
Judith R. Gordon
BOSTON COLLEGE

Human Resource Management

A Practical Approach

Allyn and Bacon, Inc. 1986
BOSTON • LONDON • SYDNEY • TORONTO

Brief Contents

PART 1	THE COMPONENTS OF HUMAN RESOURCES MANAGEMENT	1
Chapter 1	Setting the Stage for Effective Human Resources Management	3
Chapter 2	Conducting Human Resources Planning	21
<hr/>		
PART 2	PERSONNEL SYSTEMS FOR STAFFING	73
Chapter 3	Performing Systematic Recruitment	75
Chapter 4	Specifying Selection Procedures	115
Chapter 5	Addressing the Need for Decruitment	169
<hr/>		
PART 3	PERSONNEL SYSTEMS FOR EVALUATION AND DEVELOPMENT	217
Chapter 6	Implementing Effective Performance Evaluation	219
Chapter 7	Designing a Training and Development System	263
Chapter 8	Improving Career Management	311
Chapter 9	Building a Compensation System	363
<hr/>		
PART 4	LABOR RELATIONS SYSTEMS	427
Chapter 10	Dealing with Unionized and Nonunionized Organizations	429
Chapter 11	Smoothing the Collective Bargaining Process	481
Chapter 12	Using Third Parties in Negotiations and Grievance Resolution	541
<hr/>		
PART 5	ORGANIZATIONAL EFFECTIVENESS	591
Chapter 13	Responding to Legal Constraints	593
Chapter 14	Implementing Change in Organizations	647
Chapter 15	Ensuring Effective Human Resources Management	701



CHAPTER 14

Implementing Change in Organizations

CHAPTER OUTLINE

Introduction
Organization Development Interventions
 Increasing Personal and Interpersonal Effectiveness
 Building Collaborative Teams
 Reducing Intergroup Conflict
 Developing Organizational Effectiveness
Redesigning Work
 Work Simplification
 Job Enrichment
 Quality of Work Life Programs
 Alternative Work Schedules
Restructuring Organizations
 Structural Options
 Contingencies Influencing Organizational Design
 Steps in Redesigning an Organization
Lessons from Human Resources Management
 Abroad
 Worker Ownership
 Japanese Management
The Process of Change
 Identifying and Overcoming Resistance to Change
 Selecting a Change Agent
Strategies for Organizational Change
 Implications for Human Resources Professionals
 Implications for Managers

READINGS

ACTIVITIES

SUMMARY

Endnotes

Further Readings

LEARNING CHECKPOINTS

After completing the reading and activities of this chapter, students will be able to

- define quality of work life;
- describe ten organization development interventions and their uses;
- describe situations in which job redesign is appropriate;
- redesign a job using four different approaches;
- list five circumstances in which organization redesign will improve quality of working life;
- illustrate how six contingencies influence effective organizational structure;
- redesign an organization;
- list five types of resistance to change and offer ways to overcome each;
- describe the roles of managers, human resources professionals, and consultants in organizational change.



INTRODUCTION

The Lexington Travel Agency offers diverse travel services to customers in a large metropolitan area. The one hundred agents at Lexington's twenty branches book charter flights and trips, plan individual travel itineraries, book all required reservations, and ticket airline, railway, and bus passengers. Although a significant part of the business is conducted in the twenty offices, Lexington Travel also maintains a telephone sales office that serves customers twenty-four hours a day. Customers can call the telephone sales department instead of visiting an office in person.

The telephone sales group is located in a small corner of the main office building, next to the accounting department. The group has added two or three agents during each of the previous four years, but the space allocated for telephone sales has remained the same. The sales agents are in cramped quarters; clumsy dividers are used to provide privacy and soundproofing. Each member of the group has a small desk, a telephone, and the *Official Airline Guide*. Along one wall of the office is a small library of a dozen or so reference books and brochures used most often by the agents. If they require additional materials they must go to the first or second floor of the main office, where a larger supply of materials is available, or telephone other agents for assistance.

As a telephone call is received, it is automatically transferred to an agent. The sophisticated telephone system that has been installed in all Lexington's offices rings the first available agent highest on the telephone-sales random-access list. This agent is then expected to handle the customer's request. The agent may make follow-up calls at a later time if he or she needs additional information to answer the customer's question. If a customer calls a second time, the second call is not referred to the original agent; rather, the agent highest on the list must pick up where the other agent left off. The telephone system monitors the length of each call and the number of calls handled by each agent. It also monitors the number of callers put on hold and those who ultimately hang up before reaching a telephone sales agent.

Agents are evaluated according to the number of calls they handle in a day. On completing each call, the agent is expected to record the type of action that resulted from the conversation—purchase of an airline ticket, mailing of information about charter trips to Europe, and so on. These reports, together with the telephone records, are tabulated periodically by the telephone sales manager to obtain information about the group's performance.

Jessica Talley, Vice President of Sales at Lexington, has recently acquired supervisory responsibility for the telephone sales department. Previously the department operated fairly autonomously, with limited reporting to the company's president. Jessica's review of the department indicates a decline in the agents' performance. The number of calls handled by various agents has been very uneven; some handle three to five times as many calls in a period as others. Almost twenty percent of the calls placed on hold were never answered because the customer hung up while waiting to be helped. The vice president has recently received a number of complaints about the telephone sales office; customers complain that the agents lack knowledge, never follow up on their requests, or insist that a follow-up call is necessary to answer a simple question

because the sales agent lacks required information. Comparison of the time spent on calls to the results in terms of sales are disappointing. Often very long calls have not resulted in any sales.

Jessica attributes the poor performance, in part, to ineffective management by the department manager. The manager spends most of the day monitoring the agents' telephone conversations. In conversations with the agents Jessica has learned that they think the manager's "spying" is unnecessary, and that the manager should be handling calls from the queue a larger portion of the time. The telephone sales agents also indicate that the manager is not helpful in solving their problems, lacks up-to-date information about travel services, lacks strong interpersonal skills, and continually tells the agents to "speak faster and handle more calls."

Absenteeism has risen significantly during the past year. Many agents have requested transfers to branch offices. The vice president detects low morale and lethargy when she visits the telephone sales area. Even some of the best agents are showing a decline in productivity.

Is human resources management at Lexington Travel effective? The quality of working life and productivity in the telephone sales department are low. These indicators suggest a need for some changes in the organization.

Quality of work life (QWL) is the employees' perceptions of various components of their jobs, as well as the organizational context in which they occur. "QWL is . . . a new system . . . in which management attitudes toward employees . . . move from the orthodox rigidity of scientific management to a clear recognition of the dignity of human beings."¹ It is concerned with the extent to which work "provides an opportunity for an individual to satisfy a wide variety of personal needs—from the need to survive with some security to the need to interact with others, to have a sense of personal usefulness, to be recognized for achievement, and to have an opportunity to improve one's skills and knowledge."² QWL encompasses an individual's perception of adequate and fair compensation; safe and healthy working conditions; immediate opportunity to use and develop human capacities; future opportunity for individual growth and security; social integration in the organization, including freedom from prejudice, egalitarianism, mobility, supportive work groups, a sense of community, and interpersonal openness; constitutionality in the workplace, including privacy, free speech, equity, and due process; compatibility of work and extra-work life, including family and leisure; and social relevance of work life.³ Jessica Talley should consider implementing changes in the organization to improve the department's *quality of work life and productivity*.

In this chapter we examine various changes that a human resources professional or manager can use to improve the department's quality of work life. We consider organization development programs that emphasize behavioral interventions, the redesign of work, and the redesign of organizations. Then we look at lessons that can be learned from human resources management practices outside the United States. We also briefly consider the process of change; specifically, overcoming resistance to change and the selection of a change agent. We conclude the chapter with a discussion of strategies for effective organizational change.

ORGANIZATION DEVELOPMENT INTERVENTIONS

Organization development refers to a wide range of interventions that attempt to alter personal and interpersonal interactions. It has been defined as a long-range effort to improve an organization's problem-solving and renewal processes, particularly through a more effective and collaborative management of organizational culture—with special emphasis on the culture of formal work teams—with the assistance of a change agent or catalyst; and the use of the theory and technology of applied behavioral science, including action research.⁴ (Note that *organizational culture* has been defined as “the pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration.”)⁵ It has also been defined as an effort that is planned, organization-wide, and managed from the top, to increase organizational effectiveness and health through planned interventions in the organization's “processes,” using behavioral-science knowledge.⁶

Organization development (OD) interventions attempt to change individuals' skills, knowledge, or attitudes.⁷ Change must begin with a needs assessment—or in the terms of the practical approach described in this book, diagnosis. Experienced human resources professionals, outside consultants, or, in some cases, line managers must diagnose the organizational situation and determine where there are deficiencies. At Lexington Travel, for example, Jessica Talley might hire an outside consultant to assess conditions and recommend strategies for meeting identified needs.

The following sections describe strategies to address four frequently identified needs. They are the need to (1) increase personal or interpersonal effectiveness, (2) build collaborative teams, (3) reduce intergroup conflict, and (4) increase overall organizational effectiveness.⁸ Table 14–1 lists the interventions discussed to meet each need. Although many of these strategies should only be implemented by trained professionals, line managers and human resources professionals should be aware of the options available when planning for organizational change.

Increasing Personal and Interpersonal Effectiveness

When individuals have difficulty functioning in the workplace, interventions addressing improvement of their personal effectiveness may be appropriate. Individual performance problems can occur because a person's style does not fit with the work situation or with the style of supervisors, coworkers, or subordinates, or because he or she lacks effective communication or leadership skills.

Problems experienced by the telephone sales department and similar groups may also result from the ineffective interaction of two or three coworkers. The first agent who handles a client might try to hide information from another agent to prevent the second from making a sale; competition between individuals can prevent effective communication.

Psychological counseling or long-term individual training are probably the best ways to alter personal style so that quality of work life is improved. *Structured*

Intervention	Primary Target
Behavior modification	Personal or interpersonal effectiveness
Collateral organizations	Organizational effectiveness
Confrontation meeting	Intergroup conflict
Grid Organization Development	Team skill-building
Job expectation technique	Team skill-building
Organizational mirror	Intergroup conflict
Process consultation	Personal or interpersonal effectiveness
Quality circles	Organizational effectiveness
Role analysis technique	Team skill-building
Role negotiation technique	Team skill-building
Sensitivity laboratory training	Personal or interpersonal effectiveness
Structured training programs	Personal or interpersonal effectiveness
Survey feedback	Organizational effectiveness
Team-building	Team skill-building
Third-party interventions	Intergroup conflict
Transactional analysis	Personal or interpersonal effectiveness

Table 14-1 TYPES OF INTERVENTIONS

training programs (see Chapter 7) offer individuals opportunities to diagnose their personal effectiveness, and completion of questionnaires that assess personal style can provide data for such diagnosis. Role plays or other activities where individuals can practice communication and leadership skills can ultimately influence performance favorably. These approaches require workers or managers to participate frequently in training sessions to ensure they have learned the new skills well enough to use them in the work situation. Structured training is fairly commonly used today, but more often for teaching specific skills or knowledge than for changing personal behavior. To do the latter effectively requires extensive time and resources for each individual. Still, the manager of the telephone sales department might benefit from this type of training.

Behavior modification can also be used to improve individual behaviors.⁹ Here, managers or human resources professionals design and implement programs that reinforce desired behaviors. If a manager wants a problem worker to arrive at work promptly, then each time the employee comes to work on time the manager reinforces the behavior by, say, praising the employee. Or each time a supervisor implements a new, profitable idea without direction from top management, his or her manager might give the supervisor a bonus. Human resources professionals can help managers design these and other incentive programs such as those described in Chapter 9.

Behavior modification has received renewed attention in the past decade since these programs are relatively inexpensive to administer, have had significant impact on diverse types of behavior, and can be introduced by managers after relatively little training. The major drawback to this approach is the necessity for managers to precisely identify the behavior to be modified and to change only that behavior without accompanying, sometimes undesirable, side effects.

Sensitivity laboratory training has been used to improve interpersonal effectiveness.¹⁰ Small groups of individuals meet together to share perceptions of each other's behavior and offer suggestions for improving interpersonal style. They participate in a series of unstructured activities designed to provide practice in communicating and diagnosing their performance in group situations. The objectives of sensitivity training include

1. increased understanding, insight, and awareness about one's own behavior and its impact on others, including the ways in which others interpret behavior;
2. increased understanding and sensitivity about the behavior, thoughts, and feelings of others, including better interpretation of both verbal and nonverbal clues;
3. better understanding and awareness of group and intergroup processes, both those that facilitate and those that inhibit group functioning;
4. better diagnostic skills in interpersonal and intergroup situations;
5. increased ability to transform learning into action, so that real-life interventions will be successful in increasing participants' satisfaction, output, or effectiveness;
6. improvement in individuals' ability to analyze their own interpersonal behavior, as well as to learn how to help themselves and others to achieve more satisfying, rewarding, and effective interpersonal relationships.¹¹

The use of sensitivity training in organizations has declined over the past fifteen years. It is currently limited by the lack of individuals qualified to conduct this type of training. In addition, there are significant doubts about its long-term cost-effectiveness; research has questioned the transferability of learning from the workshop to the workplace.¹²

Transactional analysis focuses on improving communication by analyzing the nature of communication between two people.¹³ In this model, the individual is considered to operate from one of three ego states: (1) the parent, who judges or tries to control others; (2) the adult, who acts rationally toward others; and (3) the child, who depends on others. Here, intervention calls for individuals to diagnose the basis of their communication and offer strategies for communicating between appropriate ego states—generally adult to adult. This approach reached a peak in popularity in the 1960s and early 1970s. Although transactional analysis can be useful, its view of communication and other interpersonal interactions as a highly structured "game" offers too limited an understanding of them.

Process consultation can also assist in evaluating and improving interpersonal interactions. It is "a set of activities on the part of the consultant which help the client to perceive, understand, and act upon process events which occur in the client's environment."¹⁴ A process consultant gathers data about the effectiveness of individuals or groups, feeds back the data to the individuals involved, and then jointly develops strategies for improving communication, leadership, or decision-making. A manager or human resources professional can act as a process consultant after some training in its methodology. For example, Jessica Talley

could ask a human resources professional at Lexington Travel to act as a process consultant if she perceives that interpersonal communications problems are the major cause of the sales group's ineffectiveness.

Building Collaborative Teams

Team-building activities can focus on the roles individuals play within a team, or on the integration of an entire group. Role analysis, job expectation, and role negotiation techniques attempt to clarify roles held by individuals within a team. Teamwork skill-building and Grid Organization Development aim to facilitate team integration and coordination.

In the *role analysis* technique, group members discuss the purpose of the pivotal role in the group, determine its prescribed and discretionary components, and examine its links to other roles.¹⁵ For this last step, the role holder lists his or her expectations of others in the group, and the others list the role holder's obligations to them. Team members might analyze a project leader's role, such as that of the telephone sales manager at Lexington Travel, and then try to reach agreement about its major activities and their impact on the activities of other team members.

The *job expectation* technique follows a similar approach.¹⁶ Individuals and management separately list their roles or job expectations. Discussion typically begins with the easiest role—for example, that of the most recently hired telephone sales agent—and ends with the leader's role. The group then negotiates until agreement is reached about the expectations held for each job.

The *role negotiation* technique focuses on role behavior, and includes four steps.¹⁷ In the first—contract setting—individuals write down their expectations and demands of specific roles. The second step—diagnosis—calls for participants to analyze the performance of *all* the roles in the group and list what they would like others to do more, less, or the same; then they exchange lists for clarification. The third step—negotiation—requires pairs of individuals to negotiate behaviors to be changed. Each person agrees to change a behavior in return for a change in the other person's behavior. This continues until all parties are satisfied. The final step—follow-up—asks the group to live with its agreements and then meet again to review and renegotiate if necessary.

Teamwork skill-building brings work teams together to share information, set goals and priorities, examine the way the group is working, and analyze relationships among group members.¹⁸ A range of activities, including management simulations, decision-making exercises, and diagnostic discussions, can be used at the meetings to develop the work groups into effectively functioning teams. Because of the wide variety of activities available in this type of intervention, it can be tailored to specific situations and currently has relatively high popularity.

Grid Organization Development is a more structured approach to team development.¹⁹ This six-stage program moves individuals, work teams, and ultimately organizations to a high level of concern for both people's needs and production results. In the first phase, individuals assess their work styles and learn how to carry out the desired behaviors. In phase 2, focus shifts to the development of

teamwork through identifying group norms and receiving feedback about interpersonal styles. Phase 3 emphasizes intergroup development by reducing win-lose behavior among groups. In phase 4 each group develops a strategic plan—a description of the ideal organization. Phase 5 involves implementation of the plan. In phase 6, participants critique the change to date and identify barriers that still exist to attaining a high concern for people and production. Because trained consultants must perform this intervention, its cost is relatively high and top management's commitment is essential.

To conduct the various types of team building interventions may require special expertise. Human resources professionals may be trained to implement them, or they may need to hire outside consultants to oversee the change process. Another possible drawback is that these interventions can lead to unexpected consequences: the role analysis, job expectation, and role negotiations techniques can sometimes result in scapegoating rather than improving teamwork. In addition, unless reinforced, teamwork skill-building often has only a short-term impact. And finally, Grid Organization Development requires a commitment to change throughout the organization; if only one group wants to improve its collaborative skills this approach is not effective.

Reducing Intergroup Conflict

Team-building interventions can be used to reduce conflict, but third-party interventions, confrontation meetings, and the organizational mirror are designed specifically to address intergroup conflict.

Third-party interventions can resolve interpersonal, intergroup, or interorganizational conflict. The third party synchronizes efforts to resolve confrontation, introduces incentives to improve intergroup interaction, builds support for openness in the organization, proposes new interaction styles that facilitate confrontation and collaboration, makes tension more productive, and helps to define issues clearly.²⁰ As discussed in Chapter 12, third parties frequently intervene in labor-management disputes. For the purpose of dealing with intergroup conflict, however, human resources professionals and managers as well as outside experts can act as third parties. Normally they must have appropriate training to fill this role.

A *confrontation meeting* resolves problems by generating and analyzing data about the interaction of two groups.²¹ A top manager first introduces the issues and goals in dispute. Next, in randomly chosen small groups, participants collect information about organizational problems. Third, representatives from each small group report their list of problems to the rest of the groups. Fourth, participants convene with their usual work groups to set priorities for the problems and establish the first action steps. Fifth, a top management team meets to plan follow-up action. Finally, all the participants reconvene four to six weeks later to report progress. Like some interventions directed at improving teamwork, the confrontation meeting, if not properly conducted, can intensify rather than reduce the conflict.

