FIRST LINE SUPERVISORY

REACTIONS & ACCOMODATIONS

TO WORKER INVOLVEMENT PROGRAMS

by

Janice Anne Klein

B.S. Iowa State University
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M.B.A., Boston University
(1978)

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Signature of Author: Janice A. Klein
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Certified by: Robert B. McKersie
Thesis Supervisor

Accepted by: Ronald Rand
Chairperson, Departmental Doctoral Committee

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ABSTRACT

Prior research has found mixed reactions among first line supervisors toward worker involvement programs, with a significant number, either overtly or subtly, opposing the introduction of such programs. Through in-depth case studies of seven plants having attempted a transition from autocratic to more participative management, this research probed at the reactions and accommodations of first line supervisors to this change.

Through a comparative analysis of seven plants, several hypothesis were generated as to the underlying reasons why some supervisors oppose the introduction of these programs. In addition to issues of job security, role definition, and extra workload, concerns surfaced in the areas of status, equal treatment, beliefs in the value of worker's inputs, upper management support, and interference with supervisory influence mechanisms.

An eighth plant, which has institutionalized worker involvement, was also investigated to present one possible model for the future role of first line supervisors. Lastly, implications and recommendations were discussed for the management of first line supervisors in worker involved organizations.

Thesis Supervisor: Robert B. McKersie

Title: Professor of Management

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Chapter 1

Introduction

A major change appears to be occurring in our Industrial Relations system (Kochan & McKersie, 1983). For several decades top executives have been looking at how to increase the effectiveness of our productive workforce. In the sixties, it was stylish to proclaim that the problem was unmotivated workers. This conclusion led to numerous attempts, during the 1970's, at redesigning work or enhancing worker committment through involvement or quality of work programs. To date, the 1980's have been beset with economic crisis and the remainder of the decade does not hold much hope for a speedy recovery. As a result, many company and union officials are turning to increased worker involvement as a solution to the productivity problem. It would appear that many labor and management representatives have now concluded that cooperative efforts, such as worker involvement programs, will best serve both their individual interests and long term survival (Rosow & Zager, 1982).

Since worker involvement can only be realized when participation is granted by those in levels immediately above those to be involved, the middle and lower levels of management are critical to the implementation and success of these programs. However, many organizations are finding that the layers between the top and the workers - middle and first line supervisors - can be a source of resistance.

> Our sample of 12 plants contained a range of supervisory satisfaction from high to low. Even within a single plant, the range of individual supervisors' experiences was substantial...Nevertheless, in most cases, there was relatively less satisfaction or more dissatisfaction at the first-line supervisory level than in positions above or below them in the same plant organization hierarchy. (Walton & Schlesinger, 1979, p.27)

> But there was also little doubt that, for many supervisors and support people, neglect of the projects was both the path of least resistance and the one most likely to ensure failure of the experiments and end incursion into their domain (Witte, 1980, p.120).

This study will focus on the first level of management and explore their responses to programs designed to increase workforce involvement. Eight plants, which have had programs in place for at least five years, will be examined in an effort to better understand why some supervisors are somewhat resistant while others eagerly support these programs. By taking a retrospective view, this study will also review accommodations which supervisors and their managers have made in an effort to adjust to worker involvement programs.

Tie to Literature

The "forgotten man in the middle" was the subject of much research following the rise of the Foreman's Association of America in the 1940's. The foremen's union raised awareness of supervisory issues (AMA, 1945; Northrup, 1945; U.S. National War Labor Board, 1945; Larrowe, 1961) and led to several studies trying to understand the role of this middle man (Gardner and Whyte, 1945; Patten, 1968; Wray, 1949). Extensive selection and training programs were developed and

run to assist foremen in their new roles and help them regain the status they had prior to the rise of rank and file unions. However, assuming that supervisory concerns had been sufficiently addressed, the focus of research shifted away from the foreman or first line supervisor over the past several decades.

With the increasing interest of American industry in worker involvement, several researchers have begun to evaluate the affect of new participative management techniques on both employee and employer goals (Goodman, 1979; Witte, 1980; Katz et al, 1982, 1983). But as Schlesinger & Walton (1979) pointed out, quality of work innovations impact the various levels of the union and management hierarchy differently, and there are really seven separate parties to consider - corporate management, local management, supervison, international union, local union, stewards, and workers. However, the majority of the quality of work literature to date has focused on either the top or the bottom of the hierarchy and has tended to neglect the middle. Thus, while U.S. industry has attempted to implement these new worker involvement programs, upper management has tended to ignore the fact that the burden of implementation falls primarily on the first line of management.

> The foreman, the top sergeant of the factory floor, is facing greater challenge - and probably greater frustration - than ever before. The foreman, management's first line of contact with labor, is caught up in a strange mix of declining powers but new-found importance. No longer master craftsman or shop room tyrant, the foreman is becoming a key figure in the new gospel of worker participation.
>
> But that is not all. Today's foreman is also inundated in increasingly complicated manufacturing technology,

> bewildering regulations and demands by number-crunching superiors in the front office for more detailed reporting on production data (Feder, 1981).

With growing recognition of supervisory issues, interest in the role has began to resurface (Cook, 1981; Business Week, 1983; Drucker, 1983). The thrust of recent literature has tended to focus on the need for support and training of supervisors in their new role as integrators as opposed to delegators (Weir & Mills, 1973; Walton & Schlesinger, 1979; Westley, 1981; Schlesinger & Oshry, 1982). However, what has yet to be fully understood is the underlying reasons for the wide variation in supervisory reactions to these programs.

First Line Supervisory Leadership Styles

The first line supervisor was also the target of many industrial sociologists as they attempted to find the "best style" of leadership or supervision (Hirszowicz, 1982). This led to studies investigating the relationship between leadership style and performance of workers (Kahn & Katz, 1960) and comparing participative versus autocratic styles (McGregor, 1960). But ultimately, it was concluded that there was no one best style (Golembrewski, 1961; Fiedler, 1969).

Another strand of research focusing on a better understanding of supervisory influence led to the development of exchange theory which helped to explain the conflicting findings of the "best style" research.

> In terms of exchange theory we can explain many of the empirical findings I have discussed earlier. It seems that in situations where the nature of tasks imposes an authoritarian style of supervision, the workers may be willing to accept it if the tasks they perform are important enough for them, so that they sacrifice their immediate interests for a better work perfomance by being submissive and obedient. It is only when the tasks are not seen as relevant for their interests that they are inclined to trade their cooperation for minor or major concessions from their supervisors. The transactions between the foreman and the workers based on deliberate concessions on the part of the foreman do not necessarily generate the kind of psychological dependence and submission that occur when the leadership is charismatic. What really matters is a sense of social obligation on the part of the workers towards their superior, so that the foreman/worker relationship is not limited to a series of separate deals but creates social bonds and permanent commitments making the foreman's demands acceptable for other than pragmatic reasons (Hirszowicz, 1982, p. 117).

This study of first line supervisory responses to worker involvement programs follows in this tradition. As such, the next chapter will trace the historical development of the first line supervisory role and use exchange theory to better understand how the supervisors have maintained influence in light of social or structural change at the workplace. Later chapters will then use exchange theory in helping to better understand supervisory reaction to a more recent change, the introduction of worker involvement programs.

Scope of the Study

This study has been designed to better understand the reactions of first line supervisors to worker involvement programs. Some are very positive, others are adamently opposed,. while most fall somewhere in the middle. It is instructive to understand why some support the efforts in order to pass their positive reasons on to others, but the

more important and perplexing issue is on the negative side. Why are many opposed, to some degree, to these new forms of managing? Hence, this research focuses on supervisory resistance and accommodation.

Before understanding responses or attitudes, it is first necessary to place reactions within the context of the situational factors surrounding them (Likert,1961). Therefore, the philosophy and structure of each plant will be discussed along with their history of worker involvement efforts. Then through comparative analysis (Glaser & Strauss, 1967) five categories of resistant supervisors will be proposed and discussed relative to how management can help to alleviate some of the resistance which is occuring in the lower levels of management.

Many of the early worker involvement experiments were placed in new plant start-ups. Although they were far from problem-free, much of the initial resistance to change could be alleviated by hand choosing a workforce, both managerial and non-managerial, which was postive toward worker involvement. But as the economy tightened, green field sites became fewer in number and management had to turn toward retrofitting older plants in an effort to remain competitive (McKersie & Klein, 1982). As a result, many organizations have attempted to diffuse the concept of worker involvement into their older plants. Here the resistance to change appears to be greater and is, therefore, the setting for this study.

Outline of Report

As a starting point in understanding today's supervisory attitudes and behavior, it is instructive to review the underlying causes leading to the rise of foreman unions. Although the Taft-Hartley Act of 1947 limited further collective action, a review of the foremen grievances at that time helps to shed light on a number of pressure points today. Therefore, the following chapter will review the rise of the Foremen's Association of America and explore the close parallels to today's workplace.

Chapter 3 will layout the methodology used in this research and explain the qualitative and quantitative measures used to evaluate supervisory reaction and accommodation to worker involvement programs. Chapters 4 through 7 will then explore in detail the evolution of worker involvement efforts in the seven plants which have gone through a transition from traditional to more participative management style. These case studies will set the stage for the comparative analysis in Chapter 9 by providing insight into the situational context and the wide range of processes used to increase worker participation.

Chapter 8 will take a slight digestion from the focus of plants in transition to investigate a plant conceived and designed with worker involvement in mind. This case study will help to shed light on what the other plants are attempting to achieve. By examining a plant which has institutionalized worker involvement for over fifteen years, the future role of first line supervisors will be put in perspective.

Building upon the preceding case studies, Chapter 9 will present five categories of supervisory resistance based upon a comparative analysis of the seven plants. This will be followed in Chapter 10 by prescriptions for management in how to begin to alleviate much of the supervisory resistance. Lastly, Chapter 11 will summarize the findings and suggest future directions for research.

Chapter 2

The First Line Supervisor: Past and Present

> The word "foreman" is a very old one. As far as I know, it originated in trade guilds of Europe. In those days when the men wanted to talk to management there was always someone of mature judgement, probably a little older, a well-skilled man, who could talk a little on his feet. When the men got together, they referred to "John Anderson, fore"; and he became the foreman; he was the man who came to the fore; therefore, he was a foreman (U.S. House of Representatives, 1944, p. 104).

Historical Perspective

Whether the above is the true beginnings of the word foreman or not, it is probably fair to speculate that the foreman's role evolved from Adam Smith's division of labor. As the jobs were broken up into separate tasks, the need to coordinate the work developed. Initially, that role was performed by the owner. But as the factories grew in size, one person could not perform all activities and the role of direction and coordination of the craftsmen was turned over to a leader or foreman. The foreman learned his new job through trial and error or from watching what the owner did. There were no formal rules which had to be followed and therefore the foreman had to devise ways to direct and control his fellow craftsmen. Of course there were wages in return for production, but due to the inherent conflicts between labor and management, more was needed to keep an even, non-disrupted production flow. Since the foreman was just a working leader and had to produce as a craftsman just as his peers, he had to find a means of interaction

with the other workers. The characteristic means of communication and interaction for such behavior between peers has been described as reciprocity.

> Reciprocal interactions create or continue social bonds between peers. Interactions that are not reciprocated (for whatever reason) create status differentials. The person doing something for another without immediate return has a claim on the other. It is this claim that comprises his power. It follows that a major reason for reciprocating favors of all sorts is the desire to avoid becoming subordinate to another person (Temin, 1979, p.59).

This behavior created the stable relationship needed for the informal or community structure of the workplace.

But as markets and production expanded, hierarchal levels of management were created. The direction and coordination of the workplace activities began to fall completely under the control of the foreman. He now had control over hiring and firing, the pace of work, and payment of workers. Many cite the growth of strikes and other forms of worker resistance as a response to foreman abuse of this absolute power (Edwards, 1979; Miller, 1981), but since strikes were not a constant event in all workplaces, there had to be some form of peaceful interaction between the foreman and his subordinates. Although there was now a power or status differential, the foreman found that the reciprocal arrangements which had been developed earlier fit well into this new structure. Although there was now a power or status differential, the foreman found that he could still trade favors for labor peace or increased production. He found that he could get his subordinates to accept a technological change or an increase in

output for a promise of hiring a friend or relative.

These arrangements worked well until the coming of mass production. Just as Taylorism divided up the craft jobs into simple individual tasks, the foreman's job was also deskilled. In outlining the fundamental principles of scientific management, Taylor described the concept of "functional foremanship" where he divided the foreman's job into eight parts (Taylor, originally published in 1903, reprinted in 1947). In addition, with the birth of industrial trade unions and company welfare practices, personnel departments emerged and took many of the foreman's reciprocal powers away. The foreman could no longer hire and fire, set wage rates, etc. (Miller, 1981). In addition, the production specialists and industrial engineers came in and told the foreman and workers how to perform the job, and in what order (Edwards, 1979).

The foreman then looked around and found that his subordinates had obtained significant power and rewards through the formation of trade unions. They had won the right to have formal grievance procedures and question the actions of their foreman. They had even set up their own representative, the steward, to represent them on a more equal basis with the foreman. As a result, the foreman was left with the responsibility of coordinating the flow of production but was robbed of many of his formerly held managerial tools and status. He was left with little control over or say in the formation of company rules and policies, but was expected to execute such decisions and enforce the procedures.

The above changes led foremen to form their own union in 1941. The organization was a grass roots effort which mushroomed almost over night (Keys, 1944). Widespread interest and rapid growth of the FAA - 40,000 members by 1946, after only five years (Larrowe, 1961) - indicated that there was indeed a restlessness among the foreman ranks. Although foremen had been traditionally included in many craft unions, such as in the printing, maritime, construction, and railroad industries, most rank and file unions in mass production had specifically excluded foremen and supervisors from their jurisdiction for fear that management would take over control of the unions. But as industrial unions grew in power, and the foremen ranks grew in size to manage the growing number of production workers, these "middle men" discovered that they had common complaints and concerns.

Several reasons were put forth for the interest in foremen unionization at that time. A special panel appointed by the National War Labor Board to investigate disputes concerning foremen and other supervisors found four conditions:

1. Long-term changes in the responsibility and authority of foremen;

2. The uncertainty of the foremen concerning their terms of employment and their lack of participation in formulating those terms - in ever sharpening contrast with the opposite trends in the case of the rank-and-file workers;

3. The lag in the adjustment of the compensation of foremen which occured early in the war; and

4. The insecurity of the position of individual foremen resulting from the great temporary expansion in the number of foremen in many more plants as a result of the war (1945, p.666).

In an American Management Association publication, H.W. Anderson, vice-president of General Motors, added a slightly different twist to the reasons for foremen unionization:

> 1. Pressure on management organizations by rank and file unions to break its spirit and its authority.
>
> 2. The number of new supervisors to meet war emergency requirements who for the most part have been members of rank and file unions.
>
> 3. Uncertainty with respect to post war future - security (1945, p.5).

In summary, the main thrust for foremen unionization was three-fold: change in job status, pay, and job security.

With the passage of the National Labor Relations Act in 1947 and its lifting of the mandatory requirement for employers to bargain with supervisory unions, the Foreman's Association of America lost its power and gradually faded away. However, the FAA did succeed in bringing supervisory issues to the attention of upper management. At least, for a decade or two.

Pay

At the end of the war, wage controls were lifted and, in response to the wage grievances raised by the Foreman's Association of America, most employers adjusted supervisory salaries to a level about 15 per cent above their subordinates. Since that time most major corporations

have maintained that differential. Although first line supervisors usually gain a 15% increase in pay upon promotion out of the blue collar ranks, most are required to be in the plant at least 45 minutes before and after their shift. This represents 19% increase in time on the job without compensation (Zierden, 1980). In addition, most first line supervisors are paid on a salaried management wage scale which usually means that they receive an annual salary increase based on performance. Although this increase usually takes into account the prior year's increase in cost of living, there is no specific wage adjustment which supervisors can point to as being equivalent to the automatic annual, and often semi-annual, COLA increase granted to the rank and file workers. There is also no guarantee that supervisors will get that annual wage. If their performance is rated as only fair or marginal, they many receive only a token increase or none at all. All these factors, coupled with double-digit inflation, leave first line supervisors feeling that they have lost ground in their pay relative to the employees they supervise.

Job Security

In response to the job security issues raised by the Foreman's Association of America, many companies negotiated contract clauses with their blue collar unions which protected supervisors' seniority should they return to the bargaining unit. However, foremen's security on their own job was still left up to the whims of their managers. Although more sophisticated performance appraisals have been developed to let supervisors have a better idea of where they stand in an

organization's eyes, there are rarely any formal seniority clauses to provide the degree of job security available to unionized employees. It has been noted that large corporations have different reduction policies for managerial or white collar employees than for the production workforce (BNA, 1982) and, when faced with cutbacks, will be more reluctant to lay off supervisors and will often find work to tie them over until the business picks up. Therefore, it could be said that first line supervisors have better job security than their subordinates. However, since these practices have not been formally articulated, first line supervisors are left with a feeling that their subordinates are more secure than themselves. More recently, the new "equality of sacrifice" clause negotiated by the UAW and several of the automobile companies, whereby the supervisor/worker ratio is monitored by the union, further heightens a sense of insecurity.

Status

Although, extensive training programs were developed during the 1950's to address the changing role and status of foremen, first line supervisors remained, in what Kanter (1979) has called, a "powerlessness" position. Before looking at the status, or lack thereof, of today's supervisors, it is necessary to have a better understanding of what is meant by the term "status". Status has been defined as "a social position occupied by a person within a group. . .(which) exposes the occupant to certain culturally prescribed demands which define his rights and obligations" (Gouldner, 1954a, p. 130). This status thus allows one person to hold power over another. But

what is the source of this power in the case of first line supervisors?

French and Raven (1959) identified five bases of social power which one individual may hold over another. Each of these help to explain elements of first line supervisors' ability to direct the activities of their subordinates and coordinate production functions.

1. Reward Power - Traditionally this was one of the key sources of formal power when supervisors controlled rates of pay and other conditions of employment. Today, wages are automatic and hiring is controlled by personnel departments. Supervisory influence has become more subtle and is often on a more informal basis such as praise for a job well done.

2. Coercive Power - Supervisors have always retained the authority to discipline their workforce. However, in many respects, their power is limited by an increasing number of review procedures.

3. Legitimate Power - This is the delegated power of the position given supervisors by the hierarchal structure. Many would argue that over the years this base of power has eroded, but supervisors, in most organizations, still retain the right to assign work and direct the work activities of their subordinates.

4. Referent Power - This power depends to a great extent on

the individual, wherein if a supervisor personifies a model which a subordinate identifies with, then the supervisor holds power over that individual. However, as long as the foreman is viewed as the "man in the middle", referent power will be limited to those few who see the position as a step up in the power hierarchy.

5. Expert Power - Traditionally, the most highly skilled craftsmen became the leaders or foremen. In such cases, these individuals were looked up to and given authority because they knew more about the job than the workers. Here again, many would argue that this power base has been severely eroded with the growth of technical and personnel support functions.

Another view of supervisory status stems from the structure of formal organizations. Based upon the work of Weber and Parsons, authority has been viewed as being derived from two sources - power granted to incumbants and deference based upon legitimacy or expertise (Gouldner, 1954; Witte, 1980). In looking at the interaction of first line supervisors and their subordinates, these two sources of power can be described as:

1. prestige or authority granted supervisors by workers based on their expertise or position

2. their ability to control reciprocal arrangements or the trading of work for rewards.

Authority based on competence or legitimacy derives from the deference or prestige which is granted supervisors due to a recognition that they are more knowledgeable of the management policies, production schedules, and manufacturing processes or have achieved their position through some accepted route of experience and training. This is closely related to French and Raven's (1959) expert power.

> Where supervision is technically appropriate, it is dependent on the compliance of workers, a compliance which rests on the worker's acceptance of the authority of the foreman in principle (because he believes the foreman has the right to give orders) and on the worker's needs (Westley, 1981).

The other type of authority, that based on inducements available to an incumbent in an office, is more associated with the power of the position than the individual. In French and Raven's (1959) terminology, this would include legitimate, as well as reward and coercive power. This is the power of hiring, firing, and in other ways disciplining subordinates which other writers have referred to in their description of the abusive all-powerful foreman (Edwards, 1979; Miller, 1981). As argued earlier, since continual industrial strife is not the way of life in most workplaces, there must be methods in which the foremen use this element of control in a peaceful manner to achieve their chief status obligation of keeping the production going (Gouldner, 1954a, p. 213). Kotter's (1977) description of a manager's ability to control employees is extremely apropos.

