will precipitate. Job/role planning will provide opportunities for supportive role negotiation that will reduce anxiety levels while, at the same time, increasing our conceptual understanding of what we must do to best fulfill our own needs and those of the organization.

PART X. CONCLUSIONS AND IMPLICATIONS

Successful organizational performance and productive satisfying careers are ultimately the product of a good process of matching the everchanging needs of organizations with the ever changing needs of individual career occupants. All indications are that the rate of change is increasing, so that this matching problem will be more acute than ever.

The individual career occupant has a responsibility to know what he or she wants and requires out of the career and any given job. Such self-insight comes from experience and from systematic self-diagnosis. We should all know what our "career anchors" are so that we can make better choices and negotiate better with organizations when we are confronted with job opportunities and options (Schein, 1990). But what of the organization's responsibility?

It is my main argument that organizations have not done a good job of understanding the work to be done to meet organizational needs, and even when they do understand the work to be done they have not done a good job of communicating what those needs and expectations are. The primary purpose of job/role analysis and planning is to improve that process of planning and diagnosing work, and communicating the diagnosis to job incumbents. In other words, individuals cannot really get their job done and make good career choices if the information about the work and career options is incomplete, superficial, or actually inaccurate.

The organization is an abstraction, but the individual employee or manager is not. I am arguing that all employees and managers, as part of their basic job, must have a complete understanding of their own work and the work to be done under them and around them, and must have the skill to communicate that understanding to the subordinates, peers, and superiors who must carry out the work. Inasmuch as the work is perpetually changing, the employee and manager must perpetually think about and plan for all the jobs that he or she is responsible for or connected with. This exercise is designed to facilitate such planning and is, therefore, an integral tool in the process of fulfilling both individual and organizational needs.

X. REFERENCES

-Allen, T. J. Managing the Flow of Technology. Cambridge, Ma.: MIT Press, 1977.

-Bailyn, L. "Accommodation of Work to Family." In R. Rapoport & R.N. Rapoport. Working Couples. N.Y.: Harper Row, 1978.

-Bailyn, L. "Changing the Conditions of Work: Implications for Career Development." In D. H. Montross & C. J. Schinkman (Eds.) Career Development in the 1990's: Theory and Practice. Springfield, Ill.: Thomas, 1992.

-Davis, S. M. & Davidson, B. 2020 Vision. N.Y.: Simon & Schuster, 1991.

-Davis, S. & Lawrence, P. R. Matrix. Reading, Ma.: Addison-Wesley, 1977.

-Galbraith, J. Designing Complex Organizations. Reading, Ma.: Addison- Wesley, 1973.

-Hirschhorn, L. The Workplace Within. Cambridge, Ma.: MIT Press, 1988.

-Johansen, R., D. Sibbet, S. Benson, A. Martin, R. Mittman, & P. Saffo. Leading Business Teams. Reading, Ma.: Addison-Wesley, 1991.

-Ketchum, L. D. & Trist, E. All Teams Are Not Created Equal.
Newbury Park, Ca.: Sage, 1992.

-Kochan, T. A. & Useem, M. (Eds.) Transforming Organizations. N.Y.:
Oxford Univ. Press, 1992.

-Michael, D. N. "Governing by Learning in an Information Society." In

-S. A. Rosell (Ed.) Governing in an Information Society. Montreal,
Que.:Institute for Research on Public Policy, 1992.

-Peters, T. J. Thriving on Chaos. N. Y.: Knopf, 1987.

-Rosell, S. A. (ed.) Governing in an Information Society. Montreal,
Que.: Institute for Research on Public Policy, 1992.

-Savage, C. M. Fifth Generation Management: Integrating Enterprises
Through Human Networking. Maynard, Ma.: Digital Press, 1990.

-Schein, E. H. Career Dynamics: Matching Individual and
Organizational Needs. Reading, Ma.: Addison-Wesley, 1978.

-Schein, E. H. Reassessing the "Divine Rights" of Managers. Sloan
Management Review, 1989, 30 (3), 63-68.

-Schein, E. H. Career Anchors. San Diego: Pfeiffer, 1990.

-Schein, E. H. Organizational Culture and Leadership. San Francisco: Jossey-Bass, 1992.

-Scott-Morton, M. S. (Ed.) The Corporation of the 1990's. N.Y.: Oxford Univ. Press, 1991.

-Senge, P. M. The Fifth Discipline. N.Y.: Doubleday Currency, 1990.

-Zuboff, S. In the Age of the Smart Machine: The Future of Work. N.Y.: Basic Books, 1988.