The *organizational mirror* intervention also addresses intergroup ineffectiveness, through “a particular kind of meeting that allows an organizational unit to collect feedback from a number of key organizations to which it relates (e.g., customers, suppliers, users of services within the larger organization). The meeting closes with a list of specific tasks for improvement of operations, products, or services.”²² A consultant interviews members of all groups about the difficulty they have in interacting with the other groups. The consultant then reports the data from the interviews, after which the groups discuss the data openly. Finally, heterogeneous subgroups develop action plans for each problem.

Most typically, specially trained human resources professionals or outside consultants orchestrate the latter two types of intervention; managers can assist by recognizing situations that call for them.

Developing Organizational Effectiveness

Collateral organizations, survey feedback, and quality circles improve organizational effectiveness through encouraging worker participation in decision-making and innovative problem-solving.

Collateral organizations are supplementary organizations of employees from various departments and levels that coexist with the formal organization and focus specifically on solving difficult problems.²³ Typically, they emphasize innovation rather than output by using a relatively flat structure (few levels of authority) and low job specialization. The collateral organization provides people with new ways of working together. In a collateral organization, all information channels are open, allowing managers and nonmanagers to communicate directly. Members are encouraged to analyze and question assumptions, methods, alternatives, and goals, and any manager in the larger organization can request problem-solving assistance from the collateral organization.²⁴ Organizations facing a dynamic environment are increasingly using this intervention as an alternative to total redesign or restructuring. Human resources professionals at Lexington Travel might organize some telephone sales agents, managers, and other employees into a collateral organization to identify the department's problems and offer solutions to them.

Survey feedback polls employee attitudes and uses the responses to improve organizational effectiveness.²⁵ Survey feedback involves two steps. During the first stage—survey—a human resources professional or external consultant administers a questionnaire to determine employees' perceptions of the organization's management. During the second stage—feedback—the change agent (consultant) reports the results of the survey to those who completed the questionnaire. Feedback is provided in phases, beginning at the top of the organizational hierarchy and moving downward; each unit or team receives a summary of the results and discusses its significance with their group.²⁶ Unless managers act on the suggestions offered, however, surveys can do more harm than good because they create an expectation of change in the respondents. Still, this intervention

remains popular because of the relative ease of its implementation and the large amounts of information it generates.

Quality circles also use group meetings to increase individual, group, and organizational productivity. Groups of five to twenty people meet weekly to offer suggestions for the improvement of the conduct of work. Often the group receives technical training that it uses for analysis and recommendations.²⁷ Quality circles recommend changes in procedures, interpersonal interactions, reporting relationships, or the jobs themselves. Though enthusiastically adopted by many organizations in the early 1980s, Japanese management techniques such as quality circles are no longer imported "as is." Managers have found that they must modify such interventions to meet the unique needs of their situation.

REDESIGNING WORK

The nature of work itself can affect the quality of working life. That is, managers or human resources professionals can change the activities performed by a job holder to make the work more satisfying and productive. At Lexington Travel, for example, a needs assessment might suggest deficiencies that redesigning the telephone sales agents' jobs would address. If the agents find that they do not have the opportunity to complete a job the human resources professionals (or Jessica Talley) could restructure the tasks each agent performs by reducing the number of different activities. Or they might redesign the jobs to assign each agent more tasks to complete. In this section we examine four approaches to redesigning work: (1) work simplification, (2) job enrichment, (3) quality of work life programs, and (4) alternative work schedules.

Work Simplification

Work simplification breaks down a job into its component parts and then reassembles the parts into a more productive work process than before. Work simplification emphasizes (1) mechanical pacing of work, (2) repetitive work processes, such as those on an assembly line, (3) work on only one part of a product, (4) predetermining of tools and techniques, (5) restricted interaction among employees, and (6) few skill requirements.²⁸ Lexington Travel could institute work simplification for the telephone sales agents by having one agent make only plane reservations, another book only hotel reservations, and so on. Would this improve the situation at the agency? How does this type of job redesign influence quality of working life?

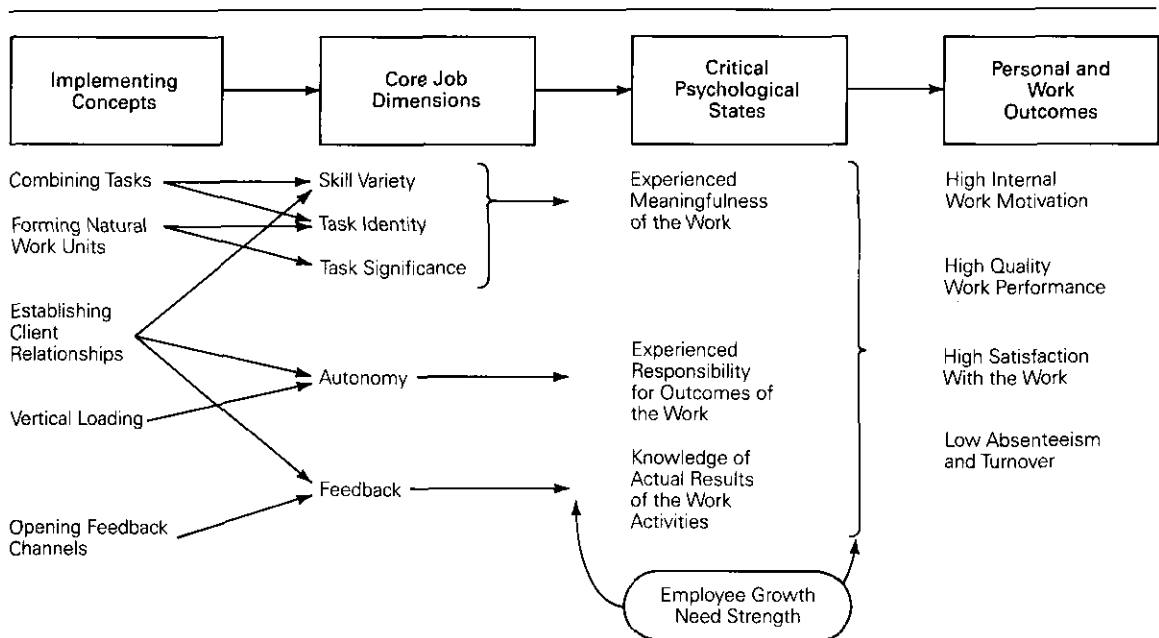
Work simplification influences productivity by giving individuals extensive experience in performing a small part of a larger task. Work simplification has the potential to help people feel more competent at their jobs, reduce feelings of work overload, and control the expenditure of effort. Often, however, work simplification leads to boredom and monotony. Any of these positive or negative consequences might result at Lexington Travel.

Job Enrichment

When jobs are overspecialized, workers experience boredom and there are no opportunities for personal growth. In this case, a more effective way to redesign a job is to *enrich* it. This means changing the job by giving individuals more responsibility and autonomy (vertical enrichment), more variety of tasks (horizontal enrichment), and more growth opportunities.²⁹ How might you enrich the job of the agents in Lexington Travel's telephone sales department? Proponents of job enrichment would suggest increasing the agents' responsibility, autonomy, and growth opportunities by giving them, for example, responsibility for booking all reservations needed for any tours in a given geographical area.

A more prescriptive form of job enrichment, the job characteristics model, focuses on changing core characteristics of a job to improve motivation, performance, satisfaction, absenteeism, and turnover.³⁰ The model specifies five core job dimensions (see Figure 14-1):

1. Skill variety—the degree to which a job requires performance of activities that challenge the worker's skills and abilities
2. Task identity—the degree to which a job requires completion of a whole and identifiable piece of work; that is, doing a job from beginning to end with a visible outcome



From J.R. Hackman et al., A new strategy for job enrichment. © 1975 by the Regents of the University of California. Reprinted from CALIFORNIA MANAGEMENT REVIEW, Volume XVII, no. 4, p. 58 by permission of the Regents.

Figure 14-1 JOB CHARACTERISTICS MODEL

3. Task significance—the degree to which a job has a substantial and perceivable impact on the lives of other people
4. Autonomy—the degree to which a job gives a worker freedom, independence, and discretion in scheduling work and determining how he or she will carry it out
5. Feedback—the degree to which a worker carrying out the activities required by a job gets information about the effectiveness of his or her efforts³¹

As shown in Figure 14–1, these core dimensions influence the degree to which an individual experiences a job as meaningful and responsible, and knows the results of his or her performance. To enrich a job means to improve it along one or more of the core dimensions. Combining tasks, forming natural work units, establishing client relationships, loading a job vertically to combine implementation and control, and opening feedback channels are all typically implemented. This approach to job enrichment has been tested in numerous work settings; and the results to date provide some, although inconsistent, support for the model. The problems seem to be in the methodology used to test the model and in its ability to accurately predict performance.³²

How could a manager enrich the job of telephone sales agent? What would be the likely outcome of such enrichment? At Lexington Travel, Jessica Talley might consider organizing the agents into calling teams. One agent or team could handle all travel requests for a particular client group such as “swinging singles,” young marrieds, or “young urban professionals.” By having total responsibility for a particular type of client, task significance, task identity, and autonomy would increase. The agent would also receive feedback directly from the client and increase the skills used on the job.

Quality of Work Life Programs

Quality of work life programs focus on improving the internal work environment of an organization. They have become an important part of collective bargaining. Unions in the automobile industry, for example, have bargained for and won the introduction of such programs for their workers in many organizations and industries. This call for improved quality of work life (QWL) and programs that address it has occurred in spite of unions' suspicions that managers support it because they view it as a way to broaden their decision-making authority.³³ In many cases, however, workers and management have addressed QWL issues through the institution of joint labor-management committees.³⁴ These committees have focused on increasing workers' involvement in decision-making, improving working conditions, and establishing more autonomy and control over their work.

At General Motors approximately fifty QWL programs existed in 1980.³⁵ The success of these programs depended, first, on union and management developing a collective bargaining climate characterized by mutual respect; second, by conducting pilot programs that emphasized workers' involvement in problem-

solving and decision-making, and finally, by joining together to solve problems in the workplace.³⁶ Reading 14-1, "The Quality-of-Worklife Project at Bolivar: An Assessment," by Barry Macy, describes one of the earliest QWL programs. Reading 14-2, "Helping Labor and Management Set Up a Quality-of-Worklife Program," by Michael Maccoby, describes a more recent effort.

Alternative Work Schedules

An employee's work schedule refers to the times during which work is performed. The most typical work schedule requires an employee to work thirty-five or forty hours a week, and divides the hours equally over Monday through Friday, generally between 8 A.M. and 6 P.M. Alternative work schedules are variations on this pattern. This type of job redesign addresses the context rather than the content of the work.

In a compressed work week, the number of days worked per week is reduced and the number of hours worked per day is increased. A worker might work four ten-hour days instead of five eight-hour days. The total number of hours worked per week remains the same, but the distribution of hours worked each day may vary.

A discretionary system, in contrast, allows a worker to decide which hours to work during the day. In a *flexitime system* (also called flexitime), employees choose their own starting and stopping times within management's guidelines.³⁷ For example, a worker might work the required eight hours a day as follows: starting time, 7 A.M.; break, 11–11:30 A.M.; ending time, 3:30 P.M. Another worker might choose the following schedule for working the eight hours: starting time, 9 A.M.; break, 12–1:30; ending time, 6:30 P.M. Management often identifies a core time or times, such as 10 A.M. to 12:00 noon and 1 P.M. to 2 P.M., when workers are required to be present.

Four types of flexitime have been described:

1. Flexiform—workers pick a schedule and stick with it thereafter
2. Gliding time—workers' schedules vary from day to day but always equal eight hours
3. Variable day—workers' schedules vary daily, and the number of hours worked in a day may vary during the week, but hours must total a certain number by the end of a week or month
4. Maxiflex—employees vary their daily hours and have no required core time³⁸

In part-time employment the number of hours worked per week is less than thirty-five or forty. One innovative type of part-time employment is job-sharing, where two workers hold a single job. Each works part-time and the two workers, not their supervisor, have the responsibility for coordinating activities so that all the work is accomplished.

Alternative schedules such as these provide workers with greater flexibility in

their lives, which can ease family-work conflicts and even reduce traffic congestion. They also give individuals greater control over their work.³⁹ Flexitime seems to reduce unpaid absences and increase performance efficiency,⁴⁰ but some organizations still lack the ability or willingness to offer it. In some cases, either the organization's tasks or its employees do not have characteristics that respond well to this type of change.

Human resources professionals who design or monitor such programs must eliminate the typical causes of failure: lack of involvement of supervisors and workers in planning alternatives; supervisors' fear of loss of control over workers; introduction of schedules that are not appropriate to workers' needs; employees' failure to meet deadlines or record hours worked; and rigidity of managers.⁴¹ Properly instituted, however, both the flexibility and autonomy encouraged by such programs can contribute to improved quality of working life. Should Lexington Travel introduce alternative work schedules? Would this change address the problems in the telephone sales group?

RESTRUCTURING ORGANIZATIONS

A third type of intervention changes the formal reporting relationships in an organization rather than redesigning the work or changing individual behavior. A needs assessment usually turns up the advisability of such a change. Organizational redesign can improve an enterprise that fails to innovate, produces at low levels, produces redundant work, communicates ineffectively, requires extensive red tape to accomplish goals, uses workers' skills ineffectively, or fails to respond to a changing environment. Rapid technological changes, the higher educational level of workers, and multi-nationalization of companies have all combined to call for structural change to allow for more rapid, appropriate, and flexible functioning. Changes in an organization's strategy (described in Chapters 2 and 15) can also necessitate changes in its structure.⁴²

Structural Options

Although organization structure has been described in a variety of ways, in this section we classify it into one of three categories: (1) functional, (2) product/project, and (3) matrix.

Functional. The functional structure groups employees according to their specialty. Manufacturing firms that adopt a functional structure generally assign personnel to a manufacturing, research and development, marketing, finance, or personnel department or division. Within this type of structure finance staff members work only with other finance personnel, marketing with marketing, and so forth.

Reporting relationships are vertical, with clear lines of authority specified and

clear distinctions made among levels in the hierarchy, such as manager, vice president, senior vice president. Each level has a clearly defined scope of responsibility and each subordinate has a single superior. Managers in each department or division perform all the evaluations of the employees who work there.

Such a structure works most effectively when the organization has a well-developed product or service, operates in a stable environment, and has roles that easily group into functional areas. Figure 14-2 shows what Lexington Travel would look like with a functional structure.

Many organizations that once operated in a stable environment and successfully used a functional structure have since found that the limitations of this structure increase as the environment changes. In particular, a changing environment frequently calls for an organization to bring diverse expertise from several different functional groups to a single project.

Project Management. An organization should consider something other than a functional form when it cannot respond to problems in the environment in a

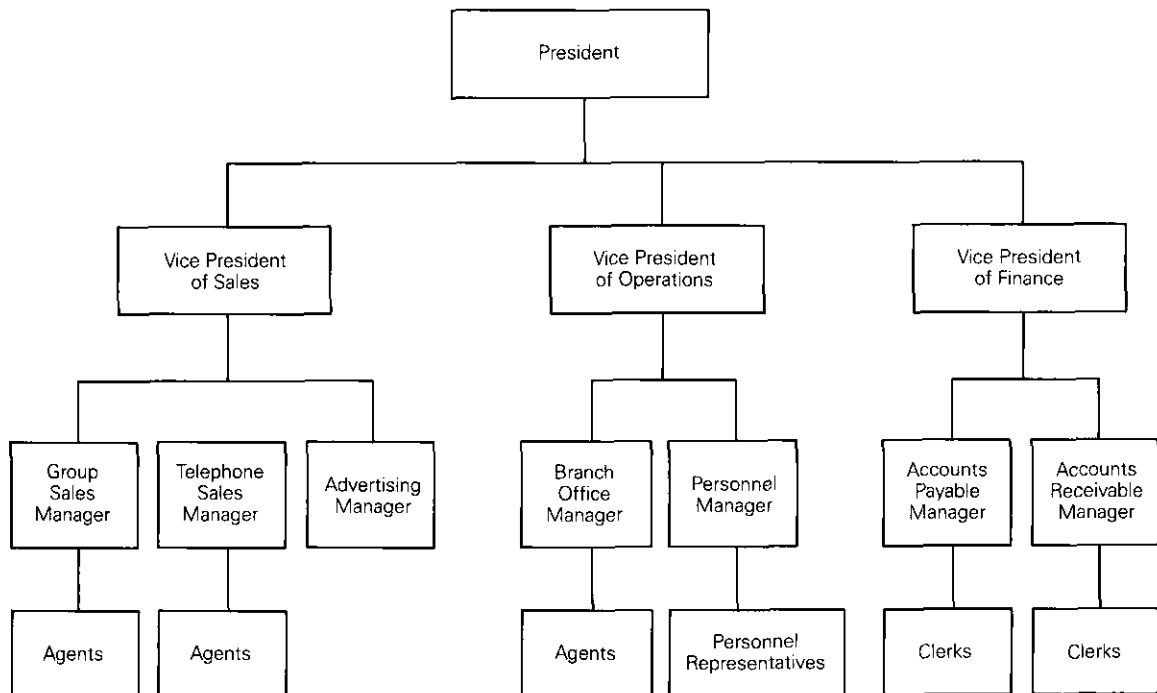


Figure 14-2 LEXINGTON TRAVEL WITH A FUNCTIONAL STRUCTURE

timely fashion. As the environment becomes more unpredictable, dynamic, and complex, such as when technological changes threaten products with obsolescence or increased competition requires the rapid introduction of new products and services, organizational responses that cut across functional areas should be implemented.⁴³

A manufacturing firm might organize into product teams, with representatives from marketing, manufacturing, and research and development on each product team. Large food manufacturers, such as General Foods and Procter and Gamble, often use a product structure in some parts of their organization; and NASA has used a project structure since the early 1960s. Personnel report to a product or project manager, rather than to a senior person in their own functional area. This reporting relationship tends to decrease the number of hierarchical levels in organizations, emphasize lateral communication among different specialties, and decentralize decision-making. Evaluation of employees is performed by product or project managers who may or may not be from the employee's functional area. How could we redesign Lexington Travel to have a product or project structure? Figure 14-3 shows one possibility.