> Trying to control others solely by directing them and on the basis of the power associated with one's position simply will not work - first, because managers are always dependent on some people over whom they have no formal authority, and

> second, because virtually no one in modern organizations will passively accept and completely obey a constant stream of orders from someone just because he or she is the "boss" (p. 128).

Reciprocity as a Theoretical Construct

The above points to the central role of reciprocity in the relation between first line supervisors and their subordinates. One way to look at reciprocity is to view it as a "mutual dependency" which has been built up between the supervisors and their workers. Emerson (1962) illustrated how these interactions could be viewed as reciprocal "power-dependent relationships". As such, one actor may dominate over the other, but, in the long run, in order to maintain an on-going relationship, the power advantage of the dominate actor must be balanced with that of the other. As Emerson stated, "In general, it appears that an unbalanced relation is unstable for it encourages the use of power which in turn sets in motion processes which we will call (a) cost reduction and (b) balancing operations." This process is closely related to Homan's (1961) description of "distributive justice".

It is the process of balancing which makes Emerson's theory extremely applicable to the historical shifting of power between first line supervisors and workers. When one looks back at the early days of industrial society, the foreman or supervisor was the dominant actor in that he had total control of hiring, firing, disciplining, setting wage rates, and making most other decisions affecting a worker's employment. This in turn led to many examples of abusive use of power (Edwards,

1979; Miller, 1981). As Emerson's theory predicts, this resulted in workers using the formation of coalitions (unions) to counter-act the foreman's power. Once unions were formed, many foremen or managers believed that the relationship went past a point of balance and that the workers, through their unions, became the dominate actors. Foremen felt that they had lost status and sought ways to regain their power. Their first reaction was to form into their own union. This resulted in a recognition by upper management that they had to enhance the status of the first line of management to shift the balance of power more towards the supervisor.

Due to the passage of the National Labor Relations Act and the development of workplace rules and union contracts, the reciprocity had to move from a formal arena to an informal one. The foremen could no longer grant the big favors of hiring a friend, but they, as well as their workers, soon found other things which could make a job either enjoyable or miserable. Foremen found ways of turning their backs to violations of the plant rules in return for shop peace. Night shift foremen are notorious for such behavior. As long as the production quotas are met for the night, the employees are often free to do as they like. Recently, an employee of a large corporation cited the following case.

> The pressure for production is so intense in Plant X that the foremen are asking the guys in the shop to produce twelve hours worth of work for eight and signing their time cards as if they worked four hours overtime although they aren't even in the plant. This will continue until the production crunch is over and then people will revert back to following the rules.

There are numerous other favors which have evolved which do not require such bending of the rules. If an employee had a rough night and comes in a little under the weather, his foreman may ease up on his requirements for the day in trade for a little extra effort in a production crunch. Similar arrangements have been demonstrated empirically:

> - Gardner and Whyte (1945) cited examples where foremen either helped subordinates in carrying out their job during peak demands or allowed time off for illnesses in the family. They recognized that a supervisor "gives help when it is needed; he asks help when he needs it. He builds up a system of reciprocal obligations which binds workers to him and binds him to them through strong ties of personal loyalty" (p. 16).
>
> - High degrees of mutual dependence and reciprocity also exist between a police sergeant and his men. "He is dependent upon them to do their work smoothly, without causing untoward concern among the public or others in the department and they are dependent upon him for shielding them from the consequences of the mistakes they will, in good faith and bad, make" (Van Maanen, forthcoming). Manning (1977) also noted that "these exchange networks channeling information, gifts, nonverbal affirmations, and written data between organizational segments constitute an important determinant of the internal morphology of the organization" (p. 145).
>
> - Gouldner (1954) recognized that "formal rules gave supervisors something with which they could 'bargain' in order to secure informal cooperation from workers. The rules were the 'chips' to which the the Company staked the supervisors and ~ ch they could use to play the game; they carved out a 'right' which, should supervisors wish to, they could 'stand upon.' In effect, then, formal bureaucratic rules served as a control device not merely because they provided a legitimating framework for the allocation of punishments, but also because they established a punishment which could be withheld. By installing a rule, management provided itself with an instrument which was valuable even if it was not used; the rules were serviceable because they created something which could be given up as well as given use (pp.173-4).

The point of this research is not so much to prove that these reciprocal arrangements exist, but if these arrangements are the bases for supervisory status, then the issue is to understand how, if at all, these arrangements are being modified or transformed by changes occurring on the shop floor, such as the introduction of worker involvement programs.

Worker Involvement Programs

> The essential purpose of the introduction of a quality of work life program is to see to it that workers in fact are treated not as inferiors, as second-class citizens, but are given ample opportunity in a meaningful way to make significant contributions to the decision-making process in the plant. This is what it's all about (Bluestone, 1980, p.26).

The basic premise of the "new industrial relations systems", a phrase recently coined by Business Week magazine (May 11, 1981), is that labor and management can work together cooperatively to improve the quality of the work environment and increase overall industrial productivity. As such, there is an attempt to narrow the gap between workers and management. As a result, many of the traditional duties of management are being performed by blue collar employees. Groups of workers are being formed into Quality Circles or Productivity Teams to solve problems and implement solutions sometimes without the direction or presence of a supervisor. Work groups are getting involved in decision making that includes setting their own production quotas, allocating overtime, and, in some cases, hiring, evaluating, and

disciplining their own peers.

The role of shop management in these new programs is ambiguous. Is there a continuing role for the foreman or first-line supervisor? Many would argue that there still remains a need to coordinate and direct the workforce. However, several companies have experimented with totally eliminating this layer of management. In a Philips Electric Company plant in Holland, management experimented with autonomous work groups and totally eliminated the foremen from one section of the plant. Although the experiment was considered a success, it was not expanded to the rest of the facility because of fear of foremen repercussions. One of the managers summed up the problem as follows:

> Well, the fact is we would have a foremen's strike on our hands if we tried to expand the autonomous work groups. You know, unlike plants in the United States, our foremen are well organized. Lower management levels are extremely threatened by this sort of thing. After all, it makes them superfluous (Shrank, p.221).

There is no question that introduction of new team approaches will have dramatic impacts on the role of first-line management, but most likely, the elimination of the role will occur in only a very few circumstances. However, where the role remains, the nature of the interactions between foremen and workers will be altered. For example, with increased worker involvement in decisions, the first line supervisor is no longer the "fountain of knowledge" concerning company policy or business conditions. In fact, as many companies attempt to narrow the gap between the top and bottom levels of the hierarchy,

senior executives are meeting directly with shop floor workers, often with the unintended result of squeezing out the middle. First line supervisors are often left out of this process (or allowed to sit in as an innocent bystanders). As such, they loose control of the flow of information between the shop floor and their managers which in effect lessens their power or status (Mechanic, 1962).

The introduction of quality circles is presenting a similar dilemma for the first line supervisor in the upward communication link (Nosow, 1981). After circle members have analyzed a problem and formulated a solution, the structure calls for a formal presentation of the recommendation to upper management for approval and needed funding. In the past, the first line supervisor was viewed by the shop floor workers as the approver or denier of ideas or requests and looked to by upper management as a critical link in the communication process. Now, even though much needed background work must still be done by the first line supervisor to assure a smooth presentation and appropriate recognition or approval of the workers' ideas, the credit goes to the workers. The result of these changed communication channels is a diminution of the supervisor's status and power base.

An important element some quality of worklife efforts is the blurring of the distinction between the role of supervisors and workers. Autonomous work teams, such as at the Topeka General Foods plant, give the responsibility and authority to hire, fire, and otherwise discipline fellow members of their work groups. In addition, many groups are setting their own production quotas and work schedules,

including deciding who will or will not receive overtime. These encroach on areas where first line supervisors have traditionally been able to control reciprocal arrangements.

Summary

This chapter has traced how the distribution of power between first line supervisors and workers has shifted over time. The last major tilt in favor of workers, the rise of rank and file unions and the portioning off of many elements of the foremen's job to support functions, led to supervisory resistance in the form of a foremen's union, the Foremen's Association of America. History has a way of repeating itself, and supervisors today are, once again, frustrated over the same issues of pay, job security, and status.

This research focuses on how the distribution of power is once again being impacted, this time by worker involvement programs. These new programs are not only encroaching into many tasks traditionally controlled by supervisors, but are also threatening the future security of the role itself. Thus, it is not surprising that many supervisors do not look upon worker involvement programs favorably. With this historical perspective as a backdrop, this research will now delve into how supervisors in eight plants are adjusting to new programs aimed at altering their managerial styles and behaviors to make way for increased involvement of the workforce.

Chapter 3

Methodology

This research focuses on the roots and variations of supervisory reactions to worker involvement programs. As such, it addresses the following questions:

1. To what degree, or under what conditions, do first line supervisors resist worker involvement programs?

2. What aspects of these programs do first line supervisors resist and why?

This chapter outlines the methodology used in this research to answer these questions.

Sample

The target population for this research was first line supervisors in large manufacturing operations which had embarked upon worker involvement programs. Since most prior research had focused on start-up operations, this research is focused on organizations which are going, or have gone, through a transition from a traditional or autocratic management style to a more participative one. Each of the organizations studied had sufficient experience with some form of worker involvement so as to provide specific examples of resistance.

Table 1 summarizes the key characteristics of the seven plants

investigated in this research. (Additional information will be provided in Chapters 4 through 7.) Plant selection criteria was based upon opportunity of access after a search of plants which had experienced some degree of supervisory resistance in the introduction of worker involvement programs. An additional objective was to study a cross-section of programs ranging from quality circles to more extensive forms of worker participation.

TABLE 1
PLANT CHARACTERISTICS

	PLANT						
	A	B	C	D	E	F	G
Total employment	540	475	350	800	1600	265	275
Hourly employment	400	300	200	350	1300	215	230
Age of facility (years)	55	55	15	7	25	40	10
Union	yes	yes	yes	yes	no	yes	no
Type of WIP[1]	QC	QC	QC/QWL	QC	QC	T	T
Manufacturing technology[2]	M	F	F	A	F/A	P	P
Organizational structure:							
level 4-Plant Manager	1	1	1	1	1	1	1
level 3	5	3	1	2	1	2	1
level 2	2	1	3	4	6	6	6
level 1-Supervisors	27	13	11	20	26	20	18

[1] WIP=worker involvement program, QC=quality circles, QWL=quality of worklife program, T=teams
[2] M=machining, F=fabrication, P=processing, A=assembly

All plants embarked upon a worker involvement program approximately five to seven years ago. Of the five plants which started a quality circle program, only Plant E views it as a success. In Plants A through D the quality circle program has gradually faded with time. Plant C also attempted an ill-fated quality of worklife program about two years ago which has since been discontinued. The two remaining plants introduced work teams into a traditional work

organization. Plant F, still in the transition stage after seven years of preparation, is in the process of implementing cross-funtional problem solving teams. Lastly, Plant G accomplished a successful transition to semi-autonomous work teams.

In addition, interviews were conducted in an eighth plant (described in Chapter 8), started-up with an employee involved structure, to understand better the role of first line supervisors in an organization which has institutionalized worker participation. However, since the plant did not go through a transition, the entire methodology was not appropriate.

Types of Worker Involvement Programs

Worker involvement programs come in many different sizes, shapes and colors. In-depth analysis restricted the sample size to only three processes - quality circles, involvement teams, and semi-autonomous work teams. Because labels can be misleading, detailed case studies of each program will be provided in Chapters 4 through 8. As a guide for the data collection process and the case write-ups, a program intensity index, summarized in Table 2, was created to compare and contrast the various programs.

TABLE 2
Guide to Program Intensity

Degree of worker involvement in decision making:
- policy decisions
- work assignments
- job design
- discipline
- selection
- performance feedback and evaluation
- day-to-day problem solving

Management Style/Culture

Duration of Program

Percentage of the Workforce Covered

Supervisory Control

The first step in differentiating among programs is to determine the extent of worker involvement in decision making. This can range from one-hour structured discussions of specific quality or process problems to participation in policy decisions. In addition, there are varying degrees of involvement on any issue from inputing opinions to being responsible for the ultimate decisions.

A thorough understanding of the management style and culture of the plant is critical in determining whether the program is a major departure from past practice or part of an on-going management process. In this regard, it is important to determine the duration of the program and the percentage of the workforce (both white and blue collar) covered by it. Lastly, relative to supervisory reaction, it is important to evaluate the role of supervisors in the process and the amount of control they have over the activities of the people they supervise.

Measurement of Supervisory Resistance

Resistance is a behavior. Measurement requires direct observation or other evidence of behavior. However, not all resistance is overt defiance. In the case of supervisors, resistance may take the form of silence or half-hearted enthusiasm which may be translated into questionable support by workers. Hence, resistance is defined here as the undermining of worker involvement efforts in any form, ranging from silence to overt comments or behaviors.

Since this research investigated plants five years after implementation, anecdotal evidence of supervisory resistance during earlier stages of the programs was gathered through extensive interviews at all levels within a plant. In addition, current supervisory attitudes toward worker involvement programs were measured. A negative attitude does not necessarily translate into resistance, but it can be safely assumed that a positive attitude would not lead to resistance except in very rare cases. Hence, by sorting out supervisors with negative attitudes, one can isolate the subset who would be prone to resistance. Although research has shown that positive attitudes or job satisfaction does not necessarily lead to specific behavior or performance (Schwab & Cummings, 1970), isolating the characteristics of those supervisors who have a tendency to resist may help to shed light on those who do.

Research Methodology

To understand both formal and informal elements of the supervisory role both qualitative and quantitative data analyses were used. There were four stages to the data gathering at each plant site - managment interviews, supervisory attitude survey, first line supervisory survey feedback and interviews, and, where possible, worker interviews. This multi-staged methodology was designed to use triangulation (Jick, 1979) to validate individual responses. The qualitative data were used as the prime data source for the analysis, with the survey data being used to supplement the interview findings.

Qualitative Analysis

The initial step at each plant site was to interview key managers and gather general plant information in an effort to understand each organization's goals and climate, and to develop trust and rapport between the researcher and the organizational members. This stage generated a general picture of the business pressures, management style, technological issues, labor-management climate, human resource polices, etc. in order to provide a better understanding of the environment in which first line supervisors work. An additional objective of the manager interviews was to gain insight into upper management's expectations of the role and their perceptions of the problems or issues confronting first line supervisors. These semi-structured interviews investigated the following areas:

Plant Characteristics - size, products, processes, skill levels, number of shifts, number of employees per supervisor, demographics of the workforce, types of worker involvement programs, origin of worker involvement programs

First Line Supervisors - critical elements of supervisory job (examples/ situations), characterisitics of strong versus weak supervisors, changes in the supervisory job over the past five or ten years, affect of worker involvement program on supervisors, other factors influencing role, future role of first line supervisors

Selection/Reduction Procedure - changes in hiring criteria over past five or ten years, formal selection and reduction procedures, replacements or removals due to worker involvement program

Following the administration of a supervisory survey, in-depth semi-structured interviews designed around survey responses were conducted with the first line supervisors. These interviews, which doubled as a survey feedback and validation process, were approximately 90 minutes in length with a group of four or five supervisors.

Group interviews were conducted because it was believed that first line supervisors would be more comfortable and candid in such a setting. Since they are neither worker nor truely management, it was felt that they would be more concerned about confidentiality of their individual comments. Workers have little to lose if a statement is traced back to them and higher level managers are quite skilled at being careful with their words during an interview. However, first line supervisors have little experience in interview settings and would tend to be more nervous.[1]

The group setting served two additional purposes: 1) an ability to interview a larger population, and 2) group discussion of the

issues. The objective of these sessions was to uncover the underlying causes of any dissatisfaction which surfaced through the survey. By structuring these sessions around the survey, supervisors were asked to explain their responses and to reflect on how the worker involvement program had affected their position in the organization.

Lastly, where possible, a sample of workers, who had taken part in the worker involvement activities, were interviewed to see how effective the worker involvement program had been and if there had been any change in their relationship with their supervisor as a result of the program. For plant convenience, these interviews often took place during a regularly scheduled team meeting.

Table 3 summarizes the number of interviews conducted at each plant. As noted above, both supervisory and worker interviews were usually conducted in small group settings. However, in a few cases they were one-on-one, as were the interviews with middle and upper management.

TABLE 3
Distribution of Interviews by Plant and Function[1]

	Plant								
	A	B	C	D	E	F	G	X	Total
Corporate Management	3*	*	*	*	1	5	1	**	10
HR/IR/OD	12*	*	*	*	4	10	1	**	27
Top Plant Management	1	1	1	2	1	1	1	2	10
Middle Management	6	3	3	6	8	8	7	3	44
First Line Supervisors									
First Shift	14	5	6	9	16	16	10	18	94
Second Shift	6	1	-	3	3	4	4	-	21
Third Shift	-	-	-	-	3	-	4	-	7
Workers	-	-	21	-	7	-	9	14	51
	42	10	31	20	43	44	37	37	264

[1] numbers may not agree with Table 1; in cases where managers may have been changing positions, interviews were conducted with both incoming and outgoing managers

* corporate and HR covered all Plant A through D
** corporate and HR covered both Plant F and X

By asking similar questions to different levels and to many individuals, responses were validated by cross-checking responses. Group interviews also provided the opportunity to quickly check individual reponses by observing the reaction of the group. In several cases, it was obvious that certain comments were not representative of the supervisory population within that plant.

Quantitative Measures

The second stage of the data collection process was the administration of a supervisory survey. (A copy of the complete survey is reproduced in the Appendix.) The survey was designed to measure supervisory attitudes toward worker involvement activities, as well as uncover any major areas of satisfaction or dissatisfaction concerning the role in general. The survey was administered after the management

interviews so that managers could meet the researcher and understand the survey's rationale. It was hoped that this approach would gain the support of the managers so that they would encourage the supervisors to respond openly and candidly by telling them that the data would be useful in future planning of plant activities. At no point in the interviews did the researcher discuss the contents of the survey.

The survey was administered during working hours by the researcher to 130 first line supervisors. (The response rate was 96%, excluding only those supervisors not present on the day of the survey.) This allowed for introductory comments and a promise of confidentiality and feedback. This introduction was designed to provide the supervisors with an understanding of the purpose of the survey and a sense of value to them personally in that they and their managers would see the results and possibly act upon them. Thus, their responses should be more valid (Argyris, 1968).

Because the survey was not viewed to be voluntary by the supervisors, the above introduction was felt to be a necessary precaution because first line supervisors, as the literature says, are "caught in the middle". They are members of management so they do not question management directives, but they have been "caught" so often in the past that their trust level is rather low. In at least five out of the seven plants in this study, surveys had previously been conducted which were touted to be confidential where supervisors later found out that the data had been used against individual respondents. As a result, many of the supervisors commented that their survey responses

were more positive than their true feelings.

The use of supervisory interviews based upon survey responses provided a mechanism to uncover such discrepancies between actual and recorded attitudes[2]. In addition, the interviews afforded an opportunity to probe at any methodological problems in the survey design, such as consistency and priming (Salancik and Pfeffer, 1977). Where inconsistencies occurred between the qualitative and quantitative data, they will be so noted in the analysis.

Survey Analysis

The survey was designed to measure supervisory attitudes about the job in general as well as their view of the worker involvement program within their plant. The discussion here will focus on the job dimensions characteristics. (Subsequent chapters will analyze supervisory responses to the worker involvement programs in conjunction with a discussion of the interview data.)

Job Characteristic Measures

The job satisfaction questions asked in this survey were quite similar to many other general job attitude questionaire, such as the Quality of Employment Survey (Quinn & Shepard, 1974), Hackman & Oldham's (1980) Job Diagnostic Survey, etc. Indices were developed via an inspection of zero order correlations and a logical sorting of relevant questions. Table 4 lists the questions which ultimately ended

up within each job satisfaction index. In addition, five questions were used as is to measure satisfaction with rewards (2e), hours (41), pay (4m), job security (4n), and manager (4p).

TABLE 4
Groupings of Survey Questions for Job Characteristic Indicies
(Numbers in parenthesis refer to the questionaire number)

Job Importance
- Others suffer if I don't do well (3d)
- Understand why job is important (3e)

Skill with Employees
- Ability to handle problem situations (3i)
- Way I act with employees to get things done (3j)

Motivation
- Feel motivated to give best efforts (2d)
- Encouraged to work hard (2f)

Company Satisfaction
- Persons in your department (4o)
- Working at Company (4r)

Treatment by People
- Respect from people you work with (4d)
- Way you are treated by people (4h)

Manager's Concern for People
- Interest in morale and well being of people (2a)
- Try to improve working conditions (2b)

Job Satisfaction
- Freedom on your job (4b)
- Chances to learn new things (4c)
- Chances to accomplish something worthwhile (4e)
- Chances to do things you do best (4f)
- Chances to feel good as a person (4g)
- Satisfied with your job (4q)

Say on Own Job
- How I do my own job (3f)
- Changing how I do my own job (3g)
- What I do day to day (3h)

Career Satisfaction
- Chances to get ahead in organization (4i)
- Satisfied with progress up to now (4s)
- Satisfied with chances to get ahead in future (4t)

TABLE 4 (continued)
Job Characteristic Indicies

Participation in Decision Making
- Above open to ideas/suggestions (2j)
- Manager encourages new ways of doing things (2k)
- Manager talks things over before making decisions (2l)
- Chances to take part in making decisions (4j)
- Opportunity to develop skills and abilities (4k)

Information Availability
- Time and amount considered (2c)
- Process decisions made with best information (2g)
- Decision makers have all available know-how (2h)
- Told what you need to do best job possible (2i)

As shown in Table 5, estimates of internal consistency (Cronbach, 1951) for each index were calculated. Coefficient alpha is consistently high, ranging from .61 to .91. These results compare favorably with most attitude measures (cf. Mowday et al, 1982).

TABLE 5
Internal Consistency of Job Characteristic Indicies
(Sample size = 123)

	Mean	Standard Deviation	Alpha Coefficient
Job Importance	6.5	.72	.61
Skill with Employees	6.1	.78	.71
Motivation	5.8	.95	.68
Company satisfaction	6.2	.95	.74
Treatment by people	5.9	1.09	.83
Manager's concern for people	5.3	1.04	.77
Job satisfaction	5.6	1.18	.91
Say on own job	5.7	1.39	.90
Career satisfaction	5.0	1.40	.86
Participation in decisions	4.9	1.27	.89
Information availability	4.5	.99	.79

Measure of Reciprocity

One of the core elements of supervisory power is their ability to use reciprocity. However, few supervisors are conscious of this process and those that are would most likely be reluctant to admit to it. In addition, reciprocity is an "off-the-record" subject in most organizations. Therefore, the subject had to be addressed indirectly.

Several of the survey questions were designed to help stimulate discussion and focus on the issues of power and supervisor-worker relations. (Numbers in parathesis refer to the questionaire number.)

-Do you prefer to deal with your employees on a one-on-one or a group basis? (5d)

-To what extent do worker involvement programs increase your ability to have one-on-one interactions with your employees? (6a15)

-How often do you find the formal policies/procedures helpful in performing your job? (5e)

Since reciprocal exchanges usually occur on a one-on-one basis, the first question was used to encourage discussion on how supervisors prefer interacting with employees. This then led into how worker involvement programs helped or hindered these interactions. The third question on rules was based upon the assumption that supervisors who are heavy users of exchanges are inclined not to use formal rules which tend to limit their formal power. Therefore, those supervisors who rely solely upon reciprocity to perform their role would not find rules useful.

Sample Demographics

Before trying to sort out the various factors influencing supervisory views toward worker involvement programs, it is necessary to ask if the sample upon which this analysis is based is representative of the supervisory population in American industry. This is critical if conclusions are to be drawn from this sample which might be applied in other plants. Table 6 summarizes the key demographic characteristics of this sample.

TABLE 6
FIRST LINE SUPERVISOR CHARACTERISTICS
(Sample size in parenthesis)

	PLANT							
	A (26)	B (12)	C (9)	D (19)	E (26)	F (20)	G (18)	Ave. (130)
average no. of subordinates	19	18	15	17	36	15	11	20
% new on job (<1 year)	8	0	13	11	15	25	6	12
% career supervisors (>10 yrs)	39	25	13	26	23	20	22	26
% under 35 years of age	15	25	44	16	23	65	39	31
% over 50 years of age	39	42	11	32	8	5	6	20
% promoted from hourly job	71	58	88	58	42	30	56	54
% with 4 year degree or more	12	25	13	16	19	75	50	30

Although there is quite a bit of variation across plants, as a whole, this sample tends to parallel that of other studies. Table 7 compares this sample with other surveys which contain first line supervisory characteristics on age, sex, race and education.

TABLE 7
COMPARISON OF SUPERVISORY DEMOGRAPHICS
(Sample size in parenthesis)

	this survey (130)	B&J[1] (4000+)	CPS^[2] (1083)
survey date	1983	1982	1979
% with 20 or less employees	63	84	n/a
% on job less than 5 years	49	61	n/a
% 30 years of age or less	20	23	22
% over 50 years of age	22	20	27
% female	11	8	7
% minority	10	30 *	10
% with 4 year degree or more	30	33	7 *

* Chi Square difference significant at less than .05

[1] Bittel & Jackson (1982), includes industries other than manufacturing
[2] 1979 Current Population Survey, occupation code = 441 (foremen)

Another test to check the randomness of the sample is to compare results on a question of personal values held by supervisors. In this regard, the 1976 Quality of Employment Survey asked supervisors a series of questions on how much say workers, who are not supervisors, should have on their job in five areas - safety equipment and practices, how work is done, wages, hours and days, and hiring and layoffs. Table 8 compares the responses of this survey versus those in the 1976 national survey.

TABLE 8
WORKERS SHOULD HAVE SAY
% Responding A Lot or Complete Say
(Sample size in parenthesis)

	this survey (129)	QES (40)
Safety	75	80
How work is done	47	38
Wages	10	15
Hours/Days	16	10
Hiring/Layoffs	5	5

On average, there is only a 5 or 6% differential between the surveys which is not highly significant. (None had Chi Square difference significant at .05 or less.) Since the programs in this study focus almost solely on the work process, one should not expect much variation in any dimensions except in how work is done. However, considering this sample was explicitly selected because the plants were involved in some sort of worker involvement effort, the more positive supervisory response on worker say in how work is done is not surprising. As will be described in the following chapters, there has been a sorting of supervisors in most plants over the past five years to a point where those who are currently supervisors are relatively positive toward worker involvement programs within their plants. Therefore, supervisors in this sample should have a greater inclination to believe that workers should have say in how work is done for two reasons; 1) they have personally seen some benefits from worker involvement programs, or 2) if they didn't believe in it, they would have been removed from their job.

Similarly, one might rightfully argue that the companies selected for this study are not truly representative of American industry because they are part of a select group who have embarked upon worker involvement programs. This might bias the sample toward more innovative companies. In fact, three of the four companies in the sample (Plants E, F & G) are considered excellent companies by Peters and Waterman (1983). Of these, two (F & G) met all criteria of the truly excellent companies which would imply that they are more employee oriented than most plants. However, in total, supervisors in these plants account for only half of the sample (64 out of 130).

Summary

This study focuses on the reactions of first line supervisors to worker involvement programs. Prior research has identified some degree of resistance at this level. Therefore, this research addresses this issue and attempts to sort out where supervisors are positive and what aspects they oppose. This will be done through detailed case studies of eight plants.

Throughout the remaining chapters, survey responses for each of the plants will be used to support and amplify interview findings. Chapters 4 through 7 provide in-depth analyses of the worker involvement programs in Plants A through G. Then through comparative analysis, hypotheses will be generated as to why some supervisors resist worker involvement programs.

Footnotes

1. Several individual interviews were conducted and in those cases the supervisors did pick and choose their words much more carefully than in the group setting. In addition, personal discussions with other researchers who have done work with first line supervisors validated this belief.

2. It is impossible to know whether the interviews or the survey reflected the true attitudes of the supervisors. However, most of these contradictory comments were made well into the interview after rapport, and hopefully some degree of trust, had been built up between the researcher and the group. Therefore, based upon their comments concerning past surveys and their trust level of this one, it is assumed that the interviews more accurately reflect their attitudes. Several managers made similar comments to further validate this assumption.

Appendix to Chapter 3

First Line Supervisory Survey
INSTRUCTIONS

1. Most questions can be answered by choosing one of the answers given. If you do not find the exact answer that fits your case, choose the one that is closest to it.

2. Answer questions by circling the number of your answer choice, as shown in this example.

Q: To what degree do you like living in New England? 1 2 3 4 5 6 7

(A response of "5" would mean that you like living in New England somewhere between "to some degree" and "to a very great degree" but closer "to some degree".)

3. Use either pen or pencil - Be sure each answer is clearly marked.

ALL RESPONSES WILL BE STRICTLY CONFIDENTIAL

PLEASE ANSWER EVERY QUESTION

1. The following information is needed to help with the statistical analyses of data. This information will allow comparisons with similar employees in other companies.

Remember, all of your responses are strictly confidential; individual responses will not be seen by anyone within your organization. We appreciate your help in providing this important information.

a. Are you (circle one)

1. Non-Minority Female
2. Non-Minority Male
3. Minority Female
4. Minority Male

b. What is your educational level? (Circle highest completed)

1. Some elementary school (grades 1-7)
2. Completed elementary school (8 grades)
3. Some high school (9-11 years)
4. Graduated from high school of G.E.D.
5. Some college or technical training beyond high school (1-3 Years)
6. Graduated from college (B.A., B.S., or other bachelors degree)
7. Some graduate school
8. Graduate degree (Masters, Ph.D., M.D., etc.)

c. In what year did you first come to work at "X" company (For example, if you started in 1972 you would answer 1972)

19____

d. How long have you been in your present assignment?

1. Less than 6 months
2. 6 months but less than 1 year
3. 1 year but less than 3 years
4. 3 years but less than 5 years
5. 5 years but less than 10 years
6. 10 years but less than 20 years
7. 20 years or greater

e. How long have you worked as a first-line supervisor?

1. less than 1 month
2. at least 1 month but less than 3 months
3. at least 3 months but less than 6 months
4. at least 6 months but less than 1 year
5. at least 1 year but less than 3 years
6. at least 3 years but less than 5 years
7. at least 5 years but less than 10 years
8. over 10 years

f. How old were you on your last birthday?

years _____

g. What was your job immediately before becoming a supervisor at "X" company

1. hourly worker within "X" company
2. hourly worker outside "X" company
3. other management or professional job within "X" company
4. foreman or supervisor outside "X" company
5. other management or professional job outside "X" company
6. college or university student
7. Other (please specify _____)

h. What shift are you assigned to?

1. First
2. Second
3. Third

i. Area of Responsibility?

1. Packing/Shipping
2. Processing
3. Support (Mechanical, Staff)

2. THIS IS PART OF THE SURVEY CONTAINS QUESTIONS ABOUT YOUR WORK SETTING. WE ARE INTERESTED IN KNOWING YOUR OPINIONS AND FEELINGS ABOUT HOW WORK GETS DONE IN THE PLANT.

a.	To what degree do the managers in this plant have interest in the well being and morale of the people who work here?	1	2	3	4	5	6	7
b.	To what degree do the managers in this plant try to improve working conditions?	1	2	3	4	5	6	7
c.	To what degree is the amount of work that needs to be done and the time available to do it considered in planning work assignments?	1	2	3	4	5	6	7
d.	To what degree do you feel motivated to give your best efforts to the company?	1	2	3	4	5	6	7
e.	To what degree do people who do the most on their job get rewarded the most?	1	2	3	4	5	6	7
f.	To what degree are there things about working here that encourage you to work hard?	1	2	3	4	5	6	7
g.	In this plant, to what degree are decisions regarding the work process made by those who have the best information?	1	2	3	4	5	6	7
h.	To what degree is information in this plant widely shared so that those who make decisions have access to all available know-how?	1	2	3	4	5	6	7
i.	To what degree are you told what you need to know in order to do your job in the best possible way?	1	2	3	4	5	6	7
j.	To what degree are those above you open to your ideas and suggestion?	1	2	3	4	5	6	7
k.	To what degree does your manager encourage those he/she supervises to develop new ways of doing things?	1	2	3	4	5	6	7
l.	To what degree does your manager talk things over with the people he/she supervises before making decisions about their work?	1	2	3	4	5	6	7

3. THE FOLLOWING STATEMENTS ARE RELATED TO HOW YOU FEEL ABOUT YOUR JOB.

a.	If something goes wrong around me which might not be part of my job, I feel it's important to let the right person know about it so it can be taken care of.	1 2 3 4 5 6 7
b.	If something goes wrong around me which might not be part of my job, I try to correct the problem myself.	1 2 3 4 5 6 7
c.	What happens to this organization is really important to me.	1 2 3 4 5 6 7
d.	If I don't do my job well, others in my department suffer.	1 2 3 4 5 6 7
e.	I understand why my job is important to helping things run smoothly in my department.	1 2 3 4 5 6 7
f.	I have a lot to say in decisions about how I do my own work.	1 2 3 4 5 6 7
g.	I have a lot to say in decisions about changing how I do my own work.	1 2 3 4 5 6 7
h.	I have a lot to say in decisions about what I do day to day.	1 2 3 4 5 6 7
i.	I am satisfied with my ability to work with my employees in problem situations.	1 2 3 4 5 6 7
j.	I am satisfied with the way I act with employees in order to get things done.	1 2 3 4 5 6 7

4. THIS NEXT SECTION ASKS HOW YOU THINK AND FEEL ABOUT SPECIFIC PARTS OF YOUR WORK. PLEASE INDICATE HOW SATISFIED YOU ARE WITH EACH OF THE FOLLOWING ASPECTS OF YOUR JOB.

HOW SATISFIED ARE YOU WITH....

a.	the friendliness of the people you work with?	1	2	3	4	5	6	7
b.	the amount of freedom you have on your job?	1	2	3	4	5	6	7
c.	the chances you have to learn new things?	1	2	3	4	5	6	7
d.	the respect you receive from the people you work with?	1	2	3	4	5	6	7
e.	the chances you have to accomplish something worthwhile?	1	2	3	4	5	6	7
f.	the chances you have to do the things you do best?	1	2	3	4	5	6	7
g.	the chances you have to do something that makes you feel good about yourself as a person?	1	2	3	4	5	6	7
h.	the way you are treated by the people you work with?	1	2	3	4	5	6	7
i.	your chances for getting ahead in this organization?	1	2	3	4	5	6	7
j.	the chances you have to take part in making decisions?	1	2	3	4	5	6	7
k.	the opportunity to develop your skills and abilities?	1	2	3	4	5	6	7
l.	the hours you work?	1	2	3	4	5	6	7
m.	the amount of pay you receive?	1	2	3	4	5	6	7
n.	the security on your present job?	1	2	3	4	5	6	7
o.	All in all, how satisfied are you with the persons in your department?	1	2	3	4	5	6	7
p.	All in all, how satisfied are you with your manager?	1	2	3	4	5	6	7

4. (Continued)
HOW SATISFIED ARE YOU WITH:

q.	All in all, how satisfied are you with your job?	1	2	3	4	5	6	7
r.	All in all, how satisfied are you with working at "X" company	1	2	3	4	5	6	7
s.	How satisfied do you feel with the progress you have made at "X" company up to now?	1	2	3	4	5	6	7
t.	How satisfied do you feel with your chances for getting ahead at "X" company in the future?	1	2	3	4	5	6	7

5. THE FOLLOWING QUESTIONS CONCERN YOUR ROLE AS A SUPERVISOR.

a. How many employees work for you directly? _____

b. How much time do you spend in a typical day with your employees talking about work related things?

1. not at all
2. less than 1 hour
3. 1 - 2 hours
4. 2 - 4 hours
5. 4 - 6 hours
6. 6 - 8 hours

c. How many teams do you have in your area? _____
Are you responsible for leading any of these teams? _____

d. How do you prefer to deal with your employees?

1. one-on-one
2. on a group basis

e. How often do you find the formal policies/procedures helpful in performing your job?

1. often
2. sometimes
3. rarely
4. never

f. Please rank the source of your knowledge/information concerning new equipment or processes within your area (List 1 - 6 where #1 is highest).

your manager
engineering support groups
company-sponsored training programs
outside courses or training programs
your employees
other (please specify _____)

g. Have you participated in any supervisory development program? Yes ___ No ___

If yes, to what degree has it helped you in performing your job?

1. a lot
2. some
3. only a little
4. not at all

6. THE FOLLOWING QUESTIONS CONCERN YOUR INVOLVEMENT WITH CROSS-SECTIONAL TEAMS

a. As a supervisor, to what extent do you agree with the following statements concerning the Teams?

1.	a waste of time	1	2	3	4	5	6	7
2.	helpful to me personally as a supervisor	1	2	3	4	5	6	7
3.	a way for employees to get around my authority	1	2	3	4	5	6	7
4.	helpful for employees to express their ideas/suggestions	1	2	3	4	5	6	7
5.	beneficial to company	1	2	3	4	5	6	7
6.	improves productivity	1	2	3	4	5	6	7
7.	an extra burden on me as a supervisor	1	2	3	4	5	6	7
8.	a way for employees to get out of work	1	2	3	4	5	6	7
9.	a program that should be continued	1	2	3	4	5	6	7
10.	improves the morale of my work group	1	2	3	4	5	6	7
11.	increases the status and authority of my job	1	2	3	4	5	6	7
12.	improves communications between upper management and the shop floor	1	2	3	4	5	6	7

6. a (continued)

13.	improves communications between me and my management	1	2	3	4	5	6	7
14.	improves communications between me and my employees	1	2	3	4	5	6	7
15.	increases my ability to have one-on-one interactions with my employees	1	2	3	4	5	6	7
16.	causes conflict among employees	1	2	3	4	5	6	7
17.	people respond better to my work requests as a result of their participation in teams	1	2	3	4	5	6	7
18.	teams get things accomplished that normal channels do not	1	2	3	4	5	6	7

6. b. Participation in teams is voluntary for supervisors. Y __ N __

c. The supervisors workload has been altered to accommodate for time spent in team activities. Y __ N __

d. Supervisors have received special training for involvement in teams. Y __ N __

e. The performance appraisal system has been modified to include team related activities. Y __ N __

f. It is clear what changes are expected of supervisors due to the team approach. Y __ N __

g. Manager's above first-line supervisors changed their behavior as a result of the team approach. Y __ N __

h. On balance, as a result of teams, supervisors have

____ lost

____ no change

____ gained

i. At what point were you involved in the change process?

___ communication after implementation started

___ training after implementation started

___ communication prior to implementation

___ training prior to implementation

___ inputs asked for by design committee

___ member of design committee

___ other (please specify _____)

j. Is there a clear direction to where the change process is headed? Y ___ N ___

k. From whom is the direction coming? _____
From whome should it be coming? _____

l. Summarize your description of the change process direction.

m. Workers sometimes have a say in decisions at their workplace, even though they are not supervisors or managers. How much say do you think workers <u>should</u> have about....

		Complete Say	A Lot Of Say	Some Say	No Say At All
1.	Safety equipment and practices?	4/__/	3/__/	2/__/	1/__/
2.	How the work is done?	4/__/	3/__/	2/__/	1/__/
3.	The wages and salaries paid?	4/__/	3/__/	2/__/	1/__/
4.	Hiring or layoffs?	4/__/	3/__/	2/__/	1/__/
5.	The particular days and hours people work?	4/__/	3/__/	2/__/	1/__/

Chapter 4

Neptune Products

Plants A, B, C and D

This chapter begins a series of case studies describing processes used to increase worker involvement. This first case outlines the efforts of one company which successfully implemented quality circles throughout four plants but failed to sustain the programs in the face of changing priorities. The quality circle experience did, however, lead to a less structured quality of worklife program in one plant. But, as will be discussed, this effort was short-lived.

This company is representative of many organizations within the United States. It is not a company with a history of innovation in human relations. Its industry is facing a declining market, the labor-management climate is accommodative on the adversarial side, and the organization is managed in a fairly traditional, autocratic manner. Therefore, it is a good example of a company taking initial steps toward increasing the involvement of its workforce.

Plant Characteristics

Neptune Products, a division of Zeuss Industries, Inc., markets power generation equipment on the world market. However, their entire manufacturing operation is housed within four plants all within a 25-mile radius on the West Coast. Due to their close proximity and

similar organizational structure, all four plants are discussed simultaneously with reference to unique characteristics of each plant as appropriate. Table 1 outlines the characteristics of each of the plants. First line supervisors at Neptune are generally referred to as foremen.

TABLE 1
NEPTUNE PRODUCTS
PLANT CHARACTERISTICS

	PLANT			
	A	B	C	D
Total employment	540	475	350	800
Hourly employment	400	300	200	350
Age of facility (years)	55	55	15	7
Union	yes	yes	yes	yes
Manufacturing technology	machining	fabrication	fabrication	assembly/ shipping
Organizational structure:				
level 1-Plant Manager	1	1	1	1
level 2-Area Managers	5	3	1	2
level 3-General Foremen	2	1	3	4
level 4-Foremen	27	13	11	20

The hourly workforce in all four plants is represented by the same local of a large international union with all work rules and personnel practices being identical in the four plants. The contract provides for intra-plant transfers for both promotions and layoffs based on company seniority which further creates a homogeneous workforce despite physical separation. Over the years fluctuations in Neptune's market have led to major swings in employment levels to the extent that at one point in 1975-76, the total hourly employment fell below 500 across all the plants.