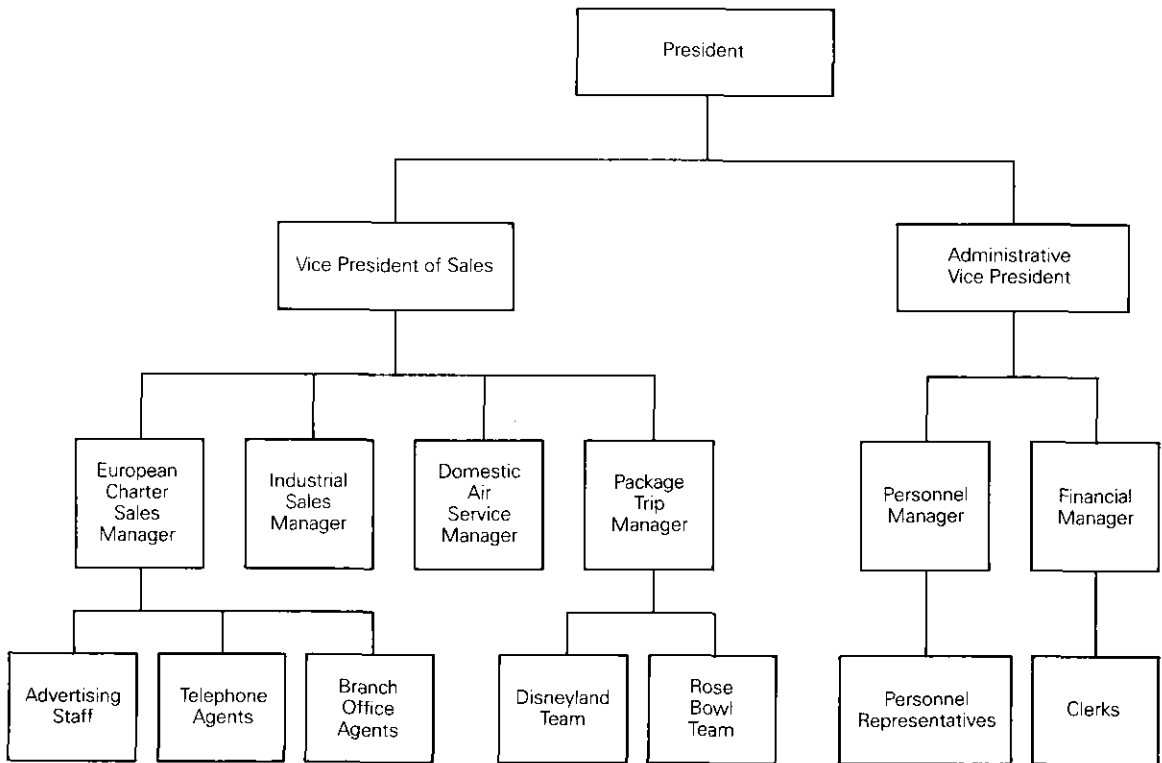


Figure 14-3 LEXINGTON TRAVEL WITH A PROJECT STRUCTURE

Product or project management appears to be effective at allowing organizations to focus on problems unique to a particular product or client, responding quickly to changes in the project, product, or client, and encouraging personnel with different expertise and professional loyalty to focus on a common goal. But some firms are reluctant to move to this more flexible structure. Project management can reduce economies of scale and thus increase costs. Often, there are duplicate positions (such as market researcher or systems analyst) on several project teams, and the job holders consequently perform the same tasks or generate the same information independently rather than consolidating activities and resources and sharing information. Furthermore, some managers fear the decreased control and authority that they perceive accompanies this structure.

Matrix. The matrix structure combines the benefits of functional and product/project structures. It consists of temporary, multidisciplinary teams composed of members from both project and functional units.⁴⁴ By adopting a matrix structure an organization opts for neither a functional nor project/product configuration; rather, it chooses both. Employees report to at least two superiors—one in the functional division and one in a project group. Thus they are evaluated by both members of the functional division and members of the project. Figure 14–4 shows a possible matrix structure for Lexington Travel.

A matrix structure responds to an organization's need for great flexibility. It is particularly effective for enterprises facing very dynamic, complex, uncertain environments. It reinforces professional identity and development, as in the functional structure, while simultaneously encouraging flexibility and lateral communication, as in the project structure. It facilitates the development and effective utilization of employees, encourages specialization, and can lead to innovation.⁴⁵ However, the matrix structure can lead to conflict between functional and project responsibilities, ambiguity in reporting relationships, and high overhead costs because of the additional management required as well.⁴⁶

Contingencies Influencing Organizational Design

How should Lexington Travel go about choosing the best design? Effective structure depends on the environment, technology, work force, goals, age, and size of an organization. Some general precepts for designing responsive organizations are as follows:

1. A dynamic, unpredictable environment requires an organic structure, such as a product or matrix design; a stable, predictable environment requires a more bureaucratic (typically functional) structure; a complex environment calls for decentralized decision-making; a simple or hostile environment calls for centralized decision-making.⁴⁷
2. An organization's technology using machines and equipment to control the employee's work calls for a bureaucratic (typically functional) structure, whereas a technology that relies on knowledge (such as in service organizations) fits best with a project or matrix structure.⁴⁸

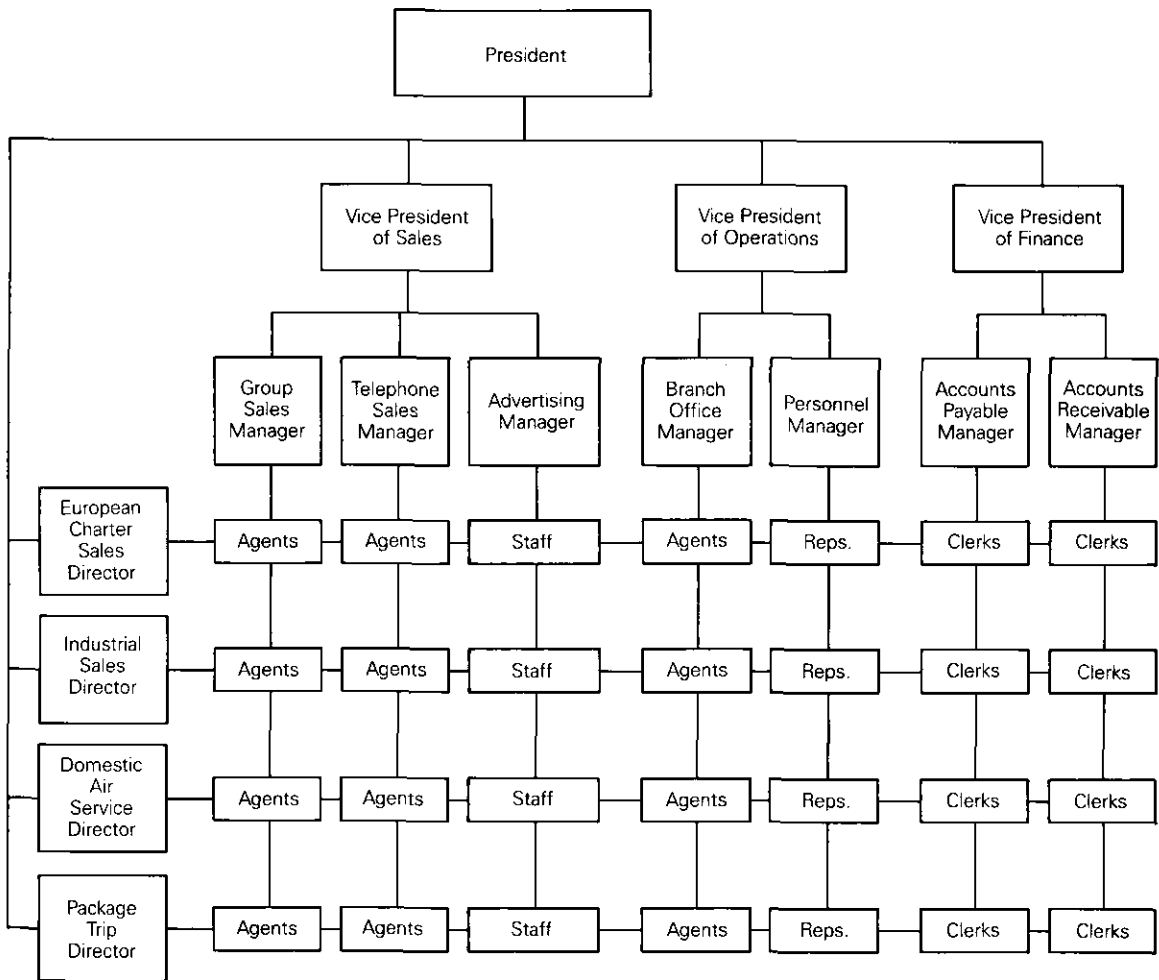


Figure 14-4 LEXINGTON TRAVEL WITH A MATRIX STRUCTURE

3. A sophisticated, complex, and intricate technology needs more support staff with special expertise and structures that emphasize lateral communication between groups.⁴⁹

4. The more professional the work force, the more the organizational structure must build in opportunities for the professionals to interact.

5. As an organization increases in size or age, it typically becomes more specialized and bureaucratic⁵⁰; thus human resources professionals and top management must ensure that these characteristics continue to fit the other contingencies.

6. Parts of an organization that have different goals should be separated and possibly have different structures.

Steps in Redesigning an Organization

In addition to determining the general structural configuration that fits best with the contingencies, redesign of an organization should follow these principles:

1. Group jobs together homogeneously, in a way that focuses on the organization's goals or specialized expertise.
2. When a group becomes too large, break it down into two or more groups.
3. Develop ways of integrating different groups through the hierarchy, task forces, linking roles, or project teams.
4. Make sure that groupings respond to the particular environment, technology, and work force.
5. Make sure that larger and older organizations are not too formal or rigid.
6. Expedite the collection and analysis of information for decision-making, where appropriate, through the creation of slack resources (extra people or financial resources), self-contained tasks (tasks performed from beginning to end by one person), and lateral relations (use of task forces, project teams, and the like); and investment in computers.⁵¹

LESSONS FROM HUMAN RESOURCES MANAGEMENT ABROAD

In addition to the organization development, work redesign, and organization redesign interventions described above, human resources professionals and managers have introduced two approaches to management from outside the United States: worker ownership and Japanese management.

Worker Ownership

In West Germany, the Scandinavian countries, and elsewhere managers have heavily involved workers in the operation and decision-making of their organizations. Worker cooperatives, such as the Mondragon Cooperatives in Spain, where workers own and manage the member organizations, have increasingly served as a model for employee ownership of steel, plywood, and meat-packing companies in the United States.⁵² Cooperatives offer workers the opportunity to exert significant control over their organization's direction and operation. For example, at Mondragon, the board of directors consists only of members elected from among the workers—a secretary, bank teller, mechanic, plant foreman, and middle manager might sit on the board at any given time.⁵³ In Yugoslavia, such cooperatives are seen as the most appropriate and efficient way to use resources to achieve societal goals.

Instead of worker ownership, some countries have mandated worker representation on their organizations' boards of directors. Known as *codetermination*, this type of management gives worker representatives voting privileges on the board,

but otherwise the *precise nature* of participation and number of representatives differ from country to country.⁵⁴ Germany, for example, extended in 1976 the earlier Works Constitution Act to require all companies with more than 2000 employees to elect an equal number of worker-directors and stockholder-directors. Here, stockholders select the chairperson of the board, who can cast a double vote in the event of a tie, and thus retain control of the company. Since 1976, Swedish companies with more than 25 employees have been required to include two worker-directors on their boards; likewise, in Austrian companies with more than 300 employees, workers elect one-third of the board. This type of representation clearly increases workers' participation in managing their organizations, but a recent trend toward including union representatives—often nonemployees—instead of worker representatives on the boards may dilute the impact of workers' participation in the future.⁵⁵

The quality-of-worklife programs described in the text and readings in this chapter borrow from worker participation ideas instituted as part of job enrichment efforts at Saab and Volvo in the 1970s.⁵⁶ In both companies, groups of workers have responsibility for assembling a particular part of a car or truck. The specific activities of each assembler are determined through negotiations with the rest of the group and can vary daily. Should Lexington Travel consider worker ownership or codetermination? The former approach might increase worker commitment and productivity, but worker ownership is normally used only as a last-resort solution to very serious problems; the owners of Lexington Travel are unlikely to sell the company to the workers. Similarly, because Lexington Travel is a family-owned company, codetermination is unlikely to be acceptable.

Japanese Management

In the early 1980s, the philosophy of management typical throughout Japan exerted a major influence on human resources management in the United States. Most Japanese companies consider their employees to be the firm's most important and profitable assets in the long run.⁵⁷ Thus Japanese companies offer the following employment conditions to their workers:

1. Long-term and secure employment
2. Emphasis on a concern for employee needs and teamwork
3. Hiring workers who will fit into the company
4. Continuous development of employees' skills
5. Multiple criteria used for evaluation
6. Open communication about and worker participation in decision-making⁵⁸

By contrast, approaches to management in the United States are typically characterized by (1) short-term employment, (2) individual decision-making, (3) individual responsibility, (4) rapid evaluation and promotion, (5) explicit, formalized control, (6) specialized career paths, and (7) segmented views of family and work life.⁵⁹

Theory Z management represents an attempt to integrate the most effective of

both the United States and Japanese practices. The following characteristics describe Theory Z management: (1) long-term employment, (2) consensual decision-making, (3) individual responsibility, (4) less frequent evaluation and promotion, (5) implicit, informal control with explicit, formalized standards and procedures, (6) moderately specialized career paths, and (7) holistic concern for employees' lives, including family relationships.⁶⁰ As shown by an early 1980s study of top-performing U.S. companies, management that incorporates most or all of these principles can indeed increase an organization's effectiveness.⁶¹

THE PROCESS OF CHANGE

Identifying and Overcoming Resistance to Change

The success of an intervention to improve organizational effectiveness depends first on its fit with needs identified during a diagnostic needs assessment. Success also relates to the willingness of the organization and its members to change. Resistance to change arises for numerous reasons. Individuals may distrust the managers, human resources professionals, or outside consultants who design and implement the change. They may fear the change itself, or want to maintain power that the change might reduce. Workers might show resistance to making adjustments because they lack the resources to support change, disagree with organizational goals, or are simply apathetic.

Resistance often arises when (1) the change ignores the needs, attitudes, and beliefs of organizational members; (2) individuals lack specific information about the change; (3) individuals do not perceive a need for change; (4) organizational members have a "we-they" attitude leading them to view the change agent as an enemy; (5) members view change as a threat to the prestige and security of their supervisor; (6) change is neither voluntary nor requested by organizational members; and (7) employees perceive threats to their expertise, status, or security.

How can human resources professionals or managers overcome resistance to change? Strategies include educating those affected, involving them in the change process, introducing change relatively slowly, and assuring employees that their jobs are secure. The change agent—manager or human resources professional—chosen to implement the change can also help overcome resistance.

Selecting a Change Agent

Managers, human resources professionals, and outside consultants can all act as change agents. When managers are the change agents they have the advantage of knowledge of and experience with a particular situation; but they may lack objectivity. Human resources professionals, in contrast, may be trained in intervention techniques or skills, and may bring greater objectivity to the situation, but workers may see them as surrogates for top management and resist or fear their change efforts. External consultants generally offer the greatest knowledge of and experience with intervention strategies, but may lack critical information

	Managers	Human Resources Professionals	External Consultants
<i>Advantages</i>	possess best knowledge of the situation are readily available require low out-of-pocket costs are a known quantity	possess best knowledge of both the situation and change strategies are readily available require low out-of-pocket costs	possess best knowledge of change strategies have more objective views of the situation have more experience dealing with diverse problems
<i>Disadvantages</i>	may be too close to the problem may hold biased views may better spend time in other ways may create resistance if viewed as part of the problem may lack expertise as change agents	may be perceived as representatives of top management may lack knowledge of the situation may hold biased views may lack expertise as change agents	may lack knowledge of the organization require higher out-of-pocket costs are an unknown quantity require longer start-up time

Table 14-2 ADVANTAGES AND DISADVANTAGES OF THE THREE TYPES OF CHANGE AGENTS

about the organization's operations. Table 14-2 summarizes the advantages and disadvantages of each of these change agents.

Managers should be involved in any changes they have the expertise to implement, any that directly influence their work group, and any that are tied to their objectives. Human resources professionals can act as resources for managers, but they can also implement interventions themselves, particularly those that are comprehensive, require expertise that they alone have, or that form the basis of human resources policy formulation. Consultants should be called upon when they have unique expertise and when there is enough money available to pay them.

In selecting a change agent, the organization must consider the purpose of the change, the type of help needed to effect it, the type of help available within the organization, who has the expertise, the constraints on the change, and the pluses and minuses of the various potential change agents.

STRATEGIES FOR ORGANIZATIONAL CHANGE

Human resources professionals and managers should be actively involved in diagnosing the need for change, selecting the appropriate option, and implementing the change. But effective change efforts should also include an evaluation of the benefits obtained. Such evaluation can parallel that described in Chapter 7 for assessing training outcomes. Human resources professionals, managers, or

outside consultants can perform the necessary evaluations using a variety of assessment techniques.

Implications for Human Resources Professionals

Human resources professionals can design, implement, or oversee change efforts in the following ways:

1. Human resources professionals should act as resources in diagnosing the need for change and in selecting the intervention strategies.
2. They should monitor change programs in other organizations and recommend those that can be adapted for implementation in their own organizations.
3. Human resources professionals should identify appropriate organization development interventions for changing behaviors and attitudes in their organization. They should then select the appropriate change agent for implementing the intervention and assist in overcoming resistance to change.
4. Human resources professionals should regularly analyze the design of jobs in the organization. They should propose job enrichment, work simplification, QWL, or alternative work schedule programs wherever appropriate.
5. They should audit the organization's environment, technology, work force, and goals to track changes that call for consequent modification of the organization's structure. Together with top management, they can propose new structures that respond better to these contingencies.

Implications for Managers

Managers typically provide data for diagnosing the type of intervention needed or participate with other workers in implementing the change. Effective change efforts include the following actions:

1. Managers should regularly diagnose the quality of working life and organizational productivity of their subordinates. Where there are problems or deficiencies, they should collaborate with top management or human resources professionals to introduce or implement new human resources practices.
2. They should participate in behavioral interventions that will improve the quality of work life or employee performance.
3. Managers should regularly analyze the design of their subordinates' jobs. They should propose and implement job enrichment, work simplification, or alternative work schedule programs wherever appropriate.
4. They should alert top management or human resources professionals where structural problems limit their own or subordinates' performance. If they have enough knowledge of organizational redesign, they might also propose new structures.
5. Managers should help reduce resistance to change among their subordinates by rewarding innovative performance, educating them about the advantages of potential changes, and resolving power conflicts.

READINGS

Reading 14-1

THE QUALITY-OF-WORKLIFE PROJECT AT BOLIVAR: AN ASSESSMENT

Barry A. Macy

The quality-of-worklife project¹ at Harman International Industries, Inc., in Bolivar, Tennessee, is a cooperative change effort between the company and the United Automobile Workers of America (UAW). The project is structured so that both parties can jointly determine and implement organizational change according to mutually agreed-upon principles. The objectives of the project are to improve employees' quality of worklife and enhance organizational effectiveness.

The explicit internal goals were identified as job security, job equity, worker humanization, and worker democracy. These were ambitious undertakings in 1973—ahead of their times in many respects—particularly because they were shared and agreed to by both labor and management. However, some of the objectives of the project have been reached and surpassed, while others have yet to be reached. Other outcomes and critical process events are discussed in an assessment study by Macy and others.²

According to the five intervention phases of the Bolivar experiment, each composed of 11 months beginning with the baseline phase through plant-wide experimentation to coincide with the change program, the following changes were measured:

Job Security. More jobs were created, as the hourly employment level rose 55 percent to 839. Once the program was underway, the cooperative union-management climate stimulated an effort to develop a joint bid on a particular product, and the company and the UAW established joint efficiency rates with the goals of increasing employees' quality of worklife and improving job security. Ultimately, this venture saved 70 jobs. Voluntary turnover rates declined by

72 percent, while involuntary turnover (discharges, retirements, and so forth) rates decreased by 95 percent.

Health and Working Conditions. Accident rates, as defined by the Occupational Safety and Health Administration, declined 60 percent, while minor accidents decreased 20 percent even with the presence of many new and inexperienced employees. Rates of short-term absences due to sickness declined 16 percent. However, not all of the changes were favorable, as the rate of minor illnesses rose 71 percent and the rate of medical leaves increased 19 percent. (Perceptions of Bolivar employees' health appear later in this report.)

Financial Security. The average hourly rate remained constant and the wage rates relative to area standards did not change (during this time, the wage rates for the whole country did not increase relative to real wages). The fringe benefit package increased by a small amount. Proposals for the introduction of a gain-sharing compensation plan (a negotiable issue) were discussed but none was adopted.

Job Security Based on Organizational Performance. Daily output per hourly-paid employee, adjusted for inflation, rose 23 percent. Two other measures of productivity—efficiency and standard performance—verify this positive change in plant performance. On the product side of the financial ledger, net product reject cost rates declined 39 percent, while the rate of customer returns decreased by 47 percent. Once again, not all was positive as the rate of manufacturing supplies used rose 22 percent and the rate of machine downtime increased slightly. What is so striking about productivity and product quality at the Harman International plant is the fact that both of these performance measures increased. Moreover, these measures have held positive and significant

Reprinted from *Monthly Labor Review* 103 (July 1980), by Dr. Barry A. Macy, Director, Texas Center for Productivity and Quality of Work Life and Associate Professor, Management Area, College of Business Administration, Texas Tech University, P.O. Box 4230, Lubbock, Texas 79409.

trends for approximately 3 years. Some of the gains are attributable to technological and capital inputs; however, many can be attributed to the cooperative labor-management change.

Cost-benefit. The cost-benefit calculations for the project reflect the program costs and benefits per hourly-paid employee per phase, summed over 55 months. The results show a net discounted benefit per hourly-paid employee to the company of more than \$3,000. There are multiple reasons for this net savings, but nevertheless, the plant improved its performance through a combination of forces, including the cooperative quality-of-worklife program.

In summary, the evidence shows that because of the quality-of-worklife program, jobs objectively became more secure; productivity and product quality rose; accidents decreased at a faster rate than their industry average; minor accidents declined while minor illnesses rose; short-term absences due to sickness declined; manufacturing supplies and machine downtime increased; and employee earnings held steady. Also, grievances decreased 51 percent and absences due to lack of work decreased 94 percent.

These positive behavioral and organizational performance gains seem to have had some practical implications for both the company and the union in their contractual process. The company's 1976 contract with the UAW was signed earlier than ever before and benefited both the company and the union membership by reducing the need for higher product inventories while maintaining the same employment level. These bargaining sessions, as contrasted to previous ones, were accomplished and concluded in a mutual atmosphere of cordiality, creativity, and trust. Absent was the win-lose philosophy and counterthreats that often accompany traditional labor-management bargaining. This is not to indicate that the adversary relationship between the UAW and Harman International Industries has vanished. It has not! The union still grieves contract issues; however, the spirit or climate in which grievances are handled has improved.

Generally, the behavioral and performance findings were positive, while the attitudinal indicators showed mixed results. Thirteen indicators of the quality of worklife and 24 measures of job and work environ-

ment characteristics known to be associated with higher quality of worklife are assessed in Table 14-3. (The data refer only to UAW members; however, these indicators represent fairly well the different types of employees surveyed at the Bolivar plant.) Some of the gains have been offset by losses or no change. It must be remembered, however, that over the extended period studied, there were some unmeasured changes in the employees' level of aspirations and expectations. These changes in expectations and aspirations were enhanced by the quality-of-worklife program and the later conditions were probably judged more critically than the earlier conditions. When asked a series of questions pertaining to the goals and outcomes of the quality-of-worklife program, the employees responded generally with positive opinions about the impact, the desirability of the program, the effectiveness of the union-management relationships, and the ability of the UAW to represent membership concerns. For example, 60 percent found the program to be desirable; a majority found the joint union-management committee responsible for designing and implementing the program to be effective without domination from either party; and 67 percent indicated that the program strengthened the local union. In addition, 90 percent of the UAW membership were satisfied with the local union in 1976, compared with 78 percent in 1973. This is substantially higher than the satisfaction level of a national sample of blue-collar union members with their union during this period.³ Moreover, union membership at the Bolivar plant has increased from 65 percent to more than 90 percent, and 100 percent of the union membership responded affirmatively when asked: "If there were an election today on whether or not the union should be kept at Harman International Industries, how would you vote?"

These results and other outcomes not reported here⁴ seem to indicate that the union members prefer to use joint union-management programs to deal with quality of worklife and other important domains of their life at work. Recently, many other reports and studies⁵ have indicated similar trends and like results with other union members. One trend seems very clear. The time is ripe for the U.S. industrial relations system to seriously consider cooperative union-management programs along with their traditional contractual and collective bargaining structures and processes.

Gains	No change	Losses
<i>Quality of Worklife</i>		
Less alienation	Job satisfaction	More reports of physical stress symptoms
Treated in a more personal way	Job offers opportunity for personal growth	More reports of psychological stress symptoms
Job involved more use of, or higher level, skills	Working conditions	Less satisfaction with pay level
Job is more secure	Work equity Fringe benefits	Less satisfaction with pay equity
<i>Work Environment</i>		
Supervisors more participative	Role conflict Job variety	Supervisors are less work-facilitating, supportive, and respectful
More work-group participation	Supervisory closeness, favoritism, and feedback	
More employee influence over task-related decisions	Work-group feedback	Less satisfaction with work group
More adequate work resources	Employee influence over work-schedule decisions	Less association between work performance and reward received (3 indicators)
More work improvement ideas provided by employees	Association between job security and intrinsic motivation with work performance General organizational climate Work improvement suggestions	Less job feedback

Note: Assessment based on 85 matched UAW members.

Table 14-3 ASSESSMENT OF QUALITY-OF-WORKLIFE INDICATORS AND WORK ENVIRONMENT CHARACTERISTICS

FOOTNOTES

¹The project was independently assessed during 1972-79. The behavioral and performance outcomes were evaluated for 55 consecutive months during 1972-76. Support for this article was provided by the Ford Foundation and the Economic Development Administration, U.S. Department of Commerce.

²B.A. Macy, G.E. Ledford, Jr., and E.E. Lawler III, *An Assessment of the Bolivar Quality of Work Life Experiment: 1972-1979* (New York, Wiley-Interscience, forthcoming).

³R.P. Quinn and G.L. Staines, *The 1977 Quality of Employment Survey* (Ann Arbor, University of Michigan, Survey Research Center, 1978). A general discussion of the survey results is described in an article by G.L. Staines and R.P. Quinn, "American workers evaluate the quality of their jobs," *Monthly Labor Review*, January 1979, pp. 3-12. For a more in-depth discussion of union attitudes, see T.A. Kochan, "How American workers view labor unions," *Monthly Labor Review*, April 1979, pp. 23-31.

⁴See Macy et al., *An Assessment*.

⁵For example, see T.A. Kochan, D. Lipsky, and L.

Dyer, "Collective Bargaining and the Quality of Work—the Views of Local Union Activists," *Proceedings of the Twenty-Seventh Annual Meeting* (Madison, Wis., Industrial Relations Research Association, 1975), pp. 150–62; A. Ponak and C. Fraser, "Union Activists' Support for Joint Programs," *Industrial Relations*, Spring 1979, pp. 197–209; B.A. Macy, "A Progress Report on the Bolivar Quality of Work Life Project," *Personnel*, August 1979, pp. 527–30 and 557–59; P.S. Goodman and E.E. Lawler III, *New Forms of Work Organization in the United States* (Geneva, Switzerland, International Labor Organization, 1977); J. Drexler and E.E. Lawler III, "A Union-Management Cooperative Project to Improve the Quality of Work Life," *The Journal of Applied Behavioral Science* (July-August-September, 1977), pp. 351–86; I. Bluestone, "The Quality of Work Life Project Between UAW and Harman International Industries," paper presented at the Thirty-Seventh Annual Meeting, The Academy of Management, Aug. 14–18, 1977; E.E. Lawler III and L. Ozley, "Winning Union-Management Cooperation," *Management Review* (March 1979), pp. 19–24; E.E. Lawler III, and J. Drexler, "The dynamics of establishing cooperative quality-of-worklife projects," *Monthly Labor Review*, March 1978, pp. 23–28; D. Nadler, "Hospitals, Organized Labor and Quality of Work: An Intervention Case Study," *The Journal of Applied Behavioral Science* (September 1978), pp. 366–81; J. Perry and others, *The Impact of Labor-Management Relations on Productivity and Efficiency in Urban Mass*

Transit (Institute of Transportation Studies and Graduate School of Administration, University of California at Irvine, 1979); B.A. Macy and M. Peterson, "Evaluating Attitudinal Change in a Longitudinal Quality of Work Life Intervention," in S. Seashore, E. Lawler III, and others, eds., *Observing and Measuring Organizational Change: A Guide to Field Practice* (New York, Wiley-Interscience, forthcoming); P.S. Goodman, *Assessing Organizational Change: The Rushton Quality of Work Experiment* (New York, Wiley-Interscience, 1979); B.A. Macy and A. Nurick, *Assessing Organizational Change and Participation: The TVA Quality of Work Experiment* (New York, Wiley-Interscience, forthcoming); and M. Duckles, R. Duckles, and M. Maccoby, "The Process of Change at Bolivar," *The Journal of Applied Behavioral Science* (July-August-September, 1977), pp. 387–99.

DISCUSSION QUESTIONS

1. Describe the quality-of-worklife project at Harman International Industries.
2. What goals did the project have?
3. What impact did the project have?
4. How could the project be adapted to other organizations?
5. What role did managers and human resources professionals play in this QWL project? Were they effective?

Reading 14-2

HELPING LABOR AND MANAGEMENT SET UP A QUALITY-OF-WORKLIFE PROGRAM

Michael Maccoby

Editor's Note: During the past 3 years, the American Telephone and Telegraph Co. (AT&T) and the Communications Workers of America have cooperated in a quality-of-worklife program unique in scope and intensity. The program is based on a memorandum of agreement covering half a million workers in 21 Bell System companies, including operating telephone companies, Western Electric, and Bell Laboratories. About 40,000 Bell System employ-

ees have participated in the program, which survived a 1983 strike and in which the parties agreed to continue after divestiture of AT&T. A subsequent survey indicated that more than 80 percent of the employees would volunteer to participate in the program.

My involvement in this project began in 1977 when the management of American Telephone and Telegraph Co. invited me to lecture on quality-of-worklife programs at a corporate policy seminar. I was asked to talk about the Bolivar project, a quality-

of-worklife experiment in an auto parts factory in Tennessee, which was the first successful American union-management experiment to improve the quality of working life.¹

However, most Bell System managers were not interested in the Bolivar experiment. They wanted to hear about my studies of managerial character.² As company men/craftsmen, they felt threatened by the gamesmen-marketeers newly recruited to the company, and wanted advice on how to deal with them. However, a few recognized that the traditional Bell System managerial character was too cautious and inflexible for a fast-arriving competitive market.

Among the latter was Rex Reed, Bell System's vice president of industrial relations. He saw the quality-of-worklife experiment at Bolivar and at the GM assembly plant in Tarrytown, N.Y., as promising models for the Bell System. He had surveyed Bell employees over a 5-year period and found disturbing trends. Although satisfied with pay and benefits and motivated to work productively, both workers and supervisors were dissatisfied with technology and perceived too much supervisory control. They believed they were mismanaged, pushed around, not listened to, and that the spirit of service was being eroded by the drive to increase profit.

PERSUADING MANAGERS

In January 1978, Reed met with Bell System regional presidents to present new approaches to raising morale and improving service. He cited examples from Ohio and Pacific Northwest Bell, and asked me to describe how employee involvement had increased both satisfaction and productivity in other companies.

I stressed to the Bell presidents the importance of cooperation with the union. Those present agreed they should moderate the rigid bureaucratic system, but there was no consensus about how to do so. Their concern at this point, before competition and divestiture had forced a new outlook on management, was as much humane as economic. They mentioned their own work history, how some had started as linesmen or clerks and had moved up with the help of friends. "Working for the Bell System has been more than making a buck," one said. "We have the obligation to make it a good place to work

for others. Everyone should feel important, respected, needed."

This meeting, together with support from Charles L. Brown, the Bell System's new chief executive officer, reinforced experimentation in participative management in some of the Bell companies, but most of the experiments were without union involvement. In fact, some middle managers reacted with anger at the idea of cooperating with the union.

Relations between Communications Workers of America (CWA) and AT&T had been stormy in some companies and always complex. Strikes had caused violence and bitter feelings in certain areas. The processing of grievances had become a sizable business. Although relationships at the top, between AT&T vice president of industrial relations Rex Reed and CWA President Glenn Watts, were cordial and respectful, at lower levels there was considerable distrust.

As in many American companies, management tended to view the union as a symptom of failure to create a good workplace. Bell System managers were proud of their achievement—building a great company, providing effective universal service, and creating new technology. In the view of executives, management was identified with science and productivity, while the union represented unproductive politics. This sense of superiority seemed to divide union and management, obscure shared values, and impeded productive cooperation.

In the spring of 1978, Robert Gaynor, vice president of Long Lines in Kansas City, began a change project with his managers. Gaynor was a leader in shifting AT&T to a more market-oriented business. He believed this could not be achieved by decree, that managers had to analyze the new competitive demands together, combine knowledge, and agree on goals. Through interviews with their peers, a research team of managers defined problem areas, including the need for innovative leadership; the need to maintain a spirit of service; the need to make measurements and control systems more flexible; and the need to improve the planning process which, like most large companies at that time, was mainly a matter of extrapolation.

Most managers believed change was essential, but were concerned that AT&T's positive values—caring about people, the spirit of service, high standards and integrity, and technical excellence—be preserved. How to begin this process of change became

the subject for task forces, and I was asked to help create more open and participative management, starting with Gaynor's team. By January 1980, we had improved management teamwork and addressed interdepartmental problems, but the process had not reached the worker level and did not include the union.

CWA BECOMES INTERESTED

In January 1980, Ronnie J. Straw, director of research at CWA, asked if I was interested in studying the various forms of union participation in management, with recommendation for the union on how it should approach AT&T. The CWA was interested in a range of possibilities, from membership on the board to shop floor participation. Was I interested?

Very much so. The CWA was an exceptionally forward-looking union. Its members were affected by changing technology and were asking the leadership to do something about job stress. The union had a good research department and creative leadership. I believed that a strong informed CWA would both further the interests of its members and put pressure on the Bell System to improve its management, and that both union and management would benefit from the project I was being asked to undertake.

But there was a problem: I had been an AT&T consultant. CWA President Watts would have to decide whether this made a difference. Also, I would not take the job unless it was approved by Rex Reed. There were two reasons for this: first, I would be bringing knowledge of Bell System management to the union; and second, I wanted to keep alive the chance to work with both.

Watts liked the idea that I was familiar with the Bell System; it would save time. Furthermore, John Carroll, CWA executive vice president, had attended the AT&T corporate policy seminar at which I urged management to cooperate with the union. Reed had no objections. In fact, he agreed that a stronger, more knowledgeable union would push management to improve, while a weaker, more reactive union would be less able to understand and support change.

To develop a strategy for CWA, I proposed that Straw and I together interview CWA leadership on its views of what changes were needed. Previous rec-

Quality of worklife grew out of the collective bargaining process. It is a commitment of management and union to support localized activities and experiments to increase employee participation in determining how to improve work. This process is guided by union-management committees and facilitators, and requires education about the goals of work and training in group process.

In the Bell company and AT&T, I see quality of worklife as a means to move from the bureaucratic-industrial model of scientific management with its fragmentation of jobs and hierarchical control, to a flexible, broadly skilled, participative team. This is a more effective way of managing market-driven technoservice work while protecting the rights and dignity of employees.

The new automated workplace requires decentralization, responsiveness to customers, and ability of workers to solve problems where they occur without waiting for hierarchical approval. Quality of worklife develops the flexibility essential for effectiveness and at the same time strengthens the union.—MM

DEFINING QUALITY OF WORKLIFE

ommendations to the union had not been acted on, largely because those who had to make use of the findings were not involved in the study process. All proposals for change are a likely threat to those who are adapted to the status quo. I wanted CWA to own the study and the strategy, which meant that it had to participate from the start.

Straw and I, assisted by others, interviewed the union executive board and more than 100 local officers from all over the country. We asked AT&T for examples of participative management projects, and asked the local union leaders for comments.

A consensus emerged: the union leaders believed that in recent years, management had tightened to prepare for deregulated competition; workers believed they could give better service if there was less monitoring, both technological and supervisory.

The union noted a number of attempts to improve morale through increased participation, but they were often short-lived. A few of the attempts tried to involve the union, and some had become the cause of grievances, as "participation" resulted in actions considered in violation of the contract. (An example was one which encouraged employees to criticize those who were less productive.)

The local presidents we interviewed did not favor participation on the board and were skeptical of joint

committees which in the past had done little. They liked the idea of a quality-of-worklife program in offices and garages, based on the Bolivar or Tarrytown models. In fact, the most enthusiastic union leaders were those currently taking part in joint initiatives of this sort.

JOINT COMMITTEE DEVELOPED

When I reported these findings to the union executive board in July 1980, Watts asked me to draft an article for the contracts he was then negotiating with Reed. I recommended joint sponsorship of participative experiments, including a National Committee on Joint Working Conditions and Service Quality Improvements with the following function:

1. Developing and recommending principles and objectives relative to working conditions and service quality improvement which will guide experiments or projects such as quality circles, problem-solving teams, and the like, in various work situations. These should be designed to encourage teamwork, to make work more satisfying, and to improve the work operation.
2. Reviewing and evaluating programs and projects which involve improving the quality of the work environment.
3. Arranging for any outside consultants which it feels are necessary or desirable to assist it, the expenses thereof to be shared equally by the company and the union.