Corporate Philosophy

For many years, Neptune was a very paternalistic organization. But as the organization grew, the division lost much of its family atmosphere. Over the two years prior to this research, Neptune experienced a significant turnover of top-level managers. The transition started when the President of the division was replaced by a young, highly educated "outsider". Shortly thereafter, he replaced many of his key operating and support staff with former colleagues from outside the company. At the time of this research, the longest tenure senior executive was the Vice President of Human Resources who has been there for three years.

Neptune is a very top down decision making organization. The style of the new president was described as "directive participation". This starts with an operating committee which is comprised of the top fifteen managers within the company. They meet regularly to discuss business issues, problems, and plans. The committee was described as a concensus mechanism. However, many decisions are not brought to this committee and are reserved for the president and his immediate staff. Many human resource issues such as hiring, firing, staffing, etc. fall in this special category. There is also a management council which is comprised of the top fifty managers within the division. This is primarily a one-way communication vehicle used to stress any new directions for the organization, such as major changes in management policies or practices.

Plant Structure

The main difference across the plants is the manufacturing technologies which lead to slightly different skill levels within each plant. However, most workers within the company are semi- to highly-skilled machinists. The plants are organized as follows:

> Plant A is a machine shop. It is also responsible for the maintenance function for both Plant A and B as well as the executive offices which are located within the complex.
>
> Plant B is a fabrication and welding shop. In addition, it houses a design shop which produces all the tools and dies for the other facilities.
>
> Plant C, the smallest of the plants, is primarily a fabrication shop but it also houses a small machine shop for plant maintenance. Because many of the jobs at Plant C are entry-level and less desirable, 70% of the workers are relatively new. In addition, if there is a reduction in the workforce at one of the other plants, Plant C is usually the hardest hit by employees "bumping in".
>
> Plant D is responsible for the final assembly and shipping of the product. Due to the high technology of the business, a large number of product engineers have offices within the plant to be close at hand if any problems arise or design changes are to be made. Likewise, due to a need to know all the intricacies of the packaging instructions, the supervisory job is much more complex and requires at least one and one-half years to learn.

Previously, there were four levels of management within each plant - plant manager, superintendent, general foreman, and foremen. Currently, in an effort to place total responsibility for a particular product or process under one manager, Neptune is in the process of introducing an area manager concept where an area manager, reporting directly to a plant manager, has responsibility for directing and supervising the foremen as well as the support functions of

manufacturing engineering, production control, etc. Due to the transition, there is a mix of both general foremen and area managers in each plant.

The introduction process for the unit concept was designed to be as participative as possible. A manager in a recently formed unit described the process as follows:

> When the plant decided to go to the unit manager structure we decided to let everyone volunteer for the unit they wanted to be in. We were concerned that this would not run smoothly but, as it turned out, most of the workforce chose the area they would probably have been placed in if we had assigned them. Out of about three hundred hourly employees only twenty-five were not put in the unit of their first choice. However, this participation did not apply to the foremen. Because there are so few foremen, we felt that we had to assign them to the proper area. We asked the foremen which area they would like on a first, second, and third choice, but the actual placement was done in "the first annual foremen draft" in the plant manager's office.

Thus, the process focused on involvement of those affected excluding the foremen. Due to perceived business needs, foremen were expected to, and did, accept their new assignments. This was not an issue but is mentioned as a prelude for supervisory involvement in the worker involvement programs.

Worker Involvement Programs

The current emphasis on worker involvement programs within Neptune began in 1975. At that point, an organizational development specialist was hired to set up a training and development group. The first

product of this group was a one-week off-site management development program which included T-groups, sensitivity training, etc. As the training and development group grew in size, they shifted their emphasis toward a total organizational change based upon the Likert's (1967) linking-pin model. The plan was to have a program in place to cross each of the four layers of the workforce: top management, middle managers, first line supervisors, and the hourly workforce. The management development program was used to cross the boundary between the top and the middle layers of management. A supervisory development program (to be described later) was viewed as the link between the first and second levels. Lastly, a quality circle program was introduced which served to cross the third boundary between first line supervisors and the hourly workforce.

Quality Circles

After a 123 day strike in 1976 an external consultant was hired to come in and recommend ways to improve the labor-management climate. Included in this recommendation was the start-up of quality circles[1]. A number of representatives were sent to Lockheed to look at their program. They brought the program back and began implementing it throughout the plants. This was under the leadership of the former president who made a commitment to give the program five years to prove its usefulness.

The initial plan was to start small and gradually increase the number of quality circles. They started with two circles and then grew

at a rate of two per month. At the end of the first year there were twelve circles and by the end of the second year there were twenty four. The plan was to get to only twenty-five or thirty quality circles and then halt any further expansion. Basically this plan continued and was achieved in the next year or so. The coordination of the quality circles was done by two facilitators who reported to the training and development department. These were full-time positions responsible solely for setting up, monitoring, and supporting the circles.

When Neptune first started the quality circle program, there was a discussion as to whether or not the circles should be structured or unstructured. As a result, the training and development department started a pilot or experiment with both approaches. After a six-month evaluation it became obvious that the unstructured sessions were basically "bitch sessions" where the foremen ended up with a shopping list of things to do and the employees were not really involved. On the other hand, the structured circles created a common vocabulary among the individuals participating and the people actually worked on their problems. As a result, the foremen were shown a new way of supervising, and the decision was made to continue with structured circles. The manager of training and development described the process as follows:

> The structure allowed circles to survive even though many of the people did not understand what they were really about. The organization is like children who are learning something and need the structure before they can totally understand. Once the children have learned, though, the structure becomes a constraint and must be thrown off to provide for further

> learning. This is exactly what happened with quality circles. They were excellent for the first couple years until the structure became too constraining, at which point many problems developed.

The process of implementation included formal training sessions for facilitators, who then trained foremen. Circle membership was voluntary except for foremen, who were usually assigned the role of circle leader. In some select cases they did volunteer, but the majority were "volunteered" by their manager. In two cases, foremen, appraised to be marginal performers, were required to start circles as a performance improvement activity. In these cases, the circles failed and both foremen were eventually removed from the job. Although their removal was not tied directly to the circle activity, their failure was considered the "last straw", and many of their peers associated their removal directly to the quality circle program.

Quality circles were viewed as generally successful for approximately 3-4 years. However, as economic conditions tightened and upper management changed, support of the program dwindled. This coincided with the loss of both full-time facilitators, one retired and the other one left the company. The training and development group, in charge of the quality circles, was disbanded and one of the OD consultants was assigned to a new QWL program being introduced in Plant C (to be described in the next section). The coordination of the quality circles was then decentralized and the responsibility for circle activity was left to the line managers.

At the time of this research quality circle activity was all but

non-existent, except in Plant D which had some minor activity. However, it would appear that in many ways the quality circle program had served its purpose. Besides setting the climate for the QWL program at Plant C, it also set in motion a gradual change process in the other plants. A number of employee committees have since been established to evaluate suggestions, select new equipment, and help lay out rearrangement plans within work areas. In addition, several of the unit managers hold discussion or "rap" sessions with small groups of hourly employees. (These groups do not usually include foremen, but in most cases the foremen are given feedback on the discussions.)

In retrospect, managers and foremen cited three main problems with the quality circle program:

1. Employee expectations were too high that they could change things outside their immediate work area. Many spent too much time on issues for which they were not trained, and they did not, or could not, get engineering support early on in the problem solving process when they needed it. As a result, many circles worked on issues outside their expertise.

2. The program was too structured. No one was allowed to deviate from the canned program, which many viewed as constraining.

3. There was a general lack of management support. Manufacturing management was unable, or unwilling, to provide the dollars or people to support the program. In addition, quality circles were viewed to be a human resources, rather then line management, program.

In spite of these shortcomings, the quality circle program did create the stage for further worker involvement. This resulted in the implementation of a quality of worklife program in Plant C.

Quality of Work Program

In early 1981 the decision was made by the executive staff to implement a quality of work life (QWL) program on an experimental basis. Plant C was chosen because of its size and the communication processes already in place. In 1978, a new plant manager and superintendent started having foremen meetings with their people on a regular basis. In addition, as the plant manager stated, "My management style is 100% open door and over a one and one-half year time period I have had personal interviews with all of the hourly employees."

As the first step in designing the program, a planning committee composed of the union leadership and the plant manufacturing staff was formed. The union stated that they did not want a traditional top-down program and requested that management, especially the foremen, not be communicated to or trained prior to the rank and file workforce. Management acquiesced and little communication was provided to any employees (both management and non-management) other than there would be training held for anyone who might be interested in a program designed to improve the quality of their worklife.[2]

Volunteers were solicited for two days of intensive QWL training. This training included exposure to what other companies were doing and the format of their programs, group processes and skills training, and directions on how to proceed if any of the employees should choose to

participate in the program at Plant C. The directions were as follows:

> If any of you are interested in forming a QWL team, all you need to do is find three or four other employees who are also interested. These other employees need not report to your foremen or be within your function in the plant. A foreman or any other member of management can be a member but a team can also be comprised of only hourly employees.
>
> Once a group has formed, you must talk with the QWL facilitator and inform him of your team's membership. He will then give you some suggestions for proceeding. You must also contact your foreman and decide upon a mutually agreeable team meeting time. You are granted one hour per week to meet to discuss whatever topic you desire, with the only exception being any contractual issues negotiated between the company and the union. You do not have to tell any member of management what you are discussing, you do not need to have any member of management present, and you can meet for as many weeks as you desire. However, we recommend that you allow the QWL facilitator to work with your team to hammer out any group problems. When you have finished discussing an issue you can either disband or you can make a recommendation or presentation to whomever you please within the plant.

Participants of the initial training were solely volunteers and mostly hourly workers. One or two foremen did volunteer, but they were not given any preliminary information. As such, those foremen who attended were given the same identical training at the same time as their subordinates. For those foremen who did not volunteer, knowledge of the program came from either their peers or their subordinates who had attended the training.

The coordination of the program was the responsibility of a QWL facilitator, who conducted the training, helped the teams in getting started, and monitored their progress. In addition, the QWL facilitator helped steer the teams away from working on specific

issues, such as personality conflicts. Many of the QWL suggestions which did come up were ideas which had been raised before, presented to the foremen, and the foremen were not succeessful in getting them accomplished. However, even though some of these ideas were now getting attention just because they were suggested by a QWL team, the foremen did not appear to be negative towards the program because they saw things getting done which were also beneficial to them. Two such examples were the building of a tool crib so that the foremen would not have to run to the other end of the building for tools and supplies and the posting of a schedule board which communicated to all employees the upcoming weekly and monthly production requirements.

Team suggestions were usually presented to the plant manager by the team in a meeting set up directly by one of the members with the plant manager. After a presentation, the plant manager would decide if the recommendation had merit. If it did, he would usually approach the foreman responsible and direct him to carry out the recommendation. In addition, the plant manager issued a newsletter covering most of the projects which had been presented to him, and he held a monthly meeting with the foremen to pass on what was going on in the QWL groups. However, there was no formal structure to provide feedback to individual foremen whose employees were involved in a team. They had to rely solely on their personal contacts with the QWL group members to find out what was being discussed and what, if anything, was being presented to the plant manager.

Recently, realizing that the foremen had been left out of the

process, the plant decided to try to involve the foremen more in the QWL teams. One team which had been approached by the QWL facilitator to include a foremen refused, saying,

> A foreman is always a foreman and he would not be able to be as open in a meeting. He would always be concerned that what was said might be carried back to the shop floor. In addition, the foreman would probably end up being the leader only because of his position and, therefore, he would not be viewed an equal member of the team.

The foremen who had been involved in teams supported this belief. They noted that although they had tried to be just members of the teams, more often than not the team members turned to them as a leader or as the person to do things. In addition, the foremen were concerned that placing them into the teams would be reverting back to quality circles.

At the time of this research, approximately 200 employees had gone through the training. Of these, about 90 had formed into groups. Most of these employees were hourly or non-exempt salaried employees (only five or six of the managerial or professional workforce had volunteered). However, a severe reduction in the workforce had just occurred. This broke up most of the teams and only six teams were still in existence. Management was waiting for the layoffs to be complete before re-initiating the training process.

First Line Supervisors

Before reviewing supervisory attitudes and reactions toward the quality circle and quality of worklife programs, it is important to

first understand their backgrounds and experiences. Due to the technical nature of the product, Neptune places a high emphasis on technical competency at all levels of the organization, including the first line of management. This has meant that one of the key prerequisites for selection as a foreman is knowledge of the product and manufacturing process. Hence, the most skilled workers are usually selected to be foremen.

In a rapid build-up following a severe layoff in 1975, the emphasis shifted slightly toward recruiting college graduates to fill some of the openings in an effort to develop future manufacturing managers. In addition, there was a scarcity of internal candidates with necessary skills. This led to a slight shift in the composition of the first line supervisory ranks. This was described by one area manager as follows:

> Up until the mid 1970's there was prestige and recognition for the career foreman who had practical experience, technical expertise, and a "thick skin". This changed with the placement of college recruits in training positions of only six months to a year.

However, even with this new emphasis, the majority of the new foremen were promoted from within the hourly workforce.

About two years ago, the new president reviewed all individuals in the management ranks and concluded that the foremen did not have a professional point of view and were not highly enough educated. Therefore, he sent out a directive that all people promoted to the

foremen ranks were to have a college education. The vice president of manufacturing responded by committing that half the foremen would be selected from internal candidates with some college education, while the other half would be external college graduates. After a few months of experience, they found that their best foremen were the former group, those hired from the shop who were either working towards a college education or had already received one, because of their product knowledge.

Table 2 gives a profile of the current first line supervisors. As can be seen from the table, the majority of the current supervisors do not have a four year college degree. But the changing emphasis has created a split within the ranks between the "have's" and the "have not's" and some resentment between the groups.

TABLE 2
NEPTUNE PRODUCTS
FIRST LINE SUPERVISOR CHARACTERISTICS
(Sample size in parenthesis)

	PL ANT				All
	A (26)	B (12)	C (9)	D (19)	Neptune (66)
average no. of subordinates	19	18	15	17	18
% new on job (<1 year)	8	0	13	11	8
% career FLS (>10 years)	39	25	13	26	29
% under 35 years of age	15	33	44	16	21
% over 50 years of age	39	42	11	32	33
% promoted from hourly job	71	58	88	58	64
% with 4 year degree or more	12	25	13	16	15

When managers were asked whether or not the first line supervisor's job had changed over the years, the general consensus was that the basic requirements of the job - supervising the hourly workforce and meeting schedule, cost, and quality requirements - had not really changed. What had changed, though, was the workforce and a need for supervisors to be more professional and have better people skills. This led to the development of the supervisory development program.

Supervisory Development Program

About three years into the quality circle program, upper management looked at the relations both between management and the hourly workforce and within the management ranks and decided that there was a need to upgrade the interpersonal skill levels of the lower levels of management. One of the managers described the work environment at that time.

> It was the worst environment I'd ever seen. Foremen were constantly screaming obscenities at one another. The middle managers were no better.

As an initial step upper management began a downward communication program to define their expectations and then began acting as role models for the new behaviors. Next a supervisory development program was developed based upon the social learning theory (Bandura, 1977; Porres, 1981) and role modeling. A fifteen page survey was administered to all employees, foremen and workers, to determine what

kinds of training was needed at the first line of management.

In order to create ownership and commitment on the part of the management team, line managers were involved in the development of the program and assigned the responsibility for instructing the sessions. All foremen attended two three-hour modules per week for twelve weeks during regular work hours. At various stages, their behavior was video-taped during role modeling exercises and foremen were given critiques of their performance. In addition, they were given video-assisted questionaires to evaluate their learnings. In general, most foremen believed that the program had been helpful to them in performing their job more effectively and middle management viewed it as instrumental in helping to change the managerial style of the foremen.

First Line Supervisory View of Job Characteristics

Figure A, at the end of the chapter, provides a tongue & cheek listing of a foreman's day-to-day activities written by one of Neptune's foreman. It illustrates that a significant portion of the job is spent "go-fering" or chasing after parts, procedures, etc. rather than supervising the workforce. This corresponds with the survey response that, on average, the foremen at Neptune spend only 4 out of 8 hours in a typical day interacting with employees. In spite of this, as Table 4 shows, almost three-quarters (73%) of the foremen responded that they are satisfied with their job and 100% of them view it as important. However, there were several dimensions in which the

majority were dissatisfied.

TABLE 4
Satisfaction with Job Characteristics
% Positive Responses:5-7
(Sample size in parenthesis)

	Plant				Neptune
	A	B	C	D	average
	(26)	(12)	(9)	(19)	(66)
Job Importance	100	100	100	100	100
Company satisfaction	88	100	89	89	91
Motivation	88	92	100	79	89
Treatment by people	85	92	89	74	83
Job satisfaction	77	83	67	68	73
Satisfaction with manager	54	83	89	74	70
Manager's concern for people	62	75	89	53	69
Say on own job	65	75	44	74	67
Career satisfaction	62	83	78	58	67
Hours	58	75	56	63	62
Pay	54	83	67	58	62
Job security	54	75	44	53	56
Participation in decisions	42	58	44	37	44
Information availability	27	50	11	28	29
Rewards	35	17	33	16	26

Upon seeing the survey results, many of the foremen noted that the low scores on participation in decisions, information availability, and rewards were all tied together. As one group commented,

> At times, management seems to have a total disinterest in what the foremen have to say. They may make the motions of asking our opinions, but then they go ahead and do whatever they were planning anyway. This is particularly true on manaufacturing engineering and human resource types of decisions. When it comes to layoffs or industrial relations policy changes, we often get most of our information from the employees because they hear it from the union first.

Several foremen noted that their responses on these dimensions will probably be more postitive in a year or so when the unit concept is totally implemented. Many of the foremen in completed units felt

they knew more about what was going on and had more say in decisions within their unit. The new organization has eliminated the role of the general foreman and has made the foremen more of an equal peer with the technical and production support people.

On the issue of rewards, several foremen noted, "You only hear about the bad and rarely get thanked for the good." Therefore, it was felt that extra effort was rarely recognized. But their responses concerning rewards also focused on how little they could reward their employees. Due to the union contract, there is very little foremen can do to reward outstanding performance with the exception of a five-cent merit increase which is viewed as really insignificant in the current economic times.

On average, the four plants were relatively consistent with one or two exceptions. Plant B was significantly more positive on all dimensions, especially on participation in decisions and information availability. When a group of Plant B foremen saw the results they noted, "That's because we are pretty much one big family in this plant." In addition, the manager in Plant B is the most participative of the four plant managers and has selected area managers who emulate his style.

Plant D ranked significantly lower than the other plants on treatment by people and managers' concern for people. This was partly attributed to the large amount of overtime that is required due to assembly schedules and the overtime policy for supervisors. One of the

foremen explained the problem as follows:

> Employees who work on Sundays get paid double time while we only get time and one-half. Employees know this and it makes it very difficult for foremen to get respect from employees who know they are making more than their boss, while working the same hours.

Plant C, usually one of the more positive plants, ranked significantly lower on "say on own job". This was attributed to the larger number of general foremen per foreman in the plant. As a result, middle management is more aware of all activities within the plant, and, as one foreman noted, "They have a tendency to give more help." This has the effect of limiting the amount of discretion given the foremen on day-to-day activities.

First Line Supervisory View of Quality Circles

As stated earlier, many foremen were not given a choice as to whether they wanted to lead a quality circle. In many cases, employees were often more willing to form circles than the foremen. As a result, Neptune switched one or two foremen so that a foreman who was interested would be in an area with employees who were also interested in starting a circle. However, more often, unwilling foremen were instructed to form circles, which, in most of those cases, ultimately failed.

Many of the foremen felt that the quality circle program was poorly implemented. It was started during a period in which employees

were required to work seven days a week in addition to overtime during the week to meet production schedules. The quality circle program was viewed as just an additional headache the foremen did not need at that time. Quality circles were also part of a larger quality awareness program which required additional time on the part of both foremen and employees. Since foremen are measured on efficiency and productivity, they saw the program as making it harder for them to meet their job requirements[3]. Therefore, just like many other programs, quality circles became an additional burden for the foremen. Several managers also felt that there was insufficient training for the foremen who had received only one day of instruction.

Table 5 summarizes first line supervisory responses to a series of questions asking them to what extent they agreed with a number of statements concerning quality circles. Based upon a scale of one (disagree) to seven (agree), a response of five to seven was viewed to be agreement with each statement Considering the questions were post facto for most of the foremen in that quality circles were no longer active in their areas, the neutral to negative responses are not surprising.