The national committee first met in the fall of 1980. It agreed on a set of principles but had trouble developing a strategy. Some management members wanted to take a relatively passive role, basically supporting whatever local companies initiated. They viewed quality-of-worklife programs as a means toward healthy decentralization, and were sensitive to playing the traditional controlling role. The union distrusted this approach: it believed that Bell companies interpreted quality-of-worklife projects as participative management without union involvement, and union officials were getting messages from local leaders that such programs were causing problems. If the national committee was not to direct the quality-of-worklife programs, CWA members wanted

it to at least control the quality of the programs and set minimum standards. The union proposed that I be retained as consultant to the committee. Management resisted the idea.

The debate was not so much about me as about the committee's role. When management agreed to hire me, it meant a decision had been made to experiment with a more active strategy. I organized a series of meetings with union leaders, district vice presidents and their assistants, and company counterparts, including personnel vice presidents and their labor relations assistants. I described the quality-of-worklife project to them, its potential benefits and risks, and the development in skills and relationships necessary for both management and union to make it work. I emphasized that management had to share power, to treat the union as a partner, and that the union had to learn more about the business, to learn to work cooperatively, and to agree that ongoing quality-of-worklife projects would not be held hostage during unrelated conflicts. Quality-of-worklife projects should not be a substitute for collective bargaining, but a development of bargaining into issues of mutual interest.

Union and management groups then met separately to discuss what they wanted from quality-of-worklife projects, and what they thought the other side wanted. Then they shared their deliberations. There were high levels of trust in some companies, especially in companies in which top management invited union leaders to discuss changes and ways of decreasing grievances. In other companies, there was little trust or communication. Even in instances where top leaders had created a good relationship, lower levels might view each other warily. The fault might be in either side or both. Managers might be insecure and inflexible, overcontrolling, or paternalistic; union leaders might want to make all the deals themselves, and fear giving more power to members who might criticize them or discover they do not need either managerial or union bosses.

We established quality-of-worklife committees in each company, with union and management coordinators who would communicate with the national committee. The strategy was to educate and train facilitators from both sides so there would be no need to hire outside consultants. This strategy avoided having to deal with approaches which might distort the shared goals and principles. It strengthened internal skills, gave a sense of ownership to both

union and management, and created a group of dedicated proponents.

The national committee developed a quality-of-worklife training package, designed by CWA District 5 and Mountain Bell. It included four modules which described quality-of-worklife, its implementation, how a group would identify and solve problems, and how to deal with interpersonal relations within the group. This became the basic training required for all levels, from workers to the problem-solving team.

The strategy announced by the national committee was to start with voluntary leadership from both sides. The first stage was to create successful models which could be copied by others.

The committee planned a series of meetings to stimulate union and management to consider quality-of-worklife projects in relation to an organizational vision. The participants were chief operating and personnel vice presidents from each Bell company with the corresponding union vice presidents. Professor Richard Walton of the Harvard Business School and I conducted the seminars, using Harvard Business School cases to describe a range of visions, from Japanese paternalism to European work councils. We persuaded management that the union was not seeking control of their decisions, and persuaded the union that management respected their role as representing workers' needs for security, fair rewards, and a chance to develop skills. This was the first time some of the operating officers had ever met union leaders; they testified that these traditional adversaries were responsible and intelligent about business needs, and were potential allies in the task of making the Bell companies more competitive in a deregulated environment.

By the summer of 1982, the national committee had achieved its first goals—designing a cooperative structure and training for teams and facilitators—and were organizing a meeting to showcase its success.

For the next stage, we invited leaders from both sides for discussions. They concluded that good models existed, but required initiative and involvement from management, and only a few innovative leaders were willing to take the risk. Support from the top was needed, including rewards for risk-takers, and a roadmap showing how to manage the process. To encourage support, the national committee planned meetings with the top management of the new regional companies. To develop a roadmap, union and management staff interviewed exemplary

leaders, representing levels from company president and regional vice president to district manager and local union presidents.

Both management and union leaders believe that quality-of-worklife projects are meant to strengthen their organizations, and that a quality-of-worklife project requires teamwork, trust, and coordinating committees that manage the process, but not the content (which must come from the workers). All the leaders interviewed had invested liberally in training and used internal consultants. They stayed with the process, holding frequent meetings, in contrast to some managers who give their blessing and then withdraw.

Union leaders reported the quality-of-worklife projects require them to gain new skills and knowledge. They also commented that intra-union struggles over turf impede the process. It is clear that quality-of-worklife projects deteriorate unless union leadership maintains an active, informed role.

The strike of August 1983 slowed down the momentum, but quality-of-worklife programs emerged intact. Watts is convinced the strike would have been longer and more violent without them. Local presidents I have interviewed agree. They say members recognized the difference between areas which demand cooperation, and those, such as wages and benefits, which are areas of disagreements. In one Bell company where such projects have widespread support, the company president talked to picketing workers and congratulated them for their loyalty to the union. Since the strike, that company has made rapid strides to extend quality-of-worklife programs.

WILL DIVESTITURE AFFECT COMMITMENT?

Both union and management leaders in the divested Bell companies have declared their commitment to quality-of-worklife projects. Internally, the union has used the process to improve its own management at headquarters and in the district teams. But further development depends on the willingness of management to work cooperatively with the union on all factors that influence the quality of working life, and the willingness of the union to understand the new problems of a competitive market. Quality-of-worklife projects must include the design of technology and the organization of work. As management builds more efficient systems, it must consider from the start

whether such changes create good jobs. Will workers be “deskilled”? Will work be organized to allow broad learning, including problem-solving skills that are not made obsolete by change? In a monopoly that has been able to maintain high levels of job security, how will management deal with downturns and technological unemployment?

The growth of quality-of-worklife projects requires a developing relationship between management and union built on mutual respect for institutional interests and values. CWA leaders have seen that quality-of-worklife can strengthen the union’s ability to serve all its members, not just those with grievances. Indeed, such projects make the union more attractive to educated service workers. But no union can operate if management threatens its existence. If the new Bell companies pursue a strategy of cutting costs by becoming nonunion, quality-of-worklife projects will wither. If management sees the union as a potential ally to be brought into strategy, quality-of-worklife projects can guarantee the new companies a highly motivated, flexible, and productive work force.

FOOTNOTES

¹In 1972, Irving Bluestone, then vice president of the United Automobile Workers, and Sidney Harman,

Bolivar chief executive officer, had asked me to help them design and direct that project which pioneered many of the practices subsequently used by GM, Ford, and AT&T. This included a union-management plant-level committee and department-level teams trained to analyze problems and to propose solutions. Bolivar went farther than most subsequent programs in supporting general education and arts and crafts, as well as technical training. The project was effective not only in terms of work satisfaction, but also in union-management cooperation to gain new business, cut costs, and achieve mutually beneficial early bargaining.

²See Michael Maccoby, *The Gamesman* (New York, Simon & Schuster, 1976).

DISCUSSION QUESTIONS

1. What constitutes high quality of work life?
2. What characteristics of the situation at AT&T prompted initiation of a QWL program?
3. What approach did AT&T use?
4. How effective has the QWL project been?
5. What role did managers and human resources professionals play in the QWL project?
6. Were they effective? If not, what role should they play?

ACTIVITIES

Activity 14-1

DATA-ENTRY CLERK JOB REDESIGN

Step 1: Read the following scenario.

Foxwood Appliances has forty data-entry clerks who report to one of two supervisors. They enter data into a video terminal for a variety of work that is supplied by a number of departments and groups at Foxwood. Some jobs are small, while others involve extensive data transfer. Most work comes with a due date, although some does not.

The work is supplied to the clerks by their supervisor. The supervisor attempts to see that each person gets exactly one-fortieth of the work. The supervisor looks at the work before giving it to the clerks to make sure the writing is legible. If not, the supervisor returns it to the originating department.

Usually each clerk is able to enter between 10,000 and 15,000 characters a day. Because of the exact nature of the work and the lack of skilled entry clerks, the output is then sent to proofreaders for review to minimize the number of errors. However, the departments still complain about large numbers of mistakes. Many due dates and schedules are not met. The department has high absenteeism and turnover.

Step 2: Diagnose the situation.

1. How effective is the human resources management?

2. What human resources management problems are there?

Step 3: Redesign the job using the following approaches:

1. work simplification
2. job enrichment
3. quality-of-worklife programs
4. alternative work schedules

Step 4: In small groups, share your job design. Decide which approach would be the most effective and which the least effective.

Step 5: Offer at least two other approaches for solving the problem at Foxwood Appliances.

Step 6: Discussion. With the entire class, share your group's conclusions. Then address the following:

1. Compare and contrast the three methods of work redesign.
2. What problems does each solve? Create?
3. What advantages and disadvantages does each offer?
4. What role should managers and human resources professionals play in redesigning the work?
5. What other approaches to change are appropriate for this situation?

Activity 14-2

SUBURBAN HOSPITAL REDESIGN

Step 1: Read the following scenario.

Suburban Hospital is a 300-bed neighborhood hospital that services several suburban communities in a large metropolitan area. It admits 25 to 100 patients

each day. Figure 14-5 shows a partial organization chart of the hospital.

The admissions clerk greets the patient when he or she arrives for admittance, gives the patient a hospital identification bracelet, and takes the patient's possessions for storage.

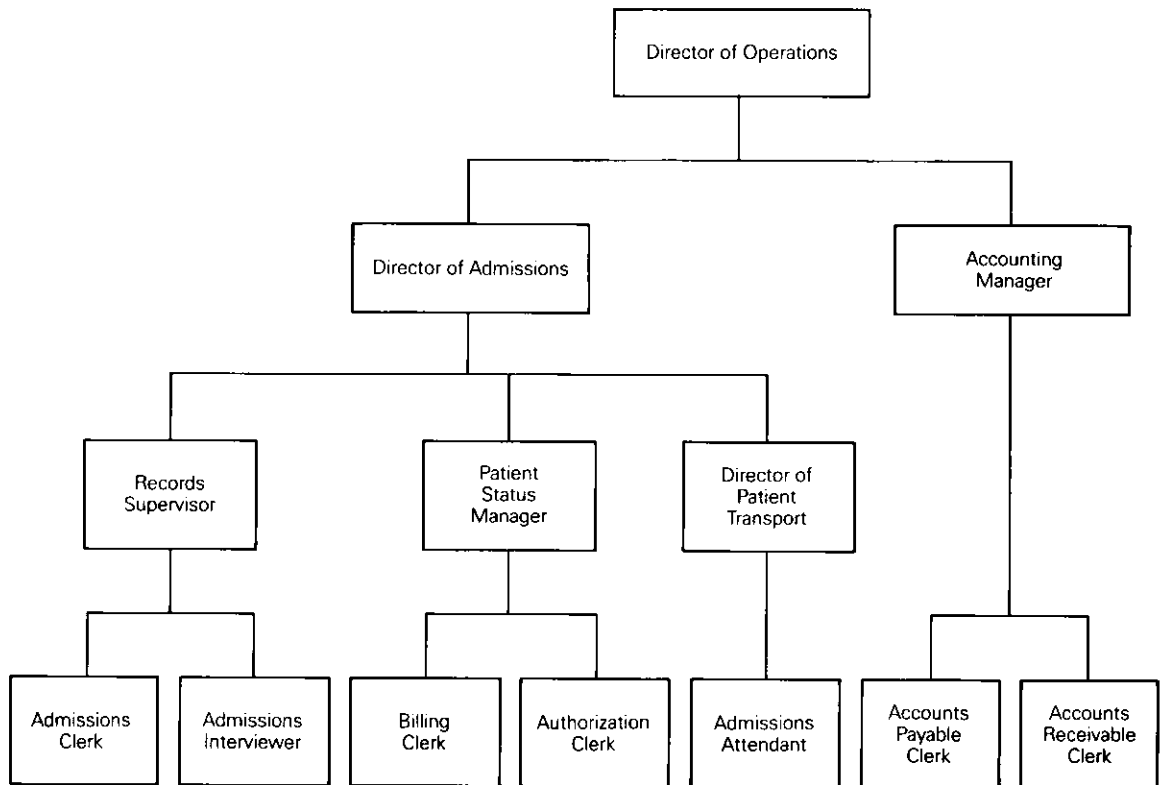


Figure 14–5 PARTIAL ORGANIZATION CHART OF SUBURBAN HOSPITAL

The admissions interviewer takes a preliminary medical history of the patient.

The billing clerk discusses the patient's plan for paying for the hospitalization. He or she enters the patient's name, personal data, and payment plan into the daily log. The clerk sends one copy of the log to the authorization clerk and one copy to the accounts receivable department.

The authorization clerk verifies the patient's ability to pay. He or she passes an authorization for admission to an admissions attendant.

The admissions attendant delivers the patient to his or her room. Delays in admitting a patient can occur at any step if the appropriate person is not available to process the patient. The patient carries

no paperwork; each admissions employee must wait for the previously completed paperwork before performing his or her admissions task.

Step 2: Individually, in small groups, or with the entire class, answer the following questions:

1. What method of organizing is used?
2. What kinds of problems does this type of organization solve? Create?
3. Is this the most effective kind of organization?
4. How would you redesign this organization?
5. What role should managers and human resources professionals play in redesigning the organization?

Activity 14-3

ERICSSON DE ARGENTINA (A)-(F)

Step 1: Read Ericsson de Argentina (A)-(F).

Step 2: Prepare the case for class discussion.

ERICSSON DE ARGENTINA (A)

The Ericsson Group is a major international producer and distributor of telecommunications equipment and business information systems. Sales in 1981 were approximately U.S.\$3 billion. Headquartered in Stockholm, Sweden, Ericsson was engaged in local manufacturing in over 30 different countries. In 1981, the company employed approximately 70,000 people world-wide. Major customers of switching and transmission equipment included public agencies such as national telecommunication nets (P.T.T.'s). Ericsson also enjoyed a private market for its business information systems, including small telephone switchboards, paging systems, intercoms and other intercommunication devices.

In the early 1980's, major competitors included ITT, Siemens, Philips, Plessey, Thomson, Nipon Electric and a number of other firms. Ericsson management believed that technological leadership, service, distribution and technical assistance, price and local production were important criteria for success in their industry. In the late 1970's, Ericsson had bolstered their reputation for technological excellence with their development of electronic switching equipment. Although not first to market with electronic telephone exchange equipment, their efforts represented one of the most successful early ventures into electronic switching.

While generally far more complex than the present technology, some elements of electronic production were less complex than electromechanical production. For example, electronic assembly required con-

siderably less training than electromechanical assembly. While electromechanical assemblers required as much as one full year to reach a high level of proficiency, electronic assemblers could be expected to be producing at high levels within two months or less. However, Ericsson had learned that Computer-Controlled testing of electronic switching equipment was considerably more complex than testing of electromechanical switching equipment. Until 1978, all of Ericsson's electronic switching equipment was manufactured in plants located in Sweden. In late 1978, the Ericsson factory in Argentina received its first local order for electronic switching equipment.*

Top management of the Ericsson Group was quite interested in the success of its first overseas venture in the manufacture of electronic switching equipment. The company had already converted a number of Swedish factories to electronic switching and believed that they could provide valuable technical support for the Argentinian startup.** Detailed documentation was available on equipment needed for production, materials, plant layout and production processes. Video tapes had been produced in Swedish plants, demonstrating in great detail the various tasks, elements and processes involved in electronic assembly and testing.

Ericsson de Argentina (E.D.A.)

Ericsson de Argentina (E.D.A.), a wholly-owned subsidiary of the Ericsson group, had been involved in manufacturing electromechanical switching equipment for approximately 10 years. The factory in Buenos Aires was managed by Eric Martenson, a 30-year-old graduate in mechanical engineering from the Chalmers University of Technology in Göteborg, Sweden. Martenson had previously been involved in

*Ericsson manufacturing in various countries throughout the world was in response to local, country orders.

**In contrast to Sweden, where electronic switching production had achieved a fairly high level of automation, the decision was made to begin production in Argentina using manual processes in the assembly operations.

This case was prepared by Professor Richard B. Higgins as a basis for class discussion rather than to illustrate either effective or ineffective handling of an administrative situation. Copyright 1983 by IMEDE (International Management Development Institute), Lausanne, Switzerland. Reproduced by permission.

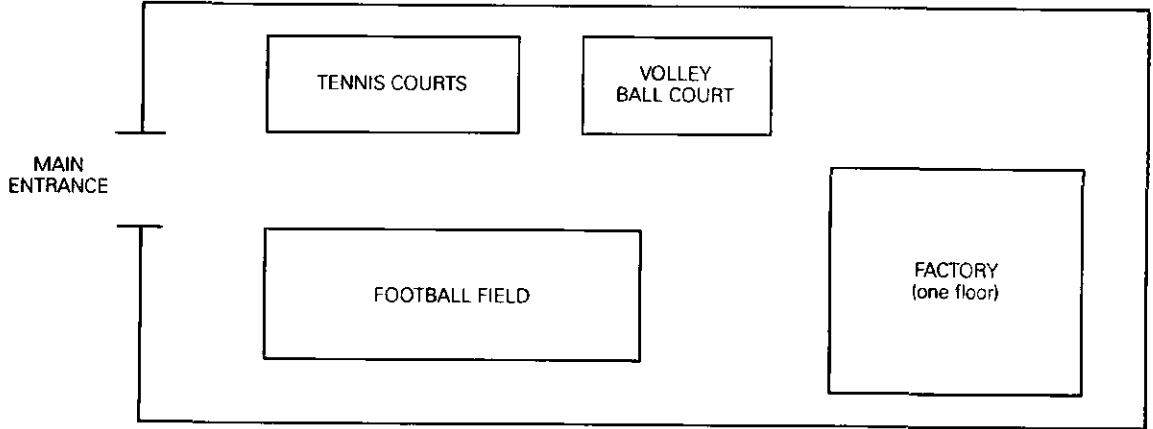


Figure 14-6 FACTORY LAYOUT PRIOR TO 1978

a production startup operation in another South American plant. When Martenson arrived in Argentina in late 1976 to take over the plant manager's position at E.D.A., he found the factory located in an old warehouse in the industrial area of Buenos Aires, while all other departments were located in the center of the city (see Figure 14-6 for an overall layout of the factory).