TABLE 5
VIEW OF QUALITY CIRCLES
% in Agreement: Responding 5-7
(Sample size in parenthesis)

	Plant				All
	A	B	C	D	Neptune
	(26)	(12)	(9)	(19)	(66)
Helpful for employees to express their ideas/suggestions	58	83	89	68	70
Beneficial to the company	58	83	67	47	61
Helpful to me personally as a supervisor	31	75	67	58	52
A program that should be continued	42	75	56	47	52
Improves communications between me and my employees	46	67	56	42	50
Improves communication between upper management & the shop floor	42	58	22	32	39
Improves productivity	28	58	33	37	37
Improves the morale of my work group	40	50	22	26	35
Improves communications between me and my superiors	23	42	22	16	24
An extra burden to me as a supervisor	35	33	11	5	23
A waste of time	23	17	56	11	23
A way for employees to get out of work	23	17	22	5	17
Increases the status and authority of my job	16	25	22	5	15
A way for employees to get around my authority	4	25	11	5	9

A review of individual responses revealed that several foremen responded that quality circles were a waste of time but also helpful personally to themselves as supervisors. This was noted during the feedback sessions and the foremen were asked if they had possibly misread the questions. Quite a few foremen commented that there was justification for the seemingly contrary statements in that the circles were helpful because they got employees to start thinking differently about their job and generating ideas to improve it, but they were a waste of time because there was no money to implement their ideas and recommendations.

It is once again interesting to note differences across the plants. As with attitudes toward job dimensions, Plant B was the most positive on many of the statements concerning quality circles. Since the structure of the programs in each plant is identical, it appears that a major factor in the differences is in middle (plant and area manager's) managerial style, The responses parallel a subjective rank order by the researcher of the managerial styles within the plants from participative to autocratic.

First Line Supervisory View of Quality of Work Program

During an initial interview, the plant manager at Plant C quickly admitted that they had made one major blunder in setting up the QWL program: the foremen.

> We did not give the foremen any preliminary information on the program prior to the training sessions. Looking back, it's amazing that we didn 't get any initial reaction from them. But about six months into the program, they began to raise a number of issues. Not surprisingly, we had created a foremen problem because they did not know what was going on. They saw employees forming into groups to work on problems they did not know anything about.

When the supervisory issues began to percolate to the surface, the QWL facilitator decided to form a foremen's QWL team. This group began meeting on a weekly basis approximately six months before this research occurred. No formal minutes were taken of these meetings because of a pledge of confidentiality and openness, but the QWL facilitator outlined the major concerns which had been raised by the foremen.

> First, the foremen do not feel that they should have to change their style until the rank and file members change their attitude. They believe that the workers are the ones who have caused the problems and therefore, they should not have to change. Two, the foremen are suspicious, both that the workers are only in the teams to get out of the work which has been assigned to them, and, also, that the workers are trying to undermine the foremen through participation on the teams. Third, which is an unexpressed concern, is that the foremen are scared of their new role and do not know what is expected of them or how to handle the new program. The fourth concern, which is also unexpressed, is a desire for the foremen to find a way that they can do what is required of them without changing their style. Fifth, there is a threat to their authority, both perceived and real. There are now three parallel systems functioning within the plant: (1) the traditional, hierarchical power system; (2) the industrial relations contractual rules and regulations; and (3) the new QWL superstructure. During the past three or four weeks the plant manager has come into these meetings and now the organization is trying to formally address the issues of the foremen.

As with quality circles, participation in the quality of work activities was voluntary for the hourly workforce, but not for the first line supervisors. As the plant manager stated:

> We have not jammed QWL down the foremen's throat, but I have asked them if they are not positive, to be neutral. So far most of the foremen have either been supportive or neutral towards the program. However, we did have to transfer one to another area within the plant where there was no QWL activity when we found that he was being detrimental to the team in his area.

Recently, all managers within Plant C were ranked according to performance to determine who would be laid-off. The foremen viewed one of their criteria to be how well they handled the QWL program. This resulted in a negative reaction by many of the foremen because they felt that the "so called voluntary program" was now being "jammed down their throat".

As with quality circles, foremen were asked to what extent they agreed with a set of statements concerning the QWL program. (The statements were identical to those used for quality circles.) The responses in Table 6 are broken out between Plant C foremen and those in the other plants who had heard about the QWL program. One should keep in mind the timing of the survey in reviewing Plant C responses. Corrective measures had already been put in place to strengthen the role of the foremen and soothe their earlier feelings toward the program. The 67% who responded that the QWL program had improved communications between themselves and their superiors were most likely reflecting on the very recent attendence of the plant manager in the foremen's QWL meetings. During the feedback sessions, all foremen commented that if the survey had been taken six months earlier, the results would have been significantly more negative. Most of those responding from outside Plant C had only heard about the program through word of mouth, so their responses were based mostly on assumptions. Their less positive responses are probably partially a result of "a fear of the unknown".

TABLE 6
VIEW OF QUALITY OF WORK PROGRAM
% in Agreement: Responding 5-7
(Sample size in parenthesis)

	Plant C (9)	Others (21)
Beneficial to company	78	48
A program that should be continued	78	38
Helpful for employees to express their ideas/suggestions	67	48
Improves communication between me and my superiors	67	33
Improves the morale of my work group	56	43
Helpful to me personally as a supervisor	56	33
Improves communication between upper management & the shop floor	44	38
An extra burden on me as a supervisor	44	29
A way for employees to get out of work	44	29
Improves productivity	33	43
Improves communication between me and my employees	33	24
A waste of time	33	14
Increases the status and authority of my job	33	5
A way for employees to get around my authority	22	20

In spite of the timing, the survey helps to illuminate several of the supervisory concerns. Although over three-quarters (78%) of the foremen in Plant C view the QWL program as beneficial to the company and a program to be continued (possibly an extension of what they had recently heard the plant manager state), only a third believe that it improves productivity. This most likely corresponds to the fact that almost half (44%) of the foremen believe that the employees use the program as a way to get out of work. As one group of foremen commented,

> The goof-offs get into the teams, just sit there and don't participate, and there are no guidelines for them to be weeded out. It was hoped that, at some point in time, peer

> pressure would do that, but so far it has not worked because of the union and a feeling that no one wants to kick anybody out. This has had a negative effect on those who are really interested in participating to the point where the good employees have asked out of the teams. In addition, many of the good workers have chosen not to go through the training. When we ask them why, they say, "I've already got quality of worklife, so why should I go through it?" As a result, most of the people in the teams are the problem employees, those who are the first to run to the union with a grievance.

Another major issue raised by foremen was a loss of their power or authority. Although one third responded that the program had increased their status and authority (again indicative of the recent corrective actions), the response by the foremen outside of Plant C (5% positive) is more in line with comments made during the interviews by all levels within Plant C. This was recognized as a major issue early on by managers, foremen and workers. As one steward noted,

> Foremen don't dislike QWL because it's taking their power away because they never had any power to begin with. The problem is that QWL points out this lack of power more directly. Another factor is that the employees can now go directly to the plant manager and bypass other levels of management if they have some concerns. However, foremen can't really let anyone know their true feelings because they have no security like seniority to protect them. They just have to follow upper management directives.

Much of the perceived loss of power stemmed from the structure of the program and the initial instructions given to employees on forming teams. The foremen felt as if they had no control whatsoever over their employees relative to QWL activities. Two of their comments help to put this in perspective.

-When the program first started, no communication was given

> to us. We were often told about QWL through our employees who were forming teams. There were times when the employees were told by the facilitator, "If your foreman gives you any trouble, come see me." When we asked our people what they were doing they would throw this statement up in our faces. When one foreman approached three of his employees at the coffee machine after the shift had started, they stated, "Hey, we're talking about quality of worklife and you can't stop us."
>
> -Management has been trying to correct their errors from earlier but it's too late. Our authority is already gone. There is this "sacred ground" between the facilitator and the shop. The facilitator had told all the employees that, "If your foreman gives you any problem, just come and talk with me. My door is always open."

Several of the hourly employees interviewed noted that in the past year or so supervisors have become more authoritarian and have become more stringent in their disciplinary actions. This was substantiated by the industrial relations director who further noted that the grievance load had increased in Plant C while declining in the other plants. Several employees attributed this to the reductions in manpower which left fewer employees per supervisor. This created closer supervision stemming from increased pressure from upper management since middle management had not been reduced proportionately. However, another explanation for increased disciplinary action may be a semi-unconscious response by the foremen to exert whatever power they do have to compensate for their perceived loss of authority through the QWL program.

Conclusions

As described throughout this chapter, Neptune has been experiencing significant change during the past few years. At the time

of this research, much of the dust had yet to settle from the most recent changes in upper management and there was quite a bit of uncertainty and stress as to exactly what direction the organization was heading. Many programs, such as quality circles, had been put in place by former leaders and were receiving less emphasis. The layoffs had put the quality of worklife program on hold and its future had yet to be decided.

But throughout all this turmoil, major steps have been made toward greater involvement of the hourly workforce in a previously adversarial culture. As noted earlier, the supervisory development program helped to improve the interpersonal skills of the foremen and the quality circle program laid the ground work for several less formalized worker involvement activities. But in most cases, the foremen have not been made a player in many of these committees or participative processes. Repeatedly, throughout this chapter, foremen were left out of both decision making and the involvement activities, such as the establishment of the new units, the implementation of quality circles, and the design of the QWL program. As several foremen stated, "They ask for our opinion and then ignore it."

It does not appear that most of the foremen were conceptually opposed to quality circles. However, because management failed to provide support for the program, foremen became reluctant to encourage workers to participate in the circles. Without support, there was no quid pro quo. That is, there was no exchange. Employees could generate ideas, but the foremen had no way to reward them.

Under the QWL program, the facilitator was put in as a intermediator between the foremen and the workers. Also, the teams go directly to the plant manager, by-passing the foremen altogether. As such, the foremen lost their control over information and problem solving, two of their key reciprocal mechanisms. However, although the foremen could regain some of that control by getting more involved in the QWL teams, they are reluctant to do so. They argue that that would be reverting back to quality circles with the foremen as the leaders of the teams. Further questioning reveals a fear of being left supporting QWL without the management support to back them up, as was the case with quality circles. If that should happen, they would loose additional credibility with their employees because they could not carry through on the team's recommendations. In essense, they would fail to carry out their part of an exchange, generation of ideas for improved quality of worklife.

The QWL facilitator also noted that the foremen don't feel a need to change until the workers do. This, in the purest sense, is resistance and also creates a circular effect. Unless the foremen volunteer for the teams, they do not know or have any influence over what occurs within the teams. When the foremen have no control over or knowledge of the team activities, they perceive a loss of authority. This leads foremen to try to regain authority through bad-mouthing the program and not encouraging employees to volunteer for the teams in hopes that QWL fades away through lack of participation. Thereby, supervisory non-support ends up as an indirect destructive force for the QWL program.

The recent foremen problems raised through the foremen's QWL group at Plant C have now heightened the awareness of upper management to the supervisory issues associated with worker involvement programs. Upper management now recognizes that they left the foremen out of the process. They also readily admit that lack of management commitment and support lead to the demise of the quality circle program. The question for the future is whether they have learned from their experience.

Epilogue

Since the time of the on-site research, the quality of worklife program has been phased out. The program was never able to rebound after the layoffs, primarily due to union opposition following a local election of new officers who had not favored the effort[4]. Since that time, efforts have shifted toward introducing a quality analysis program (similar to quality circles) for management personnel only and beginning general supervisory training on worker involvement programs.

Footnotes

1. The quality circle program at Neptune followed the structure and format of the design prescribed by most consultants in this area. For details and description of the process, see Juran (1967), Amsden (1976), or Reicker (1978).

2. During a prior visit to the company, one of the quality circle facilitators had noted that there was much concern among the foremen, stewards, and hourly workers, especially quality circle members, as to what was going on in these planning committee meetings, and whether or not the quality circle program was going to be stopped. Many felt that they were being left out at this stage of the process and that the union officials and managers were just off having a good time at the expense of the company. In addition, the planning committee was formed just prior to contract negotiations, which led many employees to view it as a management ploy to get the union to agree to their terms at the bargaining table.

3. There was no budget for quality circle activities and whatever time was spent in meeting had to go into overhead expenses. This in turn hurt their efficiency or utilization measurement, their number one performance criteria.

4. Although there had been no formal agreement made with the union, the plant committeeman was one of the most active supporters. In addition, several of the local leaders, along with eight members of management, had attended an FMCS labor-management seminar on QWL, which had been paid for by Neptune. This had been viewed as the first step toward reaching some sort of formal contract language. However, after the local elections, the new group of officers were not interested in pursuing the program and began handing out leaflets condemning participation in it.

FIGURE A
"IT'S MY JOB"

The items on the following list are tasks which Neptune expects each foreman to perform during each work day. There are some items listed that may not be done every day, but certainly only due to the unpredictable nature of the job. We continually review what didn't happen last week, while this week is falling apart around us. It's very seldom that any foreman leaves work with the feeling he "got the job done". In review of these tasks, you should note that there is not time spent training people, promoting better morale or investigating work simplifications and cost reductions.

1. Research lost labor hours
2. Written response to low performers 40% or below
3. Discuss performance with employees
4. Give 16 week performance reviews
5. Record daily attendance
6. Maintain yield charts
7. Turn in departments micrometers for calibration
8. Update bulletin boards
9. Set-up quality audits for 1st and 2nd shifts
10. Research warning notices that were generated 2 to 3 months ago, determine cause and employees involved, give written response
11. Monitor key facilities charts throughout the day
12. Walk maintenance work orders in to Maintenance Office
13. Maintain AM - PM schedules for critical shortage items
14. Take ass-chewing for things that didn't go per plan on 2nd or 3rd shift
15. Special assignments that take the foreman out of his department
16. Attend meetings of all kinds
17. Interface with all the people who have a "Hot Job" to run in department
18. Review daily labor cards
19. Fill out sick leave requests
20. Turn in vacation requests
21. Check on status of tools turned in for repairing
22. Submit transfers and check eligibility for employee shift change
23. Establish machine priority for other shifts
24. Fill out purchase requisitions for tools for department
25. Process and check status of purchase requisitions
26. Troubleshoot jobs with producibility problems
27. Relate specific problems with floor M.E. and implement corrective action
28. Give advice to employee to improve productivity
29. Follow-up on advice given to employees
30. Research information required to fill out PRM instructions on back of W/N.
31. Look for lost fixtures and details
32. Take care of tasks assigned as a result of quality audit
33. Try to get jobs with poor time standards changed with area I.E. (only 2 I.E.'s assigned to entire machine shop)

FIGURE A (continued)

34. Documenting why hot jobs don't get done on time. "C Y A" example: Down to Maintenance 1 hour, waited for another part to be line flow to machine, 2 hour, out of the correct cutter, 4 hours, etc.
35. Ask operators for weekend overtime; go back around with boss to beg them to come in to work overtime
36. Get ass chewed because so many employees are absent Monday and Tuesday that they can't run all the hot jobs
37. Put hot jobs up on facility not called out on O.I.S. to meet schedule
38. Catch hell because of low efficiency and jobs running on wrong machine
39. No matter who you need for assistance they are generally in a meeting
40. Keep overtime records accurate and up to date, maintain 36 hour spread with Sunday overtime requested (can't charge hours after Thursday)
41. Spend time convincing Maintenance that the bad part was a result of machine malfuction and not the operators fault
42. Go over to QCE office to get department responsibility charge changed because parts are made O/V or in another department
43. Interview employees on up-grade requests and new-hires
44. Fill out daily carry/over sheets
45. Correct rejected labor for all shifts
46. Work with Area Controller on schedule (where else can we run this job?)
47. Review the following reports:
    a. Daily and weekly labor reports
    b. Low efficiency
    c. Production employee effectiveness summary
    d. Quality control bulletin
    e. Delinquent precision tool list
    f. Quality audit schedule
    g. Down machine report
    h. Scrap report
    i. Rework report
    j. Weekly summary
    k. Hot lists
    l. Thruput accomplishments
    m. W/N reduction report (How many?)
    n. W/N Dollar reduction plan
    o. High dollar W/N report
    p. Accident frequency report
    q. Quality performance machine
    r. Weekend overtime requirements
    s. Performance planning and measurement system
    t. Critical facility candidates
    u. Thruput accomplishments - machine
    v. Weekly critical machine performance
    w. Quality awareness audit/worksheet
    x. Direct labor manpower status
    y. Inter-Office memos

FIGURE A (continued)

48. Union problems: grievance hearings - step 1 and 2, also the filling out of supervisor grievance logs
49. Assigned to cover some other department plus his own
50. Sit in on disciplinary discussions with other foremen
51. Contact tool and cutter grind for quick turn around of dull cutting tools
52. Check tool fixtures for condition and green tag for delivery to stores
53. Pass out pay checks
54. Monitor vacation schedule
55. Sign each requisition for drills
56. Check that set-ups are made correctly
57. Contact other foremen to get work run in his department in order to get more work for his department
58. Monitor the return of micrometers each day to the cabinet
59. Keep department clean
60. Submit work orders to have safety items corrected
61. Have inspector write W/N for discrepent parts
62. Sign department and cause code on W/N's
63. Review with rework operator what the rework paper requires
64. Look for basic gages to return to gage so they can build gages for jobs coming up next on machines
65. Take care of any assignments given them by the General Foremen

Chapter 5

Paraphernalia Products

Plant E

This second case is also a chronology of a introduction of a quality circle program. However, the management climate is distinctly different from Neptune. Although Plant E is the first of a series of plants within Paraphernalia to experiment with quality circles, the plant had good relations with its workforce at the time quality circles were implemented. Unlike Neptune, where quality circles were used to improve labor-management relations, Plant E used quality circles to continue a change process which had begun several years earlier.

Plant Characteristics

In 1957, Paraphernalia Products, a multi-national corporation, opened Plant E in the northern hills of Georgia to produce molded metal products. Table 1 highlights the plant's key characteristics. First line supervisors in this plant are generally referred to as foremen.

TABLE 1
Paraphernalia Products
Plant E Characteristics

Total Employment	1600
Hourly employment	1300
Age of facility (years)	25
Union	no
Manufacturing technology	fabrication/assembly
Organizational structure:	
level 4 - manufacturing manager	1
level 3 - operations manager	1
level 2 - unit managers	6
level 1 - foremen	26

At the time that Plant E was opened, the majority of Paraphernalia's manufacturing locations were unionized. In accordance with corporate philosophy, most of Plant E's policies and practices were designed to be equivalent with those in the unionized facilities. Although there is a totally open door policy where employees can go into any office they please, there is also a fairly traditional grievance procedure starting at the first step with the foremen (but stopping short of arbitration). The wage policy at Plant E is to follow structural changes negotiated by Paraphernalia with their national unions. Currently, there is a straight day work pay structure, but the plant is beginning to investigate implementing some type of gain sharing program.

Being located far from corporate headquarters, Plant E has been allowed to develop much autonomy. This has resulted in an orientation focused on keeping the workforce satisfied in a rather paternalistic way. Due to a change in upper management, there is a concern that much of this autonomy will soon be taken away and new policies and procedures will be forced on them to focus more on business systems and

less on people.

Evolution of Plant Practices

Plant E, opened as a nonunion facility, went through a series of closely contested union campaigns in the 1960's. The last campaign, in 1968, was won by the company by a vote of 51-49[1]. After that election both the manager of manufacturing and the personnel manager were replaced. The new management team found very poor management credibility, particularly at the first line of management. The personnel manager who was assigned the task of turning the situation around described the plant as follows:

> When we came in 90% of the communication to employees was anti-union, including name calling and making every issue a company versus union issue. The primary source of communication was through a plant newspaper, a management newsletter, and through roundtable meetings held by skip level managers. The company was always viewed as "Paraphernalia elsewhere" and never viewed as the foreman. Employees felt that the foremen didn't speak for the company.
>
> To turn the situation around we edicted that there would be no more name-calling and no more anti-union talk. We decided to change the company versus union feeling to more positive business communication. In this connection, we began communicating constructive reasons for losing a contract as opposed to negative things that will happen if you become union. We funneled all this communication through the foremen. We decided that the question of liking or disliking the company was an issue of the status of the first line of management. If employees felt their foreman had status, then we believed that they would feel more positive toward the company.
>
> We realized we had to increase the status of our foremen through a number of mechanisms. First we told the foremen that they had the power to hire and that they would be responsible for the people they hired. We gave them a six-month probationary period in which the foremen could fire with minimal review. However, after six months the foremen

had to live with the people they hired. In fact, if during a promotion or layoff period an employee was moved to an area where another foremen did not like that employee, the employee was moved back to the foreman who hired him. This policy remained intact for about four or five years until other types of problems, such as EEO, surfaced.