Organizationally, the factory manager reported to

the managing director of Ericsson de Argentina (see Figure 14-7 for an organization chart of Ericsson de Argentina). Within the factory, Martenson had four department heads reporting to him: (1) Administration, responsible for accounting, personnel, purchasing and general services; (2) Planning; (3) Control; and (4) Production (see Figure 14-8 for an organization chart of the factory). Administration, planning and control were considered to be factory

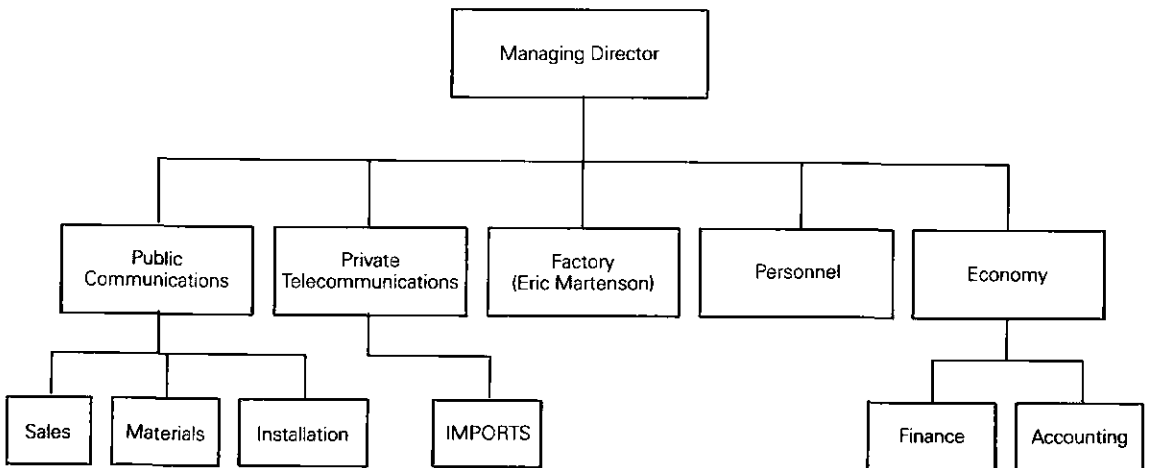


Figure 14-7 ORGANIZATION PRIOR TO 1980

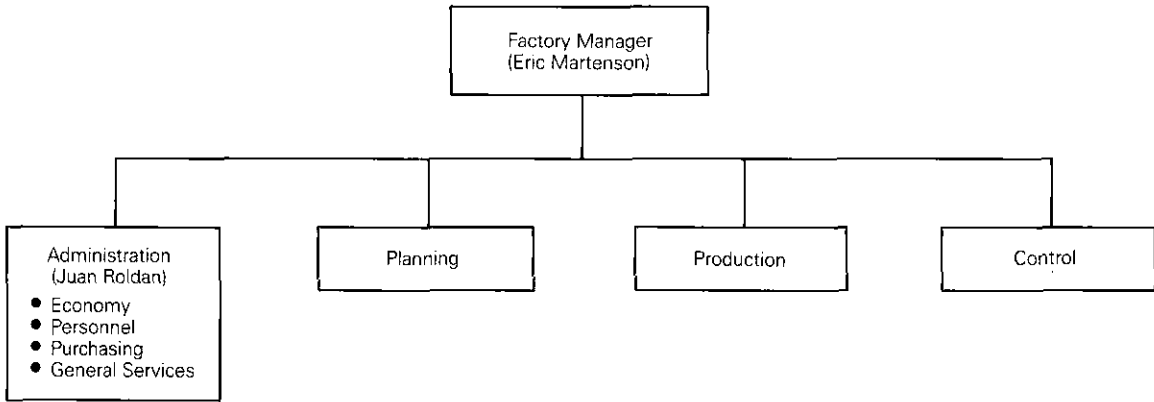


Figure 14-8 FACTORY ORGANIZATION PRIOR TO 1980

office positions. Production employed approximately 130 "direct" workers out of a total factory work force of 200.

Although factory management at E.D.A. had been engaged in preliminary planning for possible conversion to electronic production, it was not until late 1978, with a firm local order in hand, that Eric Martenson realized that his plant would be Ericsson's first overseas venture in manufacturing electronic switchgear. In preparation for the startup of electronic production in Argentina, Eric Martenson was recalled to Stockholm for an intensive briefing by engineers and headquarter's personnel who had considerable experience with a number of Swedish plant conversions.* In November of 1978, Martenson, with three suitcases filled with equipment specifications, plant layouts, blue prints, a tentative schedule for conversion and many videotapes, boarded flight no. 521 for his return trip to Buenos Aires, Argentina.

ERICSSON DE ARGENTINA (B)

Immediately upon his return from Stockholm, Sweden, Eric Martenson called a series of meetings, first with factory office employees and then with production workers. The purpose of these meetings was to brief employees on the company's plans to begin

*In the next two years, Martenson was to make five additional trips to Stockholm.

electronic production. To assist in his presentation, Martenson had brought along a number of printed boards made in Sweden. He used the boards as visual aids to describe the new technology and the impact that the new production process would have on employee staffing, training requirements and compensation policies and practices.

ERICSSON DE ARGENTINA (C)

Plant management decided to proceed with a planned phase-in at its Buenos Aires factory. Phase no. 1, referred to by some as a "debugging" period, called for transferring 30 Argentinian production workers, formerly involved in electromechanical manufacturing, to electronic production.

Eric Martenson decided to select the 30 factory employees with the best production records for transfer. His reasoning was based on two major considerations: (1) He wanted to maximize the chances for success in the changeover; and (2) He wanted to establish the idea that electronics manufacturing was a very desirable job (more employees would be needed in later phases of the conversion). In the process of selecting the electronics work group, plant management was guided by another consideration. They did not want to remove all of their most productive employees from electromechanical manufacturing. As Eric Martenson said, "We couldn't do

this, otherwise you would lose too much efficiency and, secondly, we would lose all of our 'models' of high performance."

Martenson believed that training the new electronics work group was an activity of highest priority. He was aware that training for electronic assembly tasks, aided by elaborate and detailed documentation and videotape demonstrators, would be considerably less difficult than electronics testing training. It was decided that training for testers would be conducted in two phases, (1) six months pre-training at the Buenos Aires plant, followed by (2) six months further training in Sweden. In order to provide an incentive, as well as provide backup support if needed, factory management decided to select two more testers than required during Phase 1 of the changeover. Hoping to foster competition among the testing trainees, Martenson "unofficially" informed the testers that only 4 out of the 6 would be chosen to go to Sweden for follow-on training.

Initially, a number of prospective electronic employees showed serious concerns regarding their compensation under the new manufacturing process.* They reasoned that, during the training and early production phase, their output would be at such a sufficiently low level that their paychecks would suffer. Plant management hoped eventually to establish a piece-rate compensation system for all electronics production tasks, but realized that it would take time to develop and install such a system.** In the meantime, plant management assured electronics production workers that their compensation would not be adversely affected during the training and initial production startup phases.

ERICSSON DE ARGENTINA (D)

"1979-1980 was a learning year for all of us," said Eric Martenson, factory manager at Ericsson de Argentina. "As planned, it took us a full year to begin to move into high levels of production. All of us were learning the new technology. Sweden was

*Under the present compensation system, employees' total compensation included a base salary plus incentives.

**Industrial engineers with the Ericsson Group in Sweden had developed standard times for Swedish electronic manufacturing methods, but these were based on a highly automated manufacturing process.

helpful in providing technical support wherever possible, but it was our job to make the thing work. Of course, if the transition were occurring in Sweden, the changeover probably would not have taken as long. For one thing, with all of the expensive, automated equipment in use in Sweden, management would have been under considerable pressure to reduce startup time. At the end of the year, however, we knew all about the new technology and we knew about a lot of the problems. When we brought in a new batch of employees to train, we were much more prepared."

In the meantime, in early 1978, the managing director of Ericsson de Argentina (see Figure 14-7) was reviewing final plans to relocate all offices and departments, currently situated in the Center of Buenos Aires (with the exception of private telecommunications), to the factory site located in the industrial area of Buenos Aires. Two reasons were cited by the managing director for this move: (1) to improve communications between office workers located in the center and factory office workers located at the manufacturing plant, (2) to allow for a consolidation of some functions formerly performed at the different locations. In addition, the managing director was well aware that:

(1) The working environment of the factory (located in an old warehouse) did not measure up to Ericsson standards.

(2) Production of electronic switching equipment at the factory would require plant expansion with new facilities designed to accommodate the new technology.

In order to respond to the diverse needs of the downtown office (Center of Buenos Aires) and the factory, a relocation plan was drawn up that would gradually consolidate offices and factory and provide for plant expansion. The following time schedule had been established:

Mid-1978	New canteen New factory offices for factory office workers
Mid-1979	New electronic production areas
Mid-1980	Move some downtown offices to factory site
Mid-1981	Move remainder of downtown offices to factory site

At the completion of the relocation in 1981, management visualized the following layout at the factory site as shown in Figure 14-9.

The consolidation of downtown and factory offices would increase the size of the workforce at the plant from 200 to approximately 525 employees. Currently, factory employees, both in the office and in production, worked an 8 1/2 hour day, 42 1/2 hours per week. Factory office workers regarded themselves as a rather close-knit, cohesive group. Frequently, smaller groups within the factory office would get together for off-the-job social activities. Volley ball, tennis and table tennis were popular at the factory and organized competition among different departments and groups within the factory generated considerable interest and enthusiasm.

Office employees located downtown currently worked a 37 1/2 hour, flexitime, work week. A long standing tradition in the downtown offices extended the normal lunch hour to 1 1/2 hours, permitting office workers to go home for lunch.

ERICSSON DE ARGENTINA (E)

Factory employees were generally pleased with the first two phases of the relocation and modernization program. Everyone seemed to enjoy the new canteen and factory office workers welcomed their new facilities. While the old tennis court had been selected

as the site of the new office building for downtown workers, this did not appear to cause a major problem. In mid-1979, the new electronic production area was completed on schedule.

By mid-1980, some of the downtown office workers were relocated to the factory. Almost immediately factory employees, particularly factory office workers, began to express a number of concerns to factory management. "Who are these people who are arriving in broad daylight, 1/2 to 1 hour late and going home 1/2-1 hour early?" "Are these downtown workers going to take our parking space, just like they took our tennis courts?" "Who are these people that go for lunch anytime they want to, causing us to wait in line in our own canteen?" By mid-1981, when the remainder of the downtown office personnel were transferred to the factory site, relations between office and factory employees were described by one observer as "less than cordial."

In the early 1980's, factory management decided that something must be done to remove some of the more visible differences in working conditions between the two groups. A long term goal of a standardized 40 hour work week for all employees was discussed but met considerable resistance from the "downtown" office workers. Used to a 37 1/2 hour week, they strenuously resisted an increase in their working hours to 40, although management had proposed an 8% wage increase to accompany the increased work week. Unable to convince the

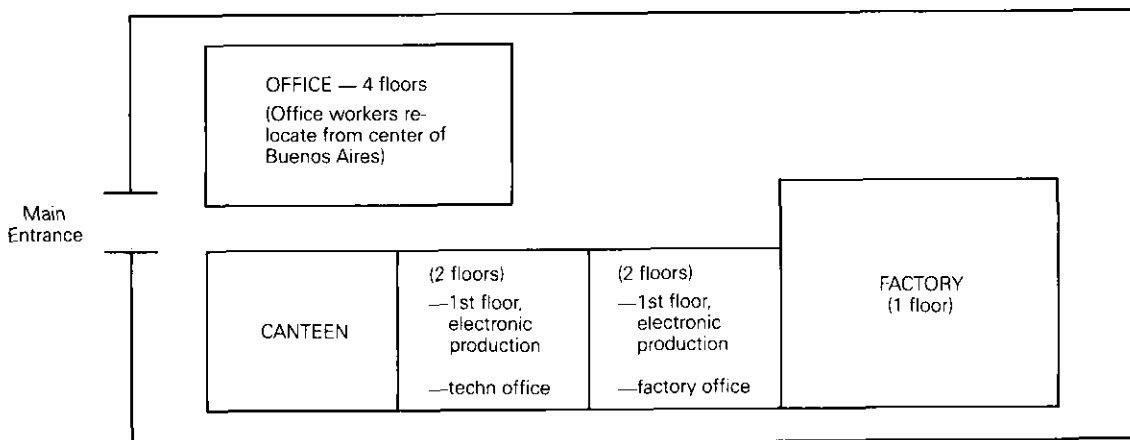


Figure 14-9 FINAL LAYOUT—CONSOLIDATED OFFICES & FACTORY 1981

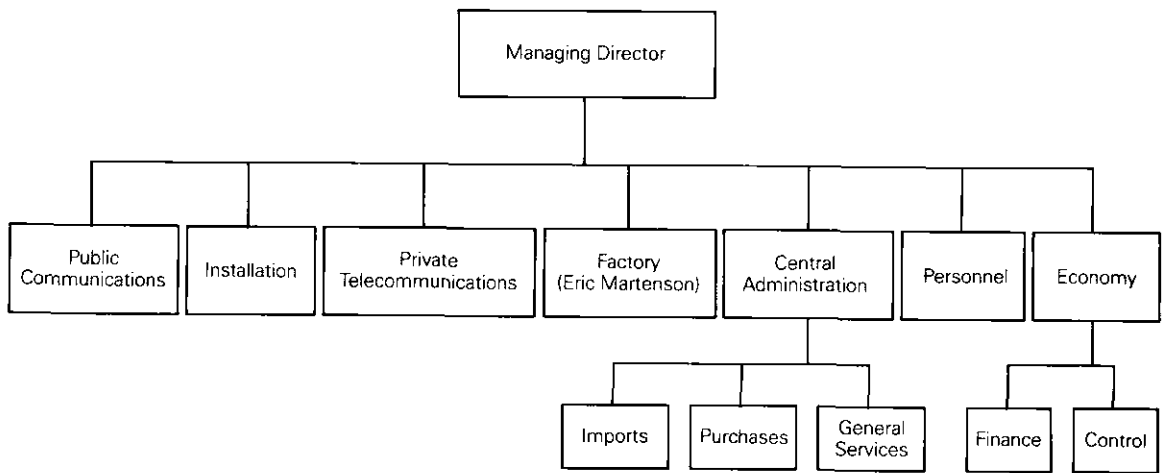


Figure 14-10 ORGANIZATION AFTER 1980

office workers to accept this package, factory management was reluctant to reduce the factory employee work week to 40 hours and factory employees continued to work a 42 1/2 hour work week.

In 1980, the relocation plan moved into its final phase. One of the initial reasons for relocation was to consolidate a number of office functions formerly performed at the factory and at the downtown location. Management had already decided to remove the purchasing and personnel functions, formerly performed by the Factory Administration department,

under Juan Roldan. These activities were to be merged with the recently relocated downtown personnel department and the newly created central administration department (see Figures 14-10 and 14-11). This consolidation was fully accepted by factory management.

Juan Roldan was about 50 years old, had been an employee of Ericsson de Argentina for 30 years, and planned to retire in another five years. He held a Bachelor of Economics degree and, at the time, was continuing with his post graduate Economics studies

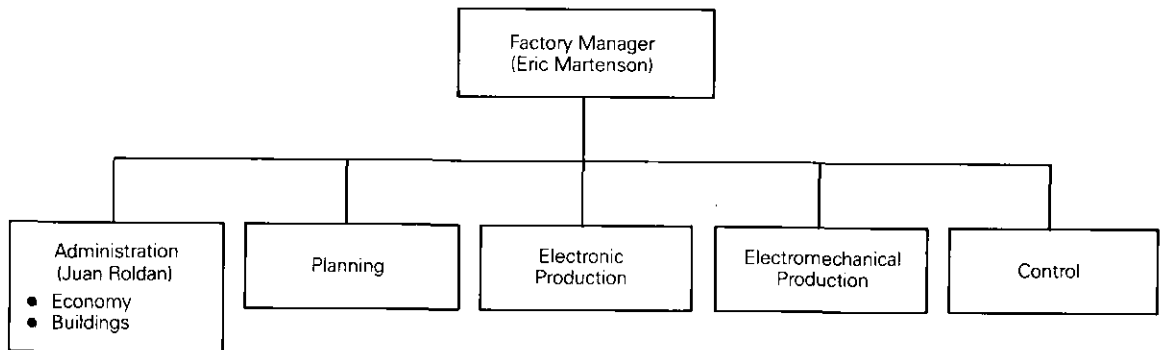


Figure 14-11 FACTORY ORGANIZATION AFTER 1980

in the evening. Plant management had been generally satisfied with Juan's performance. "The personnel administration activities under his section had worked out well and also the purchasing activities were well run."

ERICSSON DE ARGENTINA (F)

Although Juan Roldan did not openly complain about the consolidation of the Personnel and Purchasing functions, his behavior indicated that something was bothering him. He became more reserved and much less involved in project meetings and other factory discussions. The remaining function within the Administration dept. was economy.* Even here, Juan's boss, Eric Martenson, had expressed some concern over Juan's apparent lack of imagination in his cost analyses. Working very well with routine tasks, Martenson believed Juan to be a rather rigid, autocratic person, who found it difficult to tackle new and complex tasks.** Although Juan was very respectful in his relationships with Eric, Martenson had heard, through the grapevine, that he was a very difficult person to work for. Martenson knew, from first hand experience, that Juan had had some problems with his two sons. His eldest son had run away from home at 17 years old and continued to have little contact with the family. His younger son had also run away from home for a few days.

Eric Martenson was convinced that he had a serious motivational problem with one of his employees. One evening in mid-1980, Martenson was pondering the reasons for Juan's apparent frustration. Eric was not certain how significant each of the following factors were, but he thought that they might help to explain Juan's behavior in recent months:

"Juan resented preparing a rather comprehensive, written report for me each month, showing progress achieved towards targeted activities. He

*At the time of consolidation, Juan was also put in charge of buildings.

**This impression was reinforced, in Martenson's view, when Juan Roldan resisted Eric's urging to become more involved in the new electronics manufacturing process.

had never had to do this before and he obviously did not like it, at first."

- "Roldan was no longer considered as my 'natural deputy,' as he had been in the past."
- "Juan was aware that his salary was considerably lower than (25% lower) the two other Bachelor of Economics within the factory."
- "He had functions and responsibilities taken away from him (personnel and purchasing)."
- "He thought that he had the capacity to do much more and he also thought that I did not give him the chance."
- "Juan had serious family problems."
- "He had difficulties in developing a new managerial style, the 'modern' way of treating subordinates."
- "He could have found it difficult to take orders from a younger man (me)."
- "He did not feel my support."

After reviewing his list, Eric Martenson concluded that there were more than enough reasons to account for Juan's rather dispirited behavior of recent months. However, Martenson kept returning to the same question: "What can I do about the current situation with Juan?"

Four hours later, Martenson was still staring at his notes scribbled on a single piece of paper. He was considering the following options:

1. *Try to get Roldan to understand and accept the current situation.* How can you tell someone that the goals that they have set up are not going to be reached and then tell them why not?

2. *Undertake an active program of personal development,* identifying weaknesses and providing support for improvement. This of course sounds very good and maybe if I had undertaken it sooner, it would have worked. But how do you teach a guy to be more creative?

3. *Clearly define his new job and my expectations for performance* in cost control and electronic production. This, I did not do.

4. *Transfer Roldan to another department.* This may be very difficult to do.

5. *Terminate his contract with the company.* This would be next to impossible, given Juan's 30 years' service.

Step 3: Individually, in small groups, or with the entire class, address the following:

1. Evaluate the process of introducing the new technology.
2. Assess the role of Martenson in this process.
3. Was the management of human resources effective?

4. How effective was the relocation process?
5. How could the relocation problems have been avoided?
6. How could Martenson have been a more effective human resources manager?
7. What assistance could trained human resources professionals have provided?
8. How should Martenson handle Roldan?

Activity 14-4

LABOR/MANAGEMENT PARTICIPATION TEAMS

Step 1: Read Labor/Management Participation Teams.

Step 2: Prepare the case for class discussion.

Few American industries felt the impact of the recent recession more keenly—or welcomed the signs of recovery with greater relief—than the steel industry.

Today, as those signs grow stronger, a new sense of optimism and determination is growing at the Riverdale, Illinois, steelmaking plant of Interlake's Iron and Steel Division. But increased orders from automotive and consumer durable goods manufacturers are only part of the reason why.

Step into one of the plant's meeting rooms on a typical afternoon, and you'll see another aspect of this new vitality. It's a group of Interlake employees—a division superintendent, general foremen, a plant engineer and several hourly employees.

This is an advisory committee meeting of Interlake's Labor/Management Participation Team (LMPT) program.

LMPT is a system in which employees, both hourly and salaried, have the opportunity to work together. Not just in their traditional roles, but on problem-solving teams, in a joint effort to solve the serious problems which face all employees at the Riverdale plant.

In short, LMPT is a program based on the premise that every employee has a stake in the mill's success.

Since the program was initiated in late 1982, it has been expanded into all five divisions at the Riverdale steelmaking operation: hot mill, cold mill, primary rolling mill, maintenance and steel production, as well as the manufacturing and processing

division of Acme Packaging, with 275 employees at the Riverdale plant.

Each of the six LMPT advisory committees—one for each operating division—reports to a central policy committee. And each reviews and coordinates the activities of two or more operating teams. Currently, 28 teams have completed training in problem-solving and are working to improve plant efficiency, product quality and cost control. By early March, 1984, although several teams had been organized for just a few months, 89 different projects were under consideration, underway or already completed.

Interlake's LMPT program, while not unique, is one of the fastest-growing and most successful in the industry. In little more than a year, it has attracted nationwide attention from industry management and labor leaders alike.

For a clearer view of how the program began and where it's heading, *InterViews* spoke with Brian Marsden, president of the Iron and Steel Division.

InterViews: Mr. Marsden, what led to the formation of Labor/Management Participation Teams at Riverdale?

Mr. Marsden: I think three ingredients must be present for successful LMPT. There has to be the need, the desire and the organization to make it work.

We certainly had the need. Starting in 1975, the Riverdale works had shown a declining profit picture. And while various efforts were made to explain this to union membership, we really hadn't been successful. There was always an element of doubt—mistrust, you might say—which prevented an exchange of ideas between the union leadership and the management of Riverdale.

In 1980, the plant lost a significant amount of money. And even in 1981, a relatively good year from a volume standpoint, Riverdale was headed for a significant loss. The union contract would not expire until '83, but we decided in the fall of 1981 that the situation was critical. Under the existing union contract, Riverdale was not a viable operation. The plant had to renegotiate or close. We needed a major program to make everyone at Riverdale clearly understand where the profit picture was taking us.

We started with a videotape message from Fred Langenberg, who was president and chief operating officer at the time, Al Ward, president of Acme Packaging Division, and myself. This was shown to all employees—management and union—with a question and answer period following each showing. In that videotape, we pulled no punches. We showed the profit picture. We showed the decline and the fact that we were losing money.

InterViews: How did the union respond?

Mr. Marsden: The union sent in their staff representatives from Pittsburgh, whom we invited to verify our numbers. They confirmed that the Riverdale plant was indeed losing money. That employment costs were higher than the industry average. That Riverdale had certain inherent penalty costs because of the nature of the product mix, small heat sizes, coil sizes, slab sizes and operations that require a lot of man hours. They finally determined that if union membership was concerned about their future job security, they should be prepared to discuss concessions that could help keep Riverdale a viable operation.

This all transpired in early 1982. From there, we entered serious negotiations with the union, and a new three-year contract was signed in September, 1982.

InterViews: What happened in those negotiations?

Mr. Marsden: It was mutually agreed that with Riverdale's future viability at stake, it made a lot of sense to have labor/management participation teams to try to improve plant efficiency.

InterViews: Was that happening at other steel mills at the same time?

Mr. Marsden: Not to the same degree. At that point, other steel companies had not been successful in reopening negotiations with the union. I don't think any other steel companies established the degree of confidence and trust that we had. There *had* been some attempts at labor/management teams. But I

don't think the climate at other plants was as conducive to moving ahead. At Riverdale, the need was there, and the desire was there—from both the union and management. The third thing we had to put in place was the organization.

InterViews: How did you do that?

Mr. Marsden: We worked jointly to select a management consulting firm that would be the catalyst. After interviews and discussions, a New Jersey firm, Participative Systems, was selected. I guess that was the first case of cooperation: jointly we said yes, these are the people we want.

Participative Systems came in with a 3-tiered organization structure—a policy committee, the advisory committees and the actual team committees out in the plant. Each of these three levels is a working group that attacks problems.

InterViews: Has this structure been effective?

Mr. Marsden: I have to say that I had some reservations at first. But they've proven to me that the structure works. It really involves all employees. It ensures a good flow of information up and down the stream.

InterViews: What has impressed you most about the program at Riverdale?

Mr. Marsden: Two things. One is the speed with which the LMPT teams have expanded. We started with three divisions, and we've expanded probably about twice as fast as expected. In fact, we had to go back to our senior management and ask for more money—for training expense, our people's time and the consultants' time—because we were expanding faster than we had planned.

Secondly, I'm impressed by the projects that have been chosen. In the last six months, the teams have really addressed some long-standing problems in the plant. And we have gained the benefit of experienced people on the job, who often know the problems better than we do.

InterViews: Can you project the benefits of the program in terms of cost savings?

Mr. Marsden: We have a long-standing cost improvement program in this division which saves probably \$3 million at Riverdale per year. I believe it would be reasonable for the labor/management participation teams eventually to save an equal amount.

We're not near that yet. It's an ongoing thing.

InterViews: Do you think you can maintain the level of enthusiasm for LMPT that exists now?

Mr. Marsden: It's going to have to be maintained. Bear in mind that we really didn't get the teams formed until about the end of the first quarter of '83. We made considerable progress last year. But there's a lot more to be done.

If we're going to remain viable, we've got to go on proving our quality and efficiency. I think everybody at the Riverdale plant realizes this. And the best way we know to utilize all the talents and all the experience we have in this good workforce is the LMPT teams.

It's like any organization you're in: you're going to get out of it what you put into it. It requires thinking and effort—sometimes effort over and above the normal call of duty. We have counted heavily on involvement . . . continued involvement, support and enthusiasm. We've got to keep it up.

InterViews: What do you foresee for the Riverdale plant over the next five years?

Mr. Marsden: When I addressed that subject at the LMPT Activity Review Meeting in early March, it was the first time in recent years I felt I could talk confidently about our position five years hence.

We think we can capture more of the market. But we've got to improve our quality, remain close to our customers and ship our products on time. We've got to be more cost-efficient. And I see labor/management participation teams as a very important mechanism for achieving these three objectives.

LMPT ROUND TABLE

Today at Interlake's Riverdale facility, hourly and salaried employees are facing problems and opportunities together—from a shared perspective. How do they view the LMPT approach to problem-solving now, 16 months after the original policy statement was drafted?

To find out, *InterViews* met with four of the Interlake employees most closely involved with the formation and activities of LMPT at Riverdale. All participated in the 1982 contract negotiations and are members of the LMPT central policy committee:

Mike Batka, plant manager, Riverdale Plant

George Chandler, president, Local 1053, United Steelworkers of America, BOF shop employee

Don Pearson, trustee, Local 1053, United Steelworkers of America, primary mill employee

Jerry Shope, manager of employee relations, Iron and Steel Division

InterViews: Was the LMPT system a part of the contract negotiated in 1982?

Mr. Shope: It was actually part of the 1980 labor agreement. When we negotiated in 1982, we reaffirmed the commitment to enter into the process.

Mr. Chandler: I guess we couldn't get together prior to that . . . for reasons both on the union side and the company side. The only way we in the union would go with the concession agreement in '82 was to make sure LMPT was instituted.

Mr. Shope: I think *survival* was something that really got us moving. There was an understanding that the concessions themselves weren't our salvation. We had to go way beyond concessions. LMPT looked like it had the potential.

InterViews: What was the next step?

Mr. Shope: To find out exactly what the labor/management participation process was. That involved talking to three different consulting firms. Participative Systems out of Princeton, New Jersey, seemed to have the best record of experience and expertise. We brought their personnel on site, and they talked to us for several months.

Mr. Batka: An interesting point—they looked us over as much as we looked *them* over. They wanted to have a reasonable chance of success, or they wouldn't have made the commitment to come with us.

Mr. Shope: They wanted to know that we were serious, that it wasn't just a negotiating ploy or something we agreed to because we had to.

InterViews: When did the program really get started?

Mr. Chandler: In early December of '82, we held a joint meeting—about 60 people—union officials plus company officials, superintendents and so on.

That was the planning meeting. Over a three-day period we were oriented on what LMPT is. Then we developed a policy statement covering our common objectives. We also went through some exercises in building trust relationships. At the conclusion of the meeting, we established a policy committee whose first task was to decide how to go from there.

Mr. Batka: That three-day conference was probably the first instance where union and management got

together in a non-adversarial situation. Most of the time, my only contact with George had been to discuss a problem at the plant, usually in the form of a grievance. And now here we were, in a three-day conference together. Day two was a little better than day one. And by day three, we were standing next to each other drinking coffee.

Mr. Shope: We found out that we had a common objective: job security. We wanted to do the same thing.

Mr. Pearson: I had never worked with anybody from management before. I worked for Mike when he was a superintendent in the melt shop, but had never worked *with* management.

InterViews: How did you communicate this new spirit of cooperation to employees?

Mr. Pearson: We had plant-wide orientations, meeting department by department on the floor. It was very difficult. There were all kinds of questions.

Mr. Chandler: We passed out information and policy statements at the gate as people came in and went home.

Mr. Shope: We communicated however we could. And the communication is still going on. There are still skeptics.

Mr. Batka: From the management standpoint, from the line foreman on up the line, this process means relinquishing some authority. It means asking the worker, "What's your thought on this? How do you think we should proceed?" This sharing of authority and responsibility was new and different. And it caused some apprehension.

Mr. Pearson: It was a threat to the established union official, and it caused us some apprehension, too.

Mr. Shope: It really is a traumatic thing to go through, and it's slow. But we're further along than other companies might be because of the environment we're in. Job security motivated us to work harder than we might have otherwise—if we were all comfortable and complacent, and there was no threat of the plant closing.

InterViews: Could you explain briefly how the three-tiered LMPT structure works?

Mr. Chandler: The policy committee is made up of key union and management people whose basic responsibility is to create the proper environment for the process, help it grow and monitor the progress. We established divisional advisory committees which

not only administer and support the teams but also solve problems themselves. That's one of the unique features of the structure: all of these groups are problem-solving groups—not just administrative bodies—and they consist of both hourly and salaried people. Participation is strictly voluntary. That was established from the start.

LMPT AT RIVERDALE

InterViews: What's involved in the training process?

Mr. Pearson: Each team gets 40 hours of problem-solving training. People talk about what's going on in their area and look for problems. Then the exercises are directed toward those problems.

Mr. Batka: The emphasis is on problem-solving, but the training encompasses other areas, too. There's a lot of orientation on LMPT, the objectives of people on the teams, group dynamics and interpersonal skills—solving problems as a group.

Mr. Chandler: We also have four coordinator-trainers who underwent a three-week course in New Jersey. They both train the teams and help them after the initial training period. Without the coordinator-trainers, I don't think we'd be where we're at now.

InterViews: How did you set priorities for selecting problems to address?

Mr. Batka: One of the key things that led to our current success in working together was the dissemination of information at the policy committee meeting. The employees asked, "What areas should we look at?" We had our chief industrial engineer come out to make a presentation, describing practically all the major cost items in the plant—labor, energy, material yields and so on. It was another indication that we were interested in the process for real. We opened our books to show actual cost information.

Mr. Shope: That information filtered down all the way to the shop floor teams. Since everybody had the same information, most people picked the same priorities. That really helped in our problem selection.

Mr. Batka: From my perspective, improving our product quality is the single most important task we have at Riverdale. It's not only a dollars-and-cents area but the key to the plant's survival. We could be the most efficient producer in the world . . . reduce

our labor costs, energy costs and increase our productivity far beyond our competitors. But if the product we produce is not acceptable to the customer, all that's for naught.

Mr. Pearson: I don't think people ever thought about the millions of dollars involved in quality problems. I know I didn't. I just did my job. Now I hear people who have just finished their training say they never knew quality was so important.

One of our most successful projects to date concerns both quality and product yield in the primary rolling mill. The solution we implemented saved more than \$8,500 the first month. When we expand that project, we expect to save about a quarter of a million dollars annually.

Mr. Shope: In another area, we have a joint activity on a quality problem, involving the hot mill, the cold mill and the manufacturing and processing division. They're trying to improve the quality of the product going from the steel division through manufacturing.

Mr. Chandler: That kind of joint effort is growing now. Before, a lot of people said, "I'll make it here the best I can and send it over there . . . and if they have trouble with it, that's their problem." Now we have joint teams between the divisions.

InterViews: Is the LMPT program helping to boost employee morale at Riverdale?

Mr. Batka: Once people get involved, they see the benefits to themselves—the excitement of being part of the decision-making process. Having something to say about their work activities.

Mr. Pearson: I think the shop floor teams get turned on when they ask for information from management people and get it. Teams have the right to ask any questions in any area they're working on. That really excites people.

Mr. Shope: The benefit is not just in the results; it's actually going through the process. When you can't do anything about your situation, you're frustrated . . . and that compounds the problem. But when you get involved in a productive, problem-solving process, you're contributing something. You just feel better about it.

InterViews: What are your opinions of the program's overall success at this point?

Mr. Batka: We're off to an excellent start. We're receiving recognition and credit from other people for our quick progress. But it really is just a start,

and we're not out of the woods by a long shot. Without everyone's continuing support, it would collapse. Once people see the benefits of being involved, the program becomes self-perpetuating.

Mr. Shope: We started out with a meeting of 60 people and a policy committee of 11. Now I believe we have more than 200 people involved. We've deliberately avoided giving ourselves a lot of publicity and patting ourselves on the back because we have a long way to go. But we've seen some successes and encouraging response in the last 15 months. We're starting to get people interested in what's going on here, working on problems related to our survival.

Mr. Pearson: One indicator of the response is our low rate of drop-outs from the teams. We calculated it at about 5% since the LMPT process began here. From what I gather talking to people involved in programs at other plants, that's very low.

Mr. Chandler: From my eyes, the success of this program depends on keeping as many people employed as we can without losing benefits. We've lost a lot of active employees in the past few years.

Mr. Batka: The process is not a panacea. It won't solve all the problems at Riverdale. But it is a very substantial part of the progress made in the plant during the past year. I'd like to see us move faster, but some things can't be pushed. We're talking not only about structural changes but cultural changes, too. It's a different way of life for us, and will continue to be different.

Mr. Pearson: There's a relationship that's changed. People are working together. And the relationship comes out of solving problems.

Mr. Batka: Right. That relationship develops not because of altruistic statements but by getting together and doing some hard knocking. That's solid. That's fundamental. And that's what's going to make this thing last.

Step 3: Individually, in small groups, or with the entire class, answer the following questions:

1. What effect will LMPT likely have on the quality of work life?
2. What human resources management practices should accompany introduction of LMPT to increase the likelihood of the program's success?

3. What is management's reaction to LMPT? Workers'?

4. What is the role of managers in LMPT? What should the role of managers be?

5. What is the role of human resources manage-

ment professionals in LMPT? What should their role be?

6. What is the role of workers in LMPT? What should their role be?

Activity 14-5

DIGITAL TRYING THE BOSSLESS SYSTEM

Step 1: Read the following description of the Bossless System at Digital Equipment Corporation.

Enfield, Conn.—The inside of the Digital Equipment Corp. plant here looks much less like a factory than a warehouse full of machines and office desks deposited haphazardly.

Equipment, people and the odd potted plant seem randomly scattered about the cavernous, 10,000-square-foot building. No neat aisles divide the space, no obvious paths cut through the maze.

In one particular touch of incongruity, a volleyball net stands ready at one end of the room.

This, it turns out, is new management. It's an experiment—or, as one Digital official calls it, "an investment"—in the team management approach.

And according to Digital officials, it works.

The plant's 180 employees produce printed circuit board modules for computer storage systems. At other Digital plants, similar modules are made in assembly lines, where one person does the same job, or operates the same machine, all day.

At Enfield, by contrast, each board is put together from start to finish by one of several teams. The 18 people on each team divide the work among themselves and assemble the modules from the moment the raw materials are delivered to the plant to the time the finished product is shipped out the door. Each person is expected to be able to do all the roughly 20 jobs involved in making a module.

Workers set their own hours, plan their own schedules, check their own work and take team responsibility for each board. There are no time

clocks, no security guards, no quality control officers and every employee has a key to the building.

The system is not new—several thousand similar operations have emerged at other companies and plants across the country during the last 10 years. But it's new for Digital, and although it affects a very small portion of the company's 73,000 employees worldwide (including about 28,000 in Massachusetts), company officials are supportive and say they are willing to extend it to other parts of the company.

"We do a lot of experimenting as a company," says Greg Plakias, Digital's group manufacturing manager of storage systems. "We encourage it, we reward it. We believe that if the investment and the concept is successful, then other parts of the company will reach in and take segments that are most applicable to their organization."

Enfield plant manager Bruce Dillingham says the new system has decreased by 40 percent the time needed to produce one printed circuit board, reduced by half the amount of scrap that is common in the industry and has produced twice as many perfectly working modules than other production systems.

The theory behind such new forms of participatory management, says Homer Hagedorn, management consultant at Arthur D. Little in Cambridge, is basically that, "People will be more interested in what they're doing and do a faster and higher quality job."

Employees at the Digital plant say that's exactly how they feel.

"This gives me a little more experience in how to put the whole board together and how to check it," says Betty Stebbins, a grandmother from Springfield who's worked for Digital for five years and at the Enfield plant for one. "You're sort of proud because you see the end product."

Plakias won't give specific numbers on productivity and savings, but says the year-old experiment "is going very well."