We also brought the foremen in on policy changes such as layoffs or job posting. We would ask the foremen to tell us their needs and include them on a committee to rewrite policies. Then the changes in the policies would be communicated to employees via roundtable meetings conducted by foremen. The foremen, in essence, became power brokers. Also all policies were viewed as flexible except for being frozen when dealing with a specific problem. Once a problem was handled, policies could then be reviewed and changed.

We also did a lot of training but it didn't do any good. Our initial emphasis was not on changing foremen, but we ended up having to make a number of moves.

The manager of manufacturing recalled his plan of action:

When I came in the problems were primarily that of management credibility. The foremen were not viewed as boss and were reluctant to make decisions because a number of decisions had been reversed on them. My first move was to make changes in my direct staff. Next I attacked the foreman level.

Within two years, only three of the original twenty-three foremen were still on their job. We made the moves through a very progressive plan. First, I held a general meeting of all management to explain my philosophy and told the foremen that they would be responsible and held accountable for their total area. They would have the power to hire, fire, and discipline. Then I slowly made a number of moves. First I put a major emphasis on hiring graduates of the corporate management training program into the foreman job. We also started our own internal training programs for local people to be trained to become foremen. Then we either promoted or transferred many of the foremen to jobs in methods, quality, or production control. Others retired, some left, and a few were told they were no longer needed. Today none of those original foremen are in first line supervisory positions.

It is interesting to note that one of the unit managers who had been a foremen promoted during this two year period was not aware of

any major management effort to replace foremen during the years he had been in the plant. Another manager, who was aware of the game plan, stated that as far as he knew none of the foremen who were moved at that time felt like they had been pressured. He added that many were relieved to finally get out of the job. Therefore, it appears that this entire replacement process was accomplished with little resistance from, or stress on the part of, affected foremen.

Decision Making at Plant E

The foremen replacements in the 1970's began a process of change in the management philosophy. Although Plant E would still be considered a top-down decision making organization, they are beginning to take additional steps toward employee involvement at all levels. The process by which this researcher entered the plant is illustrative.

Initially, the personnel manager and the operations manager thought this research project was a good idea, but neither wanted to say they would do it without getting the other key managers to agree. Therefore, a meeting was set up to discuss the process and outcomes. The attendees at this meeting were the operations manager, his three unit managers, the production control manager, the manager of manufacturing administration, the personnel manager, and the hourly relations administrator. The session lasted for approximately two and one-half hours. Generally, it was felt that most of the participants wanted to proceed with the process and towards the end of the meeting one of the unit managers motioned to do such. The operations manager

quickly spoke up and said, "I think we should think about this over the next week and get back together to decide on it." This was done in an effort to allow all present some time to think about the research process without having it forced on them.

The session described above was an extended version of a weekly meeting called the "personnel committee". This committee has been meeting since the early 1960's to discuss plant issues or concerns involving employment policies, discipline decisions, etc. Although the discussion was relatively open, it was obvious that the operations manager was the authority figure. This went along with the personnel manager's description of the plant, "People here are hard-working and very communicative with one another, but also extremely respective of authority and the normal organizational hierarchy. However, trust must be earned."

Quality Circle Program

Over the years, Plant E had tried a number of programs to build up employee involvement and commitment to the plant. Most were initiated as a result of the union drives and only lasted six to eight months. At one point, the general manager set up a series of group goal-setting meetings with the hourly employees. These worked for awhile until gradually the managers and employees began to place the foremen in the middle and the foremen began to undermine the program through non-support.

In response to a company-wide campaign to improve productivity in the late 1970's, the plant decided to hold a series of off-site productivity sessions. The first series, held in the fall of 1977, was brainstorming sessions on how to improve productivity. These were held with all members of management, including the foremen. However, they were very loosely run and no records were kept.

A year later, another series of sessions were run again brainstorming how to improve productivity. This time all participants were asked to make individual recommendations which were handed into the manager of manufacturing. Many of the foremen recommended that what was needed was to get help from the hourly workforce.

At about this same time the personnel manager and the manager of manufacturing administration had read articles concerning quality control circles. After much discussion and several trips to other companies, Plant E embarked upon a quality circle program.[2]

The first round of training included the manager of manufacturing, the two managers of operations (these two jobs have since been combined into one), two unit managers, two foremen, and a personnel representative, who was to act as the facilitator. According to one of the initial trainers, the session was "real agony" because no one really knew what they were doing. The personnel representative recalled the training session:

> During the session, the group was split between the managers on one side and the foremen and me on the other. We weren't

> concerned about the concept, in fact we really thought it was good. Our problem was that we doubted the support of upper management and were concerned that they would leave us out on a limb and not back us up.

The plant then ran a second group through the training. After some initial delay, five circles began in September of 1979. Since that time they have gradually grown to have fifty active circles thoughout the plant. The plan is now to institutionalize them at the current level and use them as a building block for further worker involvement[3].

At the time of this survey, 100% of the foremen had been involved with quality circles as either a member, leader or facilitator. However, only 62% of the foremen responded that the circles were currently active in their areas. Further analysis of the responses showed that 73% of the production foremen had active circles, while only 46% of the support foremen were currently actively involved with the program. Feedback sessions revealed that there was an additional split between components manufacturing and assembly. Circles have been much more successful in the components area where workers have more control over the content and pace of their job. The manager of the assembly area explained why circles had been less successful in his area,

> Since the foremen cannot shut down a line and the plant has decided not to let employees receive overtime for quality circle meetings, it is extremely difficult to free up people to attend a meeting. There are 32 people on a line and it takes 30 of them to keep the line running. Therefore, the foremen cannot pull people out unless they can find employees to fill-in from other areas of the plant.

> In addition, quality circle projects in this area usually involve reducing downtime or improving productivity which translates into making the line run faster. The eight or ten line members in the circle end up being resented by their peers. It's okay for the foremen or manager to improve productivity, but not their cohorts. As a result, most people on the line avoid circles and only set-up men or those employees not directly on the line volunteer.

Almost all circles, except in the clerical areas, are led by a foreman. The facilitator is often the methods engineer or someone from one of the support functions within the area. These two individuals basically control the circle activities. As one foreman stated,

> Any foreman worth his salt can manipulate the group to discuss anything he wants them to discuss.

As such, foremen have a great degree of influence over the topics discussed, which have been limited to strictly quality or productivity isssues.

In general, recognition, as opposed to monetary awards, has been used to reward employees for participation in circles. Any ideas generated through quality circles are not eligible for the suggestion award program. Initially several trips were awarded for participation in circles, including one to the corporate headquarters to present the quality circle concept to a meeting of high level executives. Currently, circle members receive a jacket for their participation and attend a quarterly presentation to upper management. As leaders of the quality circles, supervisors receive the same recognition that their teams do.

In 1981 upper management began tracking the number of quality circles that existed along with other key plant measurements. This was taken out the following year because it led to an emphasis on quantity, as opposed to quality of circles, to make the numbers look good. For example, some recommendations were accepted initially just because the managers didn't want, or know how, to say "no" to a group, even if the suggestions really were not that worthwhile. This resulted in a number of ideas, which had previously been rejected by the suggestion system, being accepted as quality circle ideas. When the initial suggesters realized this, they re-submitted their suggestions and had to be paid for them. In defense of this dilemma, the personnel manager noted that this was not too surprising since "many heads are better than one." However, when employees learned that quality circles were part of the plant measurements, a few used it as a form of reciprocity saying to their foreman, "If you don't listen to me or do something I ask, I'll drop out of the quality circle and you will look bad on your measurements."

There is currently an on-going discussion within the plant on whether to include quality circles in the formal performance appraisal system. The advocates are mostly administrative people who believe that this step is necessary to institutionalize the concept. Those fighting this step are primarily the line managers. They believe that quality circle activity should just be viewed as one of the many elements which go into categories such as "dealing with people" or "improving productivity." They also believe that formalizing quality circles as a supervisory performance measurement runs counter to the

voluntary aspect of the program. As one manager noted,

> Since quality circles are supposed to be voluntary, it would be negative to any foreman who did not volunteer. In addition, there is a great deal of difference in the responsibility areas of the foremen across the plant. Some areas have alot of good ideas, while others do not.

First Line Supervisors

In the 1950's when the plant was smaller the foremen were more like "straw bosses". In fact, many even preferred to be called "boss". At that time they reported to general foremen and acted as mini-managers. In the early 1960's, the unit manager concept was introduced and the foremen took over the role they have today. This was described by one manager as "getting the product out the door and keeping the people happy".

Table 2 outlines the current demographic characteristics of the first line supervisors at Plant E. The sample includes a large number of support foremen in the areas of maintenance, production control, and quality control. This had a skewing affect on the total number of employees per foreman. In addition, within the production area, there is a large range in span of control varying from over sixty to under twenty employees per foreman. One foreman noted that at one time he had over 100 employees reporting to him.

TABLE 2
FIRST LINE SUPERVISOR CHARACTERISTICS
(Sample size in parenthesis)

	Area		
	Production (15)	Support (11)	Total (26)
average no. of employees	46	22	36
% new on job (<1 year)	20	9	15
% career FLS (>10 years)	13	36	23
% under 35 years of age	20	9	15
% over 50 years of age	13	9	12
% promoted from hourly job	60	27	46
% with 4 year degree or more	13	27	19

The plant has continued the practice, started during the foremen replacements of the 1970's, of rotating professionals between foremen and staff functions, such as manaufacturing engineering, production control, etc. As a result, many of the current foremen have held other management jobs prior to becoming a foreman.

Foremen's Forum

About six or seven years ago, a disgruntled foreman who thought he should have been selected as a unit manager formed a group called the "Foremen's Forum". The group began meeting on a monthly basis for dinner, collected dues to cover expenses, and elected officers. The founder of the group served as the president for the first several years. Initially, those individuals who were considered to be the better foremen or "pro-management" did not belong because they viewed it as a gripe session. Gradually the meetings became more of a social event and now most of the foremen belong and look forward to the

meetings as a place to relax. The organization also makes special efforts to encourage newly appointed foremen to attend the meetings in an effort to provide moral support while assimulating to their new job.

The forum is used as a support group where foremen raise issues of common interest. They decide which is their number one concern and then invite the manager who is responsible for that area to come and speak to the group. Recently they invited the operations and personnel managers in to talk about hiring procedures[4]. They were concerned that they did not have a choice in the process and that not enough relatives were being hired. They complained that management wouldn't listen to their recommendations for hires. This once again points to the supervisory need to have control over a key exchange tool.

Recently, in an effort to keep the forum tied in closely with plant issues, a member or representative of the Foreman's Forum has been invited to sit on the personnel committee. The personnel manager was concerned that the forum was drifting too far away from the company and it was thought that putting a representative on the committee would bring them closer together.

First Line Supervisory View of Job Characteristics

As Table 3 shows, supervisors at Plant E are generally satisfied with the key characteristics of their job. This is most likely a reflection of the emphasis that management has placed on the importance of the position in the plant.

TABLE 3
Satisfaction with Job Characteristics
% Positive Responses:5-7
(Sample size in parenthesis)

	Area		
	Production (15)	Support (11)	Total (26)
Skill with employees	100	100	100
Say on own job	100	100	100
Treatment by people	100	91	96
Company satisfaction	100	91	96
Motivation	100	91	96
Manager's concern for people	100	91	96
Satisfaction with manager	93	100	96
Job importance	93	92	92
Job satisfaction	93	91	92
Participation in decisions	93	91	92
Hours	87	91	89
Job security	80	91	85
Career satisfaction	87	73	81
Pay	73	64	69
Information availability	73	55	65
Rewards	47	18	35

Recently, one of the managers asked employees in his area to fill out an evaluation form on their foreman. Although the foremen responded favorably to this idea, when they were asked to fill out a similar form for their manager, they refused saying, "If we have anything to say, we'll say it to you directly, not in a written form." This has one of two implications for the survey results. Either the foremen are very positive, as the survey indicated, or they still prefer to talk one-on-one with their manager and, therefore, felt they should not respond negatively. Based on other comments, the first reasoning is most likely the case. This was validated by one of the newer managers who had chosen a foreman assignment at Plant E after graduating from the corporate management training program.

> I chose Plant E because I wanted to be a foreman and felt that the foreman's job here was better than at any other plant I'd seen. From the interview, I felt that the foreman's job was more all inclusive, that is, I would have a larger number of people and have the prerogative to run the area as I wanted. I found all that to be true.

Since a large number of survey respondents hold supervisory positions in support functions (maintenance, shipping, quality control, or manaufacturing engineering), their responses were separated from production foremen to determine if there were any differences in their views of their jobs. Although, the support foremen were slightly less positive, the differential was very small.

The only significant area of dissatisfaction was rewards, both for themselves and their employees. Several of the foremen's comments will help to put this is perspective:

> - What do you mean by rewards? We don't have any here!
>
> -Well maybe our reward is that we survived the recent employment cuts, but other than that there is really no rewards as far as pay and promotion.
>
> -Foremen have no way to reward a good employee, especially a short service one. All promotions are based solely on seniority. The appraisal system is barely worth the p f paper it is written on. Everyone gets a good a al except for those who maybe have an attendence or disciplinary problem.

Because the foremen at Plant E were so positive, an additional analysis of the data was made by eliminating those who responded with marginal agreement to the survey statements (a response of five on a scale of one to seven). The rank order of the factors did not change

significantly for those responding strong agreement (a response of six or seven) except in two areas - managers' concern for people and information availability. Both dropped by over forty percentage points to rank at the bottom along with rewards.

The reduced score on managers' concern for people was attributed to a change in management style which occurred a couple of years ago. Prior to that time, middle and upper management did a lot of walking around the shop and talking with hourly employees. The change appears to have been triggered by a reorganization within the second and third levels of the management organization. The "papa figure" of the plant was moved from a line to a staff position, while the total number of middle managers in the plant was reduced. This left the remaining managers with less time to do everything, especially "schmoozing". This has been viewed by many of the foremen, especially the more senior ones, as a major change in management philosophy. As one foremen noted, "Attitudes of management toward the shop are the lowest they have ever been."

The other area of reduced job satisfaction was information availability. Most of the foremen attibuted this to the large number of direct reports that both managers and foremen have. As a result, no one has the time to sit down and pass on infomation in a proper manner.

First Line Supervisory View of Quality Circles

When quality circles were initially implemented, supervisory

concerns focused on three fears: 1)whether or not management would carry through on the concept; 2) extra work for the foremen; and 3) peer pressure and a fear that they would be losing their leadership role with only one vote out of eight in a circle. However, as Table 4 shows, most of the foremen are relatively positive toward quality circles today.

TABLE 4
VIEW OF QUALITY CIRCLES
% in Agreement: Responding:5-7
(Sample size in parenthesis)

	Agree		
	Production (15)	Support (11)	Total (26)
Helpful for employees to express their ideas/suggestions	93	82	88
Beneficial to the company	80	73	77
Get things accomplished that normal channels do not	80	73	77
A program that should be continued	67	82	73
Improves communication between upper management & the shop floor	73	64	69
Improves the morale of my work group	60	64	62
Improves communications between me and my employees	53	64	58
Improves productivity	53	55	54
Helpful to me personally as a supervisor	53	50	52
An extra burden to me as a supervisor	33	45	39
Increases my ability to have one-on-one interactions	33	36	34
Improves communications between me and my superiors	36	36	32
People respond better to work requests	20	45	31
Causes conflict among my work group	13	27	19
A waste of time	13	20	16
A way for employees to get out of work	20	9	15
Increases the status and authority of my job	7	9	8
A way for employees to get around my authority	7	9	8

After five years, the first issue concerning permanence has basically disappeared. However, during several of the feedback

sessions, foremen noted that much of the emphasis is beginning to fade and there is still a possibility that quality circles may just be another program which lasted a little longer.

The fear of extra work for foremen did become a reality. Although Table 4 shows that only 39% of the foremen view quality circles as an extra burden to themselves as supervisors, the feedback sessions indicated that the survey results are quite low and not truely representative of supervisory feelings. Most foremen see the burden of all coordination and follow-up activity for the circles as falling on their shoulders. This is especially a problem on the off-shifts. Since foremen are not allowed to pay employees overtime to stay over and talk with support areas, they end up doing most of the work (usually without overtime pay). Along these same lines, many feel that they end up doing many of the things that methods engineers were responsible for in the past.

Although foremen are supposedly only a one-vote member of a quality circle, they feel as though they are the ones responsible for chasing after answers from support functions and having to respond to upper management's questions as to why projects are not being completed on schedule. However, the concern over losing the leadership role has mostly dissipated. Foremen have found that they can maintain influence over the circles since most employees view them as both the formal and informal leader. This has resulted in quality circles being a vehicle for involving workers in the generation of ideas and suggestions but not a mechanism for allowing workers some say or participation in their

jobs beyond the narrow scope of specific problem solving projects.

Although many foremen just view quality circles as extra work, half (52%) of them do see quality circles as helpful to themselves personally as a supervisor. As one manager noted,

> Many foremen have found quality circles useful on two counts. First, they have found they can get things done through quality circles which would never get a high enough priority to get attention otherwise. Secondly, they use the circles as a two-way communication vehicle. They can gather information on the workforce through the circle members and they can also use the members to pass on information to their peers.

Although quality circles were billed as voluntary for everyone, including foremen, few foremen view them as truely voluntary. One foreman noted that he had initially felt that quality circles were a good idea and was about to volunteer when his manager went out and told his employees that they would have a circle. As a result, he felt caught in the middle even though he had wanted a circle. Today, the foremen view quality circles as voluntary only to the degree that they can choose to have an active or inactive circle. In addition, minutes and attendance records are kept for each meeting and sent to the quality circle director. This has created a bit of resentment among the foremen. As one foreman noted,

> A shop worker may be absent from a circle meeting two or three times without any questions, but if a supervisor is absent once, his manager will get a call from the quality circle office asking why.

Conclusions

The implementation of quality circles at Plant E can only be viewed within the total context of the changes which began in the 1970's. The foremen replacements at that time left the plant with a supervisory workforce which is very people oriented. The foremen were used to a constant stream of new programs focusing on the employees in order to remain nonunion. Quality circles were viewed as just one more program, this time focused on productivity improvement. As such, the program was not considered as a major change in management style or a new intervention. The main issue was whether it would last. Those who doubted the commitment of upper management were at first hesitant to support it in fear that they would be unable to demonstrate to their employees that the program was worthwhile. That is, the foremen needed something beneficial to employees in exchange for their ideas.

Aside from viewing quality circles as an extra burden, foremen today are relatively positive toward the program. Aside from a few who have elected not to have active circles, there has been minimal resistance at the first line supervisory level. However, circles are primarily under the control of the foremen and they have a strong influence in which problems will or will not be worked on. There is no doubt that workers are given a greater voice in problem solving, but one must question how much participation workers are really granted. To date, this does not appear to have had a stifling effect on quality circles due to their narrow focus. However, it is doubtful that more advanced forms of worker involvement programs will be accepted by the

foremen unless they are willing to relinquish some of their control as "boss".

Footnotes

1. Since 1968, there have been no additional union campaigns, no card signings, and no other type of union activity.

2. The quality circle program at Plant E followed the structure and format of the design prescribed by most consultants in this area. For details and description of the process, see Juran (1967), Amsden (1976), or Reicker (1978).

3. At the time of this research, upper management was in the initial stages of investigating a number of different types of worker involvement processes, including other forms of team activities, semi-autonomous work teams and gain sharing. It was unclear what direction they might take.

4. Other issues which they have raised in the past include the pay and promotion system for foremen.

Chapter 6

Potpourri, Inc.

Plant F

This case explores the use of less structured processes for increasing the involvement of the workforce. It illustrates an organization that has attempted to change supervisory behavior through training and cross-funtional task teams as opposed to a formal structured program. The process has been slow and there are questions as to whether it has been effective, but it is an intermediate step between the narrow scope of quality circles and more extensive forms of worker involvement programs such semi-autonomous work teams.

Plant Characteristics

Plant F, located in the Northeast, is one of the oldest plants within the Potpourri chain. Since 1940, the year it was built, the plant has produced packaged foods. The hourly workforce is represented by a local independent union. Table 1 highlights the plant's key characteristics.

TABLE 1
Potpourri, Inc.
Plant F Characteristics

Total Employment	265
Hourly Employment	215
Age of Facility (years)	40
Union	yes
Manufacturing Technology	processing/packaging
Organizational Structure:	
level 4 - plant manager	1
level 3 - production managers	3
level 2 - area managers	6
level 1 - supervisors	20*

* includes project managers who rotate along supervisors in training assignments

Corporate Philosophy

Potpourri is widely regarded as one of the best managed companies in the United States with a history of being viewed as very concerned with employee morale and commitment. There is a deep-rooted corporate culture which is instilled in all employees through an extensive socialization process. The focus of this culture is an emphasis on quality, competition - both within the organization and in the market place - and a concern for employee growth and development.

A cornerstone of their philosophy is people development. There is a very firm policy of promotion from within with entry at either the lowest level of the hourly or mananagement hierarchy, except for especially unique skills. This policy of internal promotion is coupled with a belief in continual training at every level of the organization. This begins on day one with a thorough orientation program which explains the company culture and expectations.

All manufacturing managers go through some rotational training program which can include assignments as a line supervisor, a staff supervisor, or a project engineer. Prior education may have an influence in initial assignments. However, future opportunities take into consideration the company's needs and the individual's strengths and identified areas of development. There is no distinction made between managerial and staff. Each new hire is identified as a manager, regardless of the starting assignment.

Special skills for industrial relations/human resources functions or internal organizational development consulting are provided to line personnel as needed. Any "experts" are line developed managers. As a result, all managers are aware of and hold a high esteem for behavioral science theory, especially organizational designs and development processes. Another cornerstone of the corporate philosophy is long range planning. This cultivates managers with a long range view who have an appreciation for the patience required in a change process.

Change Process at Plant F

Change at plant F, as in all Potpourri plants, is not a new phenomenon. There is intense competition between plants for both new as well as continuing business. As such, all managers are continually searching for new and more cost effective ways of managing their organizations.

One of the current production managers described the atmosphere in

the plant about twelve to fifteen years ago to be that of low morale, poor operating conditions, and poor relations between labor and management.[1] At that time the previous plant manager decided to work on team building at the plant manager/staff level with the aim of eventually creating total team decision making throughout the plant. This process was orchestrated by an internal OD staff consultant with the help of a local academic who specialized in this area. However, this process was shortlived due to a change in plant managers and the retirement of the OD consultant approximately one year later.

Like his predecessor, the current plant manager had been schooled in many of the new system techniques and wanted to apply them to Plant F. In 1974, he decided to take a process which was used to start-up a new plant and apply it to Plant F. Approximately 30 people, including the plant manager, were put through a number of sessions, conducted by a consultant from the headquarters staff, which exposed them to "open systems" theory (Beckhard, 1969) and the planning process. They spent about eighteen days in three to four day blocks trying to decide what the organization should be and how work should be done. At the end of this process they sent a second group through a similar process to build upon the first model. However, the second group did not agree with the first group's product and developed their own. This required representatives of the two groups to get together and develop a common plan. This entire process involved approximately 60 employees, both management and non-management, or about 20% of the plant.

Follow-up activities on the plans began slowly, but the actual

plan was never implemented for several reasons. First, there were interface responsibility issues which began to surface among the managers. Secondly, the process took too long. It extended over two years and the uncertainty of the outcome began to create anxieties in the plant. Three, the target seemed to be continually changing, making the process even longer. And finally, the union decided to no longer participate because of the anxieties people were beginning to express. However, they did send a letter stating that, even though they were withdrawing, they wanted to encourage the members to continue to participate. This also coincided with the elimination of an incentive pay system.[2]

About one year after the second group completed its study, the plant started up a steering committee to work on some of the noncontroversial issues that had come out of the planning groups. This committee set up six task forces of management and nonmanagement people to work on issues such as communications, training, performance reviews, input to construction designs, emergency action plans, and affirmative action.

These task forces worked fairly well, especially the one on performance reviews. They designed an appraisal format for both ongoing as well as probationary (on the job for less than nine months) employees. These reviews are conducted on a yearly basis. Recently, one department has begun conducting peer reviews where employees are reviewed by one another as well as the supervisor.

Two years ago the plant sent four area managers through an off-site one-week "open systems" training program which required them to once again design what they considered to be an ideal organization. They then visited several of Potpourri' more progressive plants which had worker involvement programs in place to see how they were organized. In a general discussion with the division manager to review what they had learned from the training, they concluded that one of the main problems with organizational change towards more participation was the next level up, the production managers. This led to a two-and-one-half day session with all production managers, area managers, and the plant manager in attendance. The main focus of these sessions was on improving their working relationships and understanding expectations for running the business. Some issues included who was responsible for managing the supervisors, frequency of feedback, communications, etc. This session also led to a regular weekly meeting of area managers. Since that time, all area managers have attended the one-week corporate workshop on "open systems".

Plant management also began about two years ago to meet regularly with the union leadership in an effort to improve the labor-management climate. The plant manager and the industrial relations manager meets weekly with the six members of the executive board to discuss general union issues. In addition, the plant manager meets monthly with the union leadership to discuss major changes in the plant and their role in these changes.

Another on-going activity is a gradual introduction of plant

principles on how to run the plant. The plant manager started with a group of eighteen to design the principles. Last year he disseminated those principles to the rest of the management organization and then to the union leadership. At each step of this process they have worked on getting mutual agreement through continual informal discussions and modification. The final product, shown in Figure 1, in now being communicated to all employees in the plant with full support of the union leadership.

Recently there have been a series of letters from corporate executives focusing on cost reduction and the need to increase the level of participative management at the plant level. The letters stated that there has been a lot of talking with not enough action particularly in the more traditional plants. The letters stated that in order to remain competitive, Potpourri, Inc. had to move ahead of the competition by improving productivity through more effective utilization of all of the human resources. This meant that plants had to look at how all employees were allowed to participate in the business. These letters were widely disseminated to all levels of the organization within Plant F. In addition, the day prior to the survey administration, the plant manager's boss was touring the plant reiterating the message.

In general, the following statements summarize how managers at Plant F view the change process to date:

-The basic change process in the plant is a pushing down of decision making responsibilities, and a shifting from a task

orientation to a more social orientation. Ten years ago, the plant was primarily task oriented. However, this change process is not well articulated throughout the organization and many supervisors may not be aware of it.

-On a plant-wide basis it is very hard to articulate what the change process is. It is really based on individual departments. However, there has been an emphasis given to giving all employees more business information, and the expectation that decisions will be made by the people with the best information. This is not necessarily at the lowest point in the organization, but by the people who have the most information. Five years ago, all communication was very confidential and provided only on a "need-to-know" basis. Today, we even share cost information with the operators. This change process has been formalized in the forming of teams.

-As far as the process that is occuring today, we really don't know where we are going. So far, it has been a searching and education process. The message has been an open effort to bring everybody into the business through communication, knowledge, and a sensitivity to people issues. We have sent people to "open systems" workshops and other new system locations to get an understanding of what is going on. However, in my estimation, we have spent enough time in looking at what we should do, and now we need to sit down and put together a plan on where we are going. This plan should be developed by the plant manager, the production managers, and key area managers.

As alluded to in the comments, the focus of the change process at Plant F has been on changing the climate within the plant through training and involvement in several cross-functional task teams in the hope that managers and supervisors become more participative in their management style. The effort has not been focused through any particular program or vehicle and the amount of overt action or emphasis on changing behaviors has fluctuated over time. Currently, there is increased awareness and communication, in part, due to the corporate letters.

First Line Supervisors

In accordance with the corporate philosophy of training engineering graduates to be the managers of the future, the majority of the first line supervisors at Plant F are college graduates with little or no work experience outside of Plant F. Upon entry to the plant, these supervisors were placed on a management development program. There are also a small number of supervisors who have been promoted out of the hourly ranks. This latter group have the potential to possibly reach the area manager level but tend to remain as career supervisors.

Table 2 summarizes the key demographic characteristics of the supervisors. This group is younger and more highly educated than those in the previous plants which results in a very bimodel distribution of supervisors within the plant.

TABLE 2
FIRST LINE SUPERVISOR CHARACTERISTICS
(Numbers represent those responding to survey)

No. of first line supervisors	20
average no. of employees	15
% with company less than 1 year	30
% with company more than 10 yrs.	30
% new on job (<1 year)	25
% career FLS (>10 years)	20
% under 35 years of age	65
% over 50 years of age	15
% promoted from hourly job	30
% with 4 year degree or more	75

All supervisors, regardless of their educational level or prior

work experience either within or outside of Plant F, are put through a very structured training program. It begins with a detailed schedule of activities starting on the first day. This schedule is sent to the new recruit prior to reporting on the job. The first three months are spent solely in training. Because the timing of supervisory hiring is tied to college graduation, new supervisors usually begin their careers in clusters. This allows for group training early on. One of the area managers, a college recruit, described his initial days at Plant F as follows:

> I was hired at the same time as three other individuals - two were college graduates and one was promoted out of the shop. The first month was peripheral training in employee relations, contract administration, safety, and benefits. This was done as a group of four in the conference room. The second and third months were concentrated on learning the area. This process was through two steps. One was training by my soon to be subordinates. In this, I worked side-by-side with the operators in the area[3]. The second part was ongoing training by the person who I would replace as the supervisor. This person was my primary trainer. The main emphasis was on getting to know the work performance of each individual that I would be supervising. In addition, my manager provided some training around issues such as budgets.
>
> In the second to the last week of the three month period, I was put on as an interim supervisor for one week. This was a takeover period, where the supervisor I was replacing stepped back and tried not to spend any time on the shop floor, but was available to me as a resource. At the end of this week, I then had an opportunity to say what additional training I felt I needed. The following week was devoted to this additional training. After that, I was left on my own as the new supervisor in the area.

As noted above this process is used for both college recruits as well as internally promoted supervisors. The first month of classroom training is identical for both, but the area training may be modified based upon the internally promoted supervisor's background.

After this initial three months of intensive training, supervisors are left on their own to learn their new job for about six months. At the six to eight month point, they usually have their job under control and are exposed to a three-day course on leadership. At the one year mark, they then attend a one-week "employee-employer" seminar focused on handling union-management issues through a series of role-playing exercises. In addition, throughout the first couple of years there are various on-site courses held for new supervisors.

New supervisors who are in the management development program are expected to rotate through the various manufacturing functions every 18 to 24 months. On the average, a college recruited supervisor can be expected to be promoted to the area manager level after about eight years. In contrast, several of the internally promoted supervisors have remained in their current job for over ten years.

First Line Supervisory View of Job Characteristics

As shown in Table 3, supervisors at Plant F are extremely positive, in comparison to the previous plants, on most job dimensions. Therefore, an additional sorting was made based upon those supervisors who responded that they were very satisfied (a response of six or seven on a scale of one to seven) on each of the dimensions. In addition, due to the large discrepancy in age, education, and experience between the college recruited and the internally promoted supervisors, responses are divided into the two groups. In all but four areas (pay, skill with employees, work planning, and information availability) the

college recruited supervisors are significantly less satisfied with their job than are their counterparts who nave been promoted out of the ranks.

TABLE 3
Satisfaction with Job Characteristics
% Positive Responses
(Sample size in parenthesis)

	Responding 5-7	Responding 6-7		
	Total (N=20)	Total (N=20)	Internal (N=6)	Recruited (N=14)
Manager's concern for people	100	70	83	64
Job importance	95	95	100	93
Say on own job	95	80	100	71
Pay	90	80	83	79
Motivation	90	80	100	71
Skill with employees	90	65	50	57
Treatment by people	90	65	83	57
Company satisfaction	90	60	100	43
Satisfaction with manager	85	65	83	57
Job satisfaction	80	40	67	29
Job security	80	70	83	64
Career satisfaction	70	45	67	36
Participation in decisions	70	40	67	29
Information availability	70	10	17	7
Hours	50	40	50	36
Rewards	50	25	50	14

The internally promoted supervisors, for the most part, have been in Plant F as either a supervisor or an hourly employee since before the change process began. As a result, they have seen a transition from a very autocratic environment to a more participative one. When promoted into a supervisory position they had a very clear expectation as to what the company and role required and what they would receive in return. As a result, their experiences should more closely parallel their expectations than the college recruited supervisors who had never worked in industry prior to joining Plant F. In addition, these supervisors, for whatever reason, have chosen to remain at Plant F for

a career and, hence, tend to be more satisfied with the company.

In contrast, the expectations of the college recruits were often shaped by campus recruiters who were trying to entice the best and the brightest to join Potpourri, Inc. As a result, the picture which was painted during the recruiting process may not have fairly represented the day-to-day pressures of a front line supervisor. Along these same lines, it is not surprising that the career satisfaction level of the college graduates is significantly lower than the internally promoted ones, again reflecting impatience with their inability to quickly progress up the organization.

Another significant area of difference between college recruits and internally promoted supervisors involves their degree of say on the job and participation in decision making. Supervisors who were promoted out of the hourly ranks know the process better than their counterparts and may even know the operation better than their managers. As a result, they have a tendency to be left alone on the job or asked for their input when decisions are made.

Both groups ranked information availability low on the list. Traditionally the project engineers have been responsible for planning the processes. In the past this was a fairly unilateral and autocratic process. In addition, many of these individuals are recent college recruits who do not know the operation as well as the operators or internally promoted supervisors. Hence, the internally promoted supervisors scored lower on information availablity. However, this is

gradually changing in that project engineers are now being encouraged to work with the departments and make recommendations rather than give edicts.

The two lowest areas of overall satisfaction (responding 5-7) were hours and rewards. In some respects these tie together. The main complaint on hours had to do with the total number of hours supervisors were required to spend in the plant. This may parallel a feeling of not being rewarded for the time spent in terms of pay and promotion. Once again, the college recruited supervisors scored significantly lower than internally promoted supervisors on rewards. This most likely links back to their unfulfilled recruiting expectations. As one the of the recruited supervisors stated:

> Most of us probably responded to that and other questions on a shortterm basis. Hopefully, in the long run all our hard work and what we have to put up with will pay-off.

First Line Supervisory Involvement in the Change Process

In light of the gradual change process which has been occuring at Plant F, many of the managers felt that some of the supervisors would not even recognize that there was a change in process. As a result, supervisors were asked to briefly describe the change process direction[4]. Table 4 lists their responses verbatim.

TABLE 4 -
Supervisory Responses to: "Describe the Change Process"

Responses which showed some understanding

-Toward team organization in the plant/supervisors becomes coordinator and resource and planner/employees take on day-to-day responsibilites
-Placing authority with those responsible for accomplishing the work through dissemination of all relevant information
-Take an existing system, modernize, streamline, improve without disrupting the work process or information flow
-Towards more participative management - more management functions taken on by line crews
-Very positive/line personnel are starting to be involved at a level where decisions can be more effective
-Decision making on lowest possible level, shared information, participative management - employees should run everyday business

Responses which showed frustration/confusion

-Confusing at this stage
-The transition period is very frustrating, especially if no clear direction is set
-Beginning (training) stages
-Searching for direction/fumbling
-Have not moved toward our change/still in the planning mode
-A change using old change techniques that upper management would not let us use (an autocratic change to participate)
-A semi-ordainment
-Here comes Disneyland
-Level

As can be seen the responses are quite diffuse ranging from a general understanding of the change process to confusion to rather negative, sarcastic comments. This wide diversity can be attributed to the varying lengths of time that the supervisory population has spent within the plant (and thus their different comparative bases) as well as several events which have occurred over the past few years. Two of the managers described the events as follows:

> -The main focus has been on sharing more information, that is, with the department manager sharing information down to the operators. When we first started this about two years ago, we forgot the supervisors. Some of them started to

> speak up, particularly those with more than two years on the job. However, many of the supervisors basically kept their mouth shut and accepted it because the aim of all supervisors is to get on first shift, which requires them to be "a good boy or girl". Since that time the company has been more concerned with the supervisors' attitudes. However, they still do have a tendency to listen more to the operators than the supervisors.
>
> -Two years ago the people development issue got out of hand concerning the supervisors. We left them out of the process and forgot to give them any special training. Production managers held meetings with all the operators and the supervisors would just have to go along for the ride. The production managers held all the control. Today, we try to deliberately get the supervisors involved. This started about two years ago in an off-site meeting with the plant manager for new supervisors. This is now a one-day session done yearly. We ask the supervisors to generate a number of questions for the plant manager prior to the session and then we take along one production manager to ask any sensitive questions which the supervisors would be afraid to ask. It used to be that supervisors were afraid to speak up, but that has changed significantly over the past few years.

In addition, the plant has recently sent six of the supervisors to the one-week "open systems" workshop and then to other plants to see how they are organized.

The diversity of views also emerges in Table 5 which summarizes supervisory responses to a series of yes/no questions concerning the impact of teams on supervisors or the organization in general.

TABLE 5
VIEW OF TEAMS
% Responding yes

	Total (N=18)	Internal (N=6)	Recruited (N=12)
Team activity is voluntary	18	20	17
Workload has been altered	6	17	0
There has been special training	39	67	25
Performance Appraisal revised	28	33	25
Expected change for supervisors	17	17	17
Managers have changed	44	67	33
There is a clear direction	33	33	33

It is interesting to note that college recruited and internally promoted supervisors were similar in their responses, except in the areas of training and manager change. These differences reflect having seen a change from the old autocratic ways of managing the plant. However, the inconsistent views within both groups reflect the difference in degree of change across the departments. It is important to note, though, that few supervisors see that there is a change expected of them. Hence, it appears that the training has not been internalized within the supervisors. The few who noted a revision in performance appraisals were most likely referring to a change in the hourly appraisal format. However, there was very little change made in its content.

Although there is a wide disparity across the plant, in areas where there has been activity, supervisors have been involved. As two supervisors commented,

> -We have had quite a bit of input into the actual implementation of teams and have been able to ask for comments from our crews. However, it is very clear that we

don't have a choice in the overall direction of the change process. That is an edict.

-Although there hasn't been a lot of clear edicts as to were we are headed, we get very clear direction if we do something which is counter to the overall direction.

In summary, a key distinction between supervisory involvement in Plant F and those in the quality circle plants is that the change process is not a specific program which supervisors are expected to do for their employees. It is a total organizational program where all are expected to participate, including supervisors. Therefore, aside from the short time period two years ago when supervisors complained that they were being by-passed, supervisors are involved in the process in those departments which have begun activities.

First Line Supervisory View of the Change Process

Since the most visible aspect of the change process over the past few months has been the formation of teams, supervisors were asked to respond to a similar set of statements as in Plants A through E, relative to teams as opposed to quality circles. Table 6 lists their responses.

TABLE 6
VIEW OF TEAMS
% in Agreement: Responding 5-7

	Internal (N=6)	Recruited (N=14)	Total (N=20)
Helpful for employees to express their ideas/suggestions	67	100	89
Beneficial to the company	67	92	83
A program that should be continued	67	92	83
Improves communications between me and my employees	67	92	83
Improves the morale of my work group	67	83	78
Helpful to me personally as a supervisor	67	75	72
Improves productivity	83	58	66
Increases my ability to have one-on-one interactions	67	67	67
People respond better to work requests	50	58	56
Improves communication between upper management & the shop floor	33	58	50
Get things accomplished that normal channels do not	50	50	50
An extra burden to me as a supervisor	17	50	39
Causes conflict among my work group	33	33	33
Improves communications between me and my superiors	33	33	33
Increases the status and authority of my job	33	33	33
A way for employees to get out of work	33	25	28
A way for employees to get around my authority	-	25	17
A waste of time	33	8	17

Again, it is interesting to note the difference between internally promoted versus college recruited supervisors. On average, the differences are less dramatic than on the job characteristic dimensions. This was a bit of a surprise to most managers and supervisors who see the internally promoted supervisors as being rather vocally opposed to the change direction. One of the production

managers described his view of this difference:

> The college educated supervisors who are engineering graduates are not threatened by the changes which are occurring because they see that they can fill a void in their job with their technical knowledge. However, the internally promoted supervisors are struggling more because in the giving up of their power or direction they see a greater risk. They view their life as a director to get the production out the door. If operators are now responsible of doing that, the supervisors view their opportunities for change as very limited. Their technical skills are limited, their organizational skills are limited, they are 45 or 50 years of age, and are asking "Where am I going?"

In several areas, such as teams being beneficial to the company, opening up communications, and generating ideas, the college recruited supervisors are more positive than those promoted out of the ranks. In contrast, the internally promoted supervisors scored higher on teams improving productivity and lower on teams being an extra burden to the supervisor. As one internally promoted supervisor, who had confused participation with autocratic delegation, said, "The change means that I delegate more things out of my job to the operators." In other words, by "telling" the operators to do some of his tasks, his job becomes easier.

A relatively high percentage of both internally promoted (67%) and college recruited (75%) supervisors viewed teams as helpful to themselves personally as supervisors. Two of the recent college recruits explained the helpful aspects as follows:

> -They are particularly helpful for brand new supervisors because the operators usually know more than the supervisor. By getting the teams to make decisions, it helps the

supervisor and you get better decisions.