"We have always felt that traditional hardware manufacturers invest enormously in robotics and automation and pay little attention to ways to improve the product through innovative work systems and people," Plakias says. Digital is trying to increase its productivity with fewer people, he says, while at the same time emphasizing individual involvement in the process and personal pride in the product.

As Plakias says, the company is trying to achieve a balance "between the social part of one's life and the work part of one's life."

The Enfield system was Dillingham's idea, and he, in turn, got the idea by talking with other plant managers across the country.

"It's just the stuff I believe in," he says now.

As the concept for the plant evolved and the Enfield building was built, employees were involved from the beginning. In addition to the usual architects, engineers and accountants, Digital also employed an anthropologist.

The simplicity and efficiency of the building alone, Dillingham says, saved Digital about \$500,000 over the normal set-up costs of a new plant.

Digital elected to avoid tying up money in long-term supplies, and the plant was designed with very little stockroom space.

A four-walled modular conference room can be moved to any part of the vast plant floor for meetings. Some of the desks are arranged in clusters of four, radiating out from a floor-to-ceiling pillar that holds telephone and electrical lines. Others are in pairs, facing each other, to increase eye contact and communication between workers.

The volleyball net and exercise equipment at one end of the floor are for employees as well as their families. ("We're trying to balance work and family," Dillingham says.)

Team members interview and train new workers and give each other certification tests as they learn new parts of the manufacturing process. Pay increases are based on improved levels of skill, as opposed to seniority or authority. There are only three managers in addition to Dillingham.

"Everybody is a teacher here and everybody is a learner," Dillingham says. "People are responsible for themselves, that's the trick."

Hagedorn says that sometimes causes problems: "You have to get built into the system a willingness on the part of the peer group to reject very unsuitable people. Sometimes that's hard to do."

Dillingham says his goal is to have an atmosphere that is informal, relaxed and trusting, where people are self-motivated, creative, open and flexible.

"We don't want a lot of clones here," he says. "We want a lot of individuals. Everybody here knows everything I do. We're not paying you for a job here; we're trying to use the total person."

Plakias says Digital wants to produce at the Enfield plant in one day what is produced at other plants in 10. But the real goal, he says, is to emphasize each worker's achievement and involvement.

"Productivity is good, but it comes in many ways," he says. "Primarily, this is an investment in our most valued asset and that's people."

"The concept we have designed here is one of very few layers of supervision and management . . . We have an environment here that has no functional structure. It's a team concept."

The system is not without snags.

Because there are no large stocks of supplies, vendors who are late with their deliveries or deliver faulty raw materials for the modules "can shut us down immediately," says David LaBrecque, a team member. "But we've identified a small number of vendors with excellent track records," he says, and so far, small inventories haven't been a problem.

Although Dillingham believes his system "will work anywhere," he also acknowledges that "It's not for everyone."

"It's a threatening system. We don't need as many people. The role of professional people has changed to one of learning."

Many workers don't want to work in a place where all workers are equal in terms of authority and there is no opportunity to become a supervisor.

Plakias counters by saying, "Instead of getting better at what you're good at, you get better by adding to what you have. As you gain more knowledge about how to build a product and manage the administrative aspects of the product, you become more valuable."

And, in fact, some people, like Joseph Talbot who was a supervisor for nine years with Digital in Springfield before coming to Enfield, prefer being part of a team than wielding their authority over others.

"I had 17 people under me," he said recently at the plant, bending over a table, making miniscule adjustments to a circuit board. "After a while, it gets to be a drag. I have to learn the manufacturing end of it. This gives you the overall picture."

Hagedorn at Arthur D. Little says he expects to see management systems like the one here spread to other companies because, "Many people are a little more comfortable doing this kind of work."

But unions are not always comfortable when traditional job classifications are erased and positions are not defined. And, Hagedorn says, the Enfield system won't necessarily work everywhere for many reasons:

"The whole notion of job enrichment and job enlightenment has probably been somewhat oversold. As somebody said recently, it really isn't much of an enrichment of the job if what you do is wash the spoons on Monday and wash the glassware on Tuesday."

Step 2: Individually or in small groups answer the following questions:

1. What types of interventions were used at Digital?
2. Why were these interventions introduced?
3. What are the advantages and disadvantages of each intervention?
4. Will a bossless system work for Digital? What are its assets and liabilities?

Step 3: In small groups or with the entire class, offer top management a plan for ensuring that the bossless system will succeed.

Step 4: With the entire class, share these plans. Then answer the following questions:

1. What are the key elements of each plan?
2. What do the plans share? How are they different?
3. What considerations must be included in planning for change?
4. What roles should managers and human resources professionals play in the planning? In implementing the change?

Activity 14-6

CITIZENS SERVICE CENTER CONSULTING PROBLEM

Step 1: Your instructor will divide you into groups of four to six people; one group will represent management and the rest, competing consulting groups.

Step 2: Read the following description.

Citizens Service Center provides a wide range of social services to adults and children. Most employees have advanced degrees in human services, social work, or psychology. Whereas the Center originally provided one-to-one counseling for its clients, the high demand for services has forced the employees into primarily clerical roles—filling out food stamp vouchers, obtaining medical referrals for clients, and completing detailed information forms about every visit. Most case workers spend at least fifty hours on the job, even though they are paid for only forty. The supervisors assign incoming clients randomly to the first available employee. The supervisors keep what they consider to be the best cases for themselves.

Most employees complain that they are not using their skills. In addition, the pay is relatively low. The Center has operated as a nonprofit agency, obtaining most of its funding from state and federal sources. Top management recently decided to transform the agency into a profit-making organization.

Step 3: *The Management Group.* Assume that you are the top management of the Citizens Service Center. You are concerned with the high rate of turnover and the low productivity in your organization. You want to hire a group of consultants to diagnose your organization's problems and to recommend a plan for solving them. Shortly, several consulting teams will ask you for a preliminary meeting to gather information for use in formulating their consulting proposal. Be prepared to provide them with your timelines and other requirements, as well as with any constraints, financial or otherwise, that you see as relevant to their task. Then develop guidelines for judging the various proposals presented. (Expect that

each will include, at a minimum, a diagnosis, change strategy, and plans for implementation, as well as the rationale on which these are based.)

The Consulting Groups. Your objective is to be hired as consultants to the organization described in the case. The organization's president is concerned with the high rate of turnover and low productivity of its employees. The president has asked you to diagnose the company's problems and to recommend a plan for solving them. Specifically, the president wants your answers to the following questions:

1. What do you think the real problems are and why?
2. What solution(s) would you propose and why?
3. How would you implement your plan?
4. What reasons would you give for doing it this way?

You will have the opportunity to meet briefly with the top management of the organization in a short while to get answers to preliminary questions you

have about the organization. Then, on the date given by your instructor, you will be requested to present your plan.

Step 4: The management and consulting groups meet independently, and then together.

Step 5: The consulting teams present their proposals one at a time.

Step 6: The management team selects the consulting team they would like to hire and describes the criteria for selection.

Step 7: Discussion. With the entire class, address the following:

1. What group was hired? Why?
2. What intervention strategies were proposed? Would they be effective?
3. Describe the change processes proposed.
4. What makes an effective change effort?
5. What makes an effective consulting proposal?

SUMMARY

Ensuring high quality of working life and organizational performance are major concerns of organizational members. In this chapter we discussed organization development, work design, and structural interventions that can increase the quality of working life and productivity in organizations.

Organization development interventions attempt to alter personal or interpersonal effectiveness, build collaborative teams, reduce intergroup conflict, and increase overall organizational effectiveness. In the Ericsson de Argentina and Labor/Management Participation Teams cases you identified behavioral interventions that would facilitate change in these organizations.

Redesigning work focuses on the activities performed by a job holder. In the job redesign problem at Foxwood Appliances, you had the opportunity to apply work simplification, job enrichment, QWL programs, and alternative work schedules to redesigning a job.

Restructuring an organization itself may increase efficiency as well as improve the quality of working life. In examining the Suburban Hospital Admissions Department you considered the implications of various organization structures.

Managers and human resources professionals in the United States have imported the ideas of worker ownership and Japanese management from abroad as additional ways of improving the quality of working life in U.S. organizations.

Organizational change cannot occur, however, without first diagnosing the needs an intervention is meant to address, and evaluating the effectiveness of the change strategies afterward. In addition, during implementation change agents must overcome resistance to change. In analyzing the Bossless System at Digital and participating in the Consulting Problem you offered plans for overcoming resistance to change. You also examined the trade-offs involved in the selection of various change agents, as well as some of the characteristics of an effective change agent.

ENDNOTES

¹Bluestone, Technology and the human factor, *Work Life Review* 3 (1984): 3–13.

²G. Lippitt and J. Rumley, Living with work—The search for quality in work life, *Optimum* 8 (January 1977): 38.

³R.E. Walton, Quality of working life: What is it?, *Sloan Management Review* 15 (1973): 11–21.

⁴W.L. French and C.H. Bell, Jr., *Organization Development: Behavioral Science Interventions for Organizational Improvement* 2nd ed. (Englewood Cliffs, N.J.: Prentice-Hall, 1978).

⁵E.H. Schein, The role of the founder in creating organizational culture, *Organizational Dynamics* (Summer 1983): 13–28.

⁶R. Beckhard, The confrontation meeting, *Harvard Business Review* 45 (1967): 149–155.

⁷L.E. Short, Planned organizational change, *MSU Business Topics* (Autumn 1973): 53–61.

⁸These strategies have also been characterized in other ways; see French and Bell, *op. cit.*; L. Spenser, Jr. and B. Cullen, *Taxonomies of Organizational Change—Literature Review and Analysis*, ARI Technical Report TR 78–A23 (Alexandria, Va.: U.S. Army Research Institute for the Behavioral and Social Sciences, 1978), cited in E.F. Huse, *Organization Development and Change* 2nd ed. (St. Paul, Minn.: West, 1980); M.B. Miles and R.A. Schmuck, The nature of organization development, in *Organization Development in Schools*, ed. R.A. Schmuck and M.B. Miles (La Jolla, Cal.: University Associates, 1976); R. Harrison, Choosing the depth of organizational intervention, *Journal of Applied Behavioral Science* 6 (1970): 181–202.

⁹See F. Luthans and R. Kreitner, *Organizational Behavior Modification and Beyond* (Glenview, Ill.: Scott, Foresman, 1985) for detailed discussion of behavior modification and operant learning.

¹⁰See J. Campbell and M. Dunnette, Effectiveness of t-group experiences in managerial training and development, *Psychological Bulletin* 70 (1968): 73–103; and E.H. Schein and W. Bennis, *Personal and Organizational Changes Through Group Methods: The Laboratory Approach* (New York: Wiley, 1965) for discussion of sensitivity training.

¹¹Campbell and Dunnette, *op. cit.*, p. 75.

¹²Campbell and Dunnette, *op. cit.*

¹³E. Berne, *Games People Play* (New York: Grove Press, 1964).

¹⁴E.H. Schein, *Process Consultation* (Reading, Mass.: Addison-Wesley, 1969), p. 9.

¹⁵I. Dayal and J.M. Thomas, Operation KPE: Developing a new organization, *Journal of Applied Behavioral Science* 4 (1968): 473–506.

¹⁶E.F. Huse, *op. cit.*

¹⁷R. Harrison, Role negotiation: A tough-minded approach to team development, in *The Social Technology of Organization Development*, ed. W.W. Burke and H.A. Hornstein (La Jolla, Calif.: University Associates, 1972).

¹⁸R. Beckhard, Optimizing team building efforts, *Journal of Contemporary Business* (Summer 1972): 23–32.

¹⁹R.R. Blake and J.R. Mouton, *Building a Dynamic Corporation Through Grid Organization Development* (Reading, Mass.: Addison-Wesley, 1969); R.R. Blake and J.R. Mouton, *The New Managerial Grid* (Houston: Gulf, 1978).

²⁰R.E. Walton, *Interpersonal Peacemaking: Confrontation and Third-Party Consultations* (Reading, Mass.: Addison-Wesley, 1969).

²¹Beckhard, Optimizing team building efforts, *op. cit.*

²²J.K. Fordyce and R. Weil, *Managing with People* (Reading, Mass.: Addison-Wesley, 1971).

²³D.E. Zand, Collateral organization: A new change strategy, *Journal of Applied Behavioral Science* 10 (1974): 63–89.

²⁴Huse, *op. cit.*

²⁵D.A. Nadler, *Feedback and Organization Development: Using Data-Based Methods* (Reading, Mass.: Addison-Wesley, 1977).

²⁶W.W. Burke, *Organization Development: Principles and Practices* (Boston: Little, Brown, 1982).

²⁷E. Yager, Examining the quality control circle, *Personnel Journal* (October 1979): 682–684, 708.

²⁸F.W. Taylor, *The Principles of Scientific Management* (New York: Harper, 1911).

²⁹F. Herzberg and A. Zautra, Orthodox job enrichment:

Measuring true quality in job satisfaction, *Personnel* 53 (September-October, 1976); F. Herzberg and E.A. Rafalko, Efficiency in the military: Cutting costs with orthodox job enrichment, *Personnel* 52 (November-December, 1975).

³⁰J.R. Hackman et al., A new strategy for job enrichment, *California Management Review* 17 (1975): 59.

³¹*Ibid.*

³²See K.H. Roberts and W. Glick, The job characteristics approach to task design: A critical review, *Journal of Applied Psychology* 66 (1981): 193-217.

³³D. Lewin, Collective bargaining and the quality of work life, *Organizational Dynamics* 33 (Autumn 1981): 37-53.

³⁴Hak-Chong Lee, *Lordstown Plant of General Motors Case* (Seoul, Korea: Yonsei University, n.d.).

³⁵I. Bluestone, How quality-of-worklife projects work for the United Automobile Workers, *Monthly Labor Review* (July 1980): 39-41.

³⁶*Ibid.*

³⁷See A.O. Elbing, H. Gadon, and J.R.M. Gordon, Flexible working hours: The missing link, *California Management Review* 7 (1975): 50-57; and J.W. Newstrom and J.L. Pierce, Alternative work schedules: The state of the art, *Personnel Administrator* 24 (1979): 19-23, for discussion of flexitime.

³⁸J.M. Rosow and R. Zager, Punch out the time clocks, *Harvard Business Review* (March-April 1983): 12-30.

³⁹W.D. Hicks and R. Klimoski, The impact of flexitime on employee attitude, *Academy of Management Journal* 24 (1981): 333-334.

⁴⁰J.S. Kim and A.F. Campagna, Effects of flexitime on employee attendance and performance: A field experiment, *Academy of Management Journal* 24 (1981): 729-741.

⁴¹Rosow, *op. cit.*

⁴²A. Chandler, *Strategy and Structure* (Cambridge, Mass.: MIT Press, 1969) offers a classic discussion of this relationship.

⁴³See A. Walker and J. Lorsch, Organizational choice: Product versus function, *Harvard Business Review* 46 (1968); J.R. Galbraith, Matrix organization design, *Business Horizons* 14 (1971): 29-40; and L.R. Sayles, Matrix organization: The structure with the future, *Organizational Dynamics* 4 (Autumn 1976): 2-17, for further discussion of project management.

⁴⁴See L.C. Stuckenbruck, The matrix organization, *Project*

Management Quarterly 2 (September 1979); S.M. Davis and P.R. Lawrence, *Matrix* (Reading, Mass.: Addison-Wesley, 1977); J.R. Galbraith, *Organization Design* (Reading, Mass.: Addison-Wesley, 1977); and H.F. Kolodny, The evolution to a matrix organization, *Academy of Management Review* 4 (1979): 543-553, for further discussion of matrix management.

⁴⁵Davis and Lawrence, *op. cit.*

⁴⁶H. Mintzberg, *Structure in Fives: Designing Effective Organizations* (Englewood Cliffs, N.J.: Prentice-Hall, 1983); H. Mintzberg, *Structuring Organizations* (Englewood Cliffs, N.J.: Prentice-Hall, 1978).

⁴⁷*Ibid.*

⁴⁸*Ibid.*

⁴⁹*Ibid.*

⁵⁰*Ibid.*

⁵¹See J.R. Gordon, *A Diagnostic Approach to Organizational Behavior* (Boston: Allyn and Bacon, 1983).

⁵²H. Levin and B. Jackall, eds., *Worker Cooperatives in America* (Berkeley: University of California Press, 1984).

⁵³"Mondragon Experiment," film (San Francisco: California Newsreel, n.d.).

⁵⁴R.M. Mason, *Participatory and Workplace Democracy* (Carbondale: Southern Illinois University Press, 1982); and M. Poole, *Workers' Participation in Industry* (London: Routledge & Kegan Paul, 1978) elaborate on the examples of codetermination described here.

⁵⁵Mason, *op. cit.*

⁵⁶T.G. Cummings, Self-regulating work groups: A socio-technical synthesis, *Academy of Management Review* 3 (1978): 625-634.

⁵⁷N. Hatvany and V. Pucik, Japanese management practices and productivity, *Organizational Development* 10 (Spring 1981).

⁵⁸*Ibid.*

⁵⁹W. Ouchi and A.M. Jaeger, Type Z organization: Stability in the midst of mobility, *Academy of Management Review* 3 (1978): 305-314; W. Ouchi, *Theory Z: Meeting the Japanese Challenge* (Reading, Mass.: Addison-Wesley, 1980).

⁶⁰*Ibid.*

⁶¹T. Peters and R.H. Waterman, Jr., *In Search of Excellence: Lessons from America's Best-Run Companies* (New York: Harper & Row, 1982).

FURTHER READINGS

Burke, W.W. *Organization Development: Principles and Practices*. Boston: Little, Brown, 1982.

Cummings, T.G. and Molloy, E.S. *Improving Productivity and the Quality of Work Life*. New York: Praeger, 1977.

French, W.L. and Bell, C.H., Jr. *Organization Development: Behavioral Science Interventions for Organizational Improvement* 2nd ed. Englewood Cliffs, N.J.: Prentice-Hall, 1978.

- Hackman, J.R. and Oldham, G.R. *Work Redesign*. Reading, Mass.: Addison-Wesley, 1980.
- Huse, E.F. *Organization Development and Change* 2nd ed. St. Paul, Minn.: West, 1980.
- Mintzberg, H. *Structure in Fives: Designing Effective Organizations*. Englewood Cliffs, N.J.: Prentice-Hall, 1983.
- Ouchi, W. *Theory Z: Meeting the Japanese Challenge*. Reading, Mass.: Addison-Wesley, 1980.
- Pascale, R. and Athos, A. *The Art of Japanese Management*. New York: Warner Books, 1981.
- U.S. Labor-Management Services Administration, *Resource Guide to Labor Management Cooperation*. Washington, D.C.: U.S. Government Printing Office, 1982.
- The Work Life Review*, published by the Michigan Quality of Work Life Council, Ann Arbor.