> -Teams build up an expectation that team members should put their inputs into decisions. This is extremely helpful for the new supervisors because it gets employees to help them with their job.

For the internally promoted supervisors, the teams were helpful in a different way. One supervisor noted,

> -Since we don't have a whip and a stick anymore, you either work with the teams or they start running the shop and you are no longer the supervisor.

In this way, the internally promoted supervisors had turned in their old exchange tools of discipline (whip and stick) for new mechanisms associated with the teams (involvement of the workers in day-to-day problem solving).

Although the current supervisors are relatively positive to teams, there had been instances of supervisory resistance in the past. This resistance was described by one manager as follows:

> There used to be alot of comments about "we're giving the store away" or "this is just a touchy-feely kind of program". These statement were mainly "behind the tanks talks between supervisors and operators."

That manager went on to say, "Those supervisors who did not really buy-in to the change process have been moved to 'less damaging position'." That is, they were not punished or demoted, but transferred to non-supervisory positions which had less worker

interface. Overall, when asked whether they had lost or gained due to team activity, two-thirds of the supervisors responded that they had gained, while the remainder said there had been no change. This was true for both groups of supervisors.

Conclusions

As stated throughout this chapter, Plant F is in a transition stage. This stage has taken six to seven years but plant management believes that managerial and supervisory buy-in to participative management through training will have longer term pay-off than a structured program forcing an immediate behavorial change.

The major issue confronting current supervisors is a perceived lack of direction on the part of the managers within the plant toward what form participative management will take. From a middle and upper management perspective, this has been intentional in order to avoid edicting the content or form. Although upper management has declared that the management style will become more participative which has been viewed as an autocratic edict, they have attempted to make the process as participative as possible. Their position is an excellent example of the dilemma facing managers in a tranisition. That is, how does a manager guide an organization toward participation without being autocratic about the change process? This plant illustrates that that type of participative change takes a very long time, especially when the plant has 40 years of habits and practices to undo.

Many of the issues facing traditional supervisors have been alleviated by having a large percentage of management trainees in the role who have little prior history with the plant. They are learning how to be a supervisor under a new management system and have fewer behaviors which need to be changed. However, resistance to change has surfaced through some of the internally promoted supervisors. Over the past six or seven years, there has been a gradual sorting out of supervisors to the point where those who remain are relatively positive to the change. However, a few are still reluctant to get involved and hope that, in the long run, all the talking and training will never become reality. After all, it has been seven years without any major visible change plant-wide.

Footnotes

1. It should be noted, though, that throughout the 40 year history of the plant, there have been no strikes with only one strike vote taken 18 years ago. In general, the union is viewed as having limited influence in this plant.

2. Initially the plant had an individual incentive pay system based upon output per day. Later the plant transitioned to a group incentive system. However, all new plants since 1966 within Potpourri have been started up without incentive systems, and in the 1970's, corporate headquarters decided to eliminate any incentive systems which still existed. As a result, there was a gradual buy-out program negotiated with the union. One manager noted that in his view, this was a major change in the supervisory role because supervisors had to find ways to motivate workers and divorce the dollar amount associated with output.

3. The union contract contains the following clause: "Managers Working - A member of management shall not take the place of an employee when employees are available. (Exceptions: New equipment, training, authorized absence periods, emergency, and similar situations.)"

4. Supervisors were also asked from where the direction for the change process was coming and from where it should come. In general, they saw it coming from upper management, mostly above plant management. On the question of where the direction should be coming, most responded that it should be plant management with input from below. This is not to surprising in light of the recent letters from the executive offices. Most felt that if it were not for these letters, responses on where the direction is coming from would have mirrored the "should" responses. It was felt that the direction for the change has been coming solely from the plant management staff for the past six to seven years with little visable push from above until the past few weeks.

FIGURE 1
Plant Operating Principles

1. All organizations will operate in an efficient and cost effective manner.

2. The organization will conduct its business in an ethical way.

3. Information, training and support will be provided so that the decision-making process occurs in the most effective manner.

4. The purpose of the Union to represent employees is respected and the Union is encouraged to take a supportive role in achieving the plant mission.

5. All individuals including women and minorities will be provided the same opportunity to contribute and enjoy personal growth.

6. Personal issues will be recognized and considered along with company needs.

7. Individuals are valued.

8. Each individual has the responsibility to contribute to the effective operation of the plant.

9. Honesty will be the basis of all personal behavior.

10. All individuals have the opportunity to develop themselves consistent with business needs.

11. Communication will be open, two-way, effective and timely.

12. All individuals will have the responsibility to exhibit safe behavior and maintain a clean and healthful work environment.

Chapter 7

Gourmet Products

Plant G

This chapter describes an organization which embarked upon a complete reorganization of their manufacturing operation into semi-autonomous work teams. When they first began the transition they had little experience to draw on from outside. Their process was experimental and, as such, they learned along the way. One of the major issues that arose was lack of clear definition of the supervisory role and associated fears of the first line supervisors. As a result, the supervisors at Plant G went through five extremely stressful years.

This plant completes the cases on plants in transition. It is fitting that it is last because it illustrates not only the tensions associated with a major change, but also successful actions in turning the current workforce into a positive, involved group of employees at all levels of the organization.

Plant Characteristics

Gourmet Products is a family owned food processer which markets its products on a national basis. Plant G, located in the Mid West, is responsible for producing Gourmet's products for the eastern half of the United States. Table 1 highlights the plant's key characteristics.

Table 1
Gourmet Products
Plant G Characteristics

Total Employment	275
Hourly Employment	230
Age of Facility (years)	10
Union	no
Manufacturing Technology	processing/canning
Organizational Structure:	
level 4 - manufacturing manager	1
level 3 - production manager	1
level 2 - area managers	6
level 1 - supervisors	18

Plant G is highly autonomous in its decision making except for general pay structures, policies, etc. which generate out of the headquarters office, located on the West Coast. Pay levels are kept substantially above market averages but are based solely on time and grade on a job. For nonexempt jobs, there are eleven pay grades with six month steps based on time on the job. After two years, an associate reaches the top step of the pay grade and then receives an annual wage adjustment. Similarly, exempt associates have five steps and move at a similar pace. In addition, there is a bonus program for all associates based upon the company acheiving predetermined performance levels.

The first thing that the personnel manager, the manufacturing manager, and the production manager said when this researcher first met them, each separately, was that if the subject of this research was participative management, then Plant G is not the place to look. They hoped that in possibly 3-4 years they would be at a point which they considered to be participation, but they viewed what they had at this point as solely involvement. It is also interesting to note that when

the research methodology was described to the production manager, he stated that he wanted the survey feedback to go back through the supervisors who would then decide if and what type of feedback would be passed back to their superiors and in what format.

Corporate Philosophy

Gourmet Products was founded on a belief that both owners and employees should gain mutual benefit from their association with the organization. As such, a number of policies were established early in the company's history to reduce the distinction between management and workers.

All employees, including managers, are referred to as "associates". The only distinction is made between exempt and non-exempt associates for pay purposes. The office areas are totally open and there are no reserved parking spaces. In view of the need for cleanliness in a food processing plant, all associates are provided with white uniforms. All uniforms are identical with the exception of the associate's first name. The key issue in many of the decisions is balancing what is best for the associates and the company.

In order to maintain the people focus of the organization, there is a relatively large personnel department for the size of the plant. Currently, there is approximately one personnel position for every thirty-five associates. This has created a high dependence by the associates on the personnel department to the point where supervisors

are at times by-passed.

Start-up of Plant G

Plant G, newly constructed, produced its first product in 1972. Initially, the organization was much like other plants within Gourmet Products. Each associate was trained to do a particular job on the processing line and remained at that work station until promoted or transferred to another job. The start-up managers were described as "old line", "traditional", and "conservative" in their management style. Their number one objective was to bring the plant on line within budget and on time which was successfully accomplished. Although the top managers were fairly traditional in their style of management, the production manager had previously been involved in a number of participative programs, including one of the early labor-management committees formed under the auspices of the Federal Mediation and Conciliation Service and the Teamsters at a company he had worked at prior to joining Gourmet.

In the early 1970's, Gourmet challenged each of its plants to develop programs to:

1. More effectively utilize their human resources.
2. Insure a high level of quality and productivity.
3. Improve the worklife of all associates.

In response, another division of Gourmet opened a plant in the Sun Belt

designed around a team concept. Armed with the experience of the Southern plant, a personal desire by the production manager to try something new in accordance with the corporate productivity program, a recent union campaign [1], and new personnel manager [2], Plant G embarked upon a redesign of the work organization.

Redesign of Work

In 1975, a task force was established to develop a long term plan to more effectively utilize the human resources of the plant. This task force was comprised of four individuals; the production manager (since promoted to manufacturing manager), the human resources manager, the newly hired personnel supervisor (currently the human resources manager), and an individual from the corporate headquarters. Their proposal was to help the plant make a gradual transition to a team concept.

The proposed design would have a shift manager on each of the three shifts who had full shift responsibility for all areas (maintenance, production, services, security, etc.). All non-exempt associates would be assigned into teams based upon work modules. These teams would report directly to the shift managers. Supervisors would be reassigned the role of staff coordinator in one of three areas - budget and variance, personnel services, and operations - and would perform necessary support functions for the teams on each shift. Figure A (end of the chapter) outlines the duties envisioned for each of the new roles. However, as will be descibed later, the supervisory

role did not evolve into one of staff coordination. Instead, supervisors retain responsibility and direction of the newly formed teams.

Team Structure

A team is a relatively small number of associates (normally 4-10) who are organized along a process or service which has a definite beginning and ending. All associates on a team are expected to learn all the jobs within the team in order to fill in if one team member is absent. In the production area there are five teams per shift - palletizing, preparation, mixing and canning, and two in packaging. The warehousing area has three teams - shipping, receiving, and palletizing. In addition, plant services has four teams, one for general plant services and a maintenance team on each shift.

Each team has a team communicator, a responsibility shared by team members on a rotating basis. Supervisors have meetings with the team communicators every morning. The communicators are then responsible for going back and communicating to the rest of the team. Figure B (end of the chapter) outlines the general duties and responsibilities of the teams.

Team meetings were set up to provide a means for team communications, team objective setting and review, short term planning, and possibly discussions with other departments. A typical agenda includes items such as review of team performance, review of material

usage variances, discussion of action plans for improvement, review of engineering or maintenance modifications, and other operational problems. Initially teams were to meet at least two hours every three months, however, no one currently keeps track of when teams actually meet. Some team meetings are held on Saturday mornings and paid for by the company. There is an agenda and minutes for every team meeting and these are sent to the supervisor. If any issues are discussed which seem to be out of line as far as what the team should be discussing, the supervisor becomes involved and gives guidance.

Implementation

The redesign process began in late 1975 in one area on one shift. It was labeled "an experiment" and viewed as the brain child of the production manager, the personnel manager, and the manager of that shift. The shift manager hand picked the best associates in the area to be on the first team. Both exempt and non-exempt associates reported that there was not enough communication to the rest of the plant, including those on the off-shifts in the pilot area. This created an aura of secrecy and suspicion. As a result, expectations grew based on individual assumptions as to what it was without any data to back up assumptions. This lead to fear among all associates - both exempt and non-exempt - not involved in the experiment.

Approximately six months into the experiment one of the team members, a quality inspector, suggested that his job could be more efficiently done by the other team members and that his job should be

eliminated. He was then rotated into another job (after being guaranteed job security for his suggestion). However, people outside the area did not understand what was happening and assumed that there would be a threat to job security if teams were expanded to the rest of the plant. This was especially true for the supervisors because they were led to believe that non-exempt associates would be guaranteed jobs but not necessarily supervisors. In addition, rumors began circulating that supervisors would no longer be needed when the team approach was fully implemented. Supervisors, thus, perceived that the team concept was a threat to their job security.

The pilot ran for almost nine months before expansion. The first step in diffusion was to the other shifts in the pilot area. Then teams gradually formed in other areas at an average rate of about one per month, or three teams across all shifts every three months.

Team involvement was not necessarily voluntary. Although most employees in the pilot area accepted the change, one protested and was told that he either would accept it, be moved into another area, or would have to quit. After discussions with management, he decided to stay in the area. The above policy held true throughout the team expansion up to the point (approximately one year ago) when most of the manufacturing operation became organized into teams. By that time all associates had either accepted the concept or left.

Diffusion of the team process did not go smoothly for a number of reasons. First, in the summer of 1978 a new processing machine was

installed and upper management decided that that would be a good time to try the idea of having a team on each shift report directly to the shift manager. The idea of the staff coordinator role was communicated and three supervisors were put though a three-month training program. This only intensified the fear among the supervisors who were afraid they would not be able to function in the staff role. All of them wanted the production coordinator role because they felt that they could not act in a personnel or budget capacity.

Supervisors were unsure of what their new role really was but knew they wanted to go back to the old way. They were afraid that once the teams became self-sufficient, there would be no need for the staff coordinators. Therefore, rather than helping the teams learn, as problems arose in the teams, the supervisors stood back and watched, hoping the teams would fail. Managers described the situation as follows:

> -Supervisors started saying "that's not my job, it's the team's problem". In essence, they became deserters and many used teams as an excuse not to be concerned with any problems.
>
> -Supervisors took a back-seat and as problems arose would let the teams try to handle things. As it got to a point where teams couldn't handle it, supervisors would come in with a heavy hand. It got to a point where supervisors would hope that the teams would fail so that there would be a need shown for supervisors.

As a result, the efficiency in the trial area dropped dramatically and the teams were placed back under supervision after a few months. Although the supervisors were pleased, the teams had become relatively

self-sufficient and the re-introduction of supervisors had a negative impact on them.

Secondly, a number of key personnel changes occurred. The personnel manager was transferred to a satellite plant, the production manager was promoted to the position of manaufacturing manager, and the shift superintendent became the production manager. With all these changes, the new managers focused their energies on learning their new jobs as opposed to supporting the team concept.

Lastly, the plant management lacked, what the personnel manager called, "courage of conviction" because they were unsure where the senior managers of Gourmet stood relative to worker participation. They were unwilling to propose revisions in the compensation system and they provided very little formal training for the team concept. This was due in large to economic conditions in the industry which caused top management to virtually eliminate any expenditures for training seminars. Finally, in December of 1978 the role of team coordinator[3] was created to feed and nurture the teams and help diffuse them throughout the whole plant. Then, after improving economic conditions and a change in upper management, the training constraints were lifted and, about three years ago, the plant began to focus energy on training.

In 1981 another major reorganization occurred which brought in the current production manager. He described what he found when he first came to Plant G,

> It appeared to me that plant management had been insensitive to the supervisory issues and that there was a total breakdown in the spirit of the first line supervisors. They questioned their own self-worth and had become indecisive. There had just been a paper circulated to all which had a diagram of the organizational hierarchy under the team concept. This diagram had the teams reporting directly to the shift managers with the supervisors reporting to the teams, not the shift managers, in a support role.
>
> As far as the teams were concerned, I saw two problems; one was that they didn't take ownership of problems and were continually looking to the supervisors for answers, and two, even if they did take ownership, they didn't know how to problem solve.

About this same time sales and, in turn, production requirements increased dramatically and all managers and supervisors were informed that there was a need to increase production. If that meant getting supervision back involved in team activity, that was all right. The supervisors eagerly accepted the challenge, and, today, the supervisors report that they are no longer threatened. In fact, in many cases, the teams have become quite dependent upon the supervisors.

One supervisor summed up the past five years as follows:

> We have gone through three phases in the team process. During the first stage there was no communications and both associates and supervisors had little say in what was going on. It was a hands-off period for the supervisors while the managers controlled everything. At this point we had no idea what our role was and whether we would have a job the next day. Then in order to get efficiency back up, we were given the go ahead to start supervising the teams. However, the direction was still to use flowerly types of approaches in dealing with the associates. Currently, in the third stage, we are somewhere in-between. We primarily use Theory Y in supervising associates, but when it's necessary we can use a soft form of Theory X.

> Basically we are back where we were before the teams began - at least for those of us who are still here. We did loose some of the supervisors who were hard-liners or Theory X managers, so I guess you could say the plant may have changed in total. But many of us ran our areas on a team basis without the label. After a lot of pain, all we basically have is a label.

First Line Supervisors

During the design stage of the team structure, the original personnel vice president suggested an elimination of all first line supervisors, while the manager of manufacturing believed that more supervisors would be needed to support the program in the role of staff coordinators. What resulted has been a gradual reduction in the total number of supervisors. However, no supervisors have been removed as a result of the team concept. Prior to the introduction of the teams, there were four supervisors per shift. Today, as shown in Table 2, there are two per shift plus support supervisors, or 18 in total.

TABLE 2
FIRST LINE SUPERVISOR CHARACTERISTICS
(Numbers represent those responding to survey)

No. of first line supervisors	18
average no. of employees	11
% new on job (<1 year)	6
% career FLS (>10 years)	22
% with company less than 2 years	16
% with company for 10 years	72
% under 35 years of age	39
%. over 50 years of age	11
% promoted from hourly job	56
% with 4 year degree or more	50

In 1979 there was a company wide reduction in the management workforce accompanied by a very generous severance package plus outplacement services. At that time the plant encouraged two or three supervisors to leave[4]. What remains is a core group of supervisors (almost three quarters of the total) who have been at Plant G since it opened. However, since the plant is only ten years old, the supervisors, on the average, are relatively young.

In the past there have been no formal on-site training programs for either new or experienced supervisors. This was due to the freeze on training dollars. However, as mentioned earlier, there has been an increased emphasis on training within the past three years. With one or two exceptions, this training is done off-site by local schools or consulting groups. Each supervisor is expected to attend at least two seminars per year. The choice of seminar is generally left up to the supervisors and their immediate superior.

First Line Supervisory View of Job Characteristics

Table 3 shows that supervisors at Plant G are extremely positive with their job characteristics. As with Potpourri, a further analysis was made by eliminating those who responded with marginal satisfaction (a response of five on a scale of one to seven). Here the rank order remained relatively the same except for information availability.

TABLE 3
Satisfaction with Job Characteristics
% Positive Responses
(Sample size = 18)

	% Responding	
	5-7	6-7
Job importance	100	100
Company satisfaction	100	100
Job satisfaction	100	94
Treatment by people	100	94
Manager's concern for people	100	83
Motivation	100	78
Satisfaction with manager	100	78
Say on own job	100	78
Information Availability	100	33
Skill with employees	94	83
Job security	94	83
Career satisfaction	94	61
Participation in decisions	94	61
Pay	89	89
Hours	72	61
Rewards	50	33

The main issue on information availability had to do with production scheduling which is constantly being changed to meet market requirements. Supervisors felt that the many product changeovers and short product runs hurt their quality and efficiency, two of their key measurements. These decisions are made at several levels above the supervisors and they often do not make any sense to the people on the front line.

The lowest ranked satisfaction characteristic in both rankings was rewards. This is due to a large extent to the egalitarian policies and practices at Gourmet. Pay is based solely on time on the job rather than merit and associates (both exempt and non-exempt) are measured against group goals. As a result, individual performance is rarely rewarded. This is intensified by the round the clock production which

requires each shift to be dependent upon one another and the team concept. Since the teams do not have team leaders, supervisors have no way of rewarding their best employees by giving them that role or status.

Plant management is conscious of these concerns over individual versus group rewards and is searching for ways to begin rewarding individual performance. In several areas, the annual wage adjustment is beginning to be tied to performance evaluations. This is viewed very positively by the supervisors because it provides them with a new one-on-one reciprocity tool. In addition, they are considering revising the compensation system to pay associates according to their skill and knowledge, rather than solely their specific tasks. This would also allow for increased flexibility in job assignments within the teams.

Supervisory Involvement in Team Activities

As was described earlier in the implementation process, supervisors were totally left out of the initial stages of the implementation. As one manager noted, "They felt that they had been put in jail." At first they passively accepted what was going on with the expectation that if they just waited, people would eventually tell them what was happening. However, as anxiety levels began to rise, especially around job security, they started to criticize the program behind the backs of upper management. This led to what was called, "severe depression" among the supervisors for several years.

The exact role of the supervisors at Plant G under the team concept has been an issue since the beginning. As described earlier, the initial plan to eliminate the traditional role and make supervisors staff coordinators or assistants to the teams never evolved. Nevertheless, supervisors became threatened because they didn't know what their job was and that eventually their role would be eliminated. Therefore, as supervisors groped around for a role, upper management found it necessary to articulate what their expectations for the supervisory role were. This started in September of 1976 with a document sent to all supervisors which stated,

> During the past four years we have experienced many changes in both our operating and managing philosophies. Within these changes, as always, many problems and situations occur which sometimes make it difficult for us to "see the forest for the trees," so to speak. In finding solutions for these problems it is easy to become "fire fighers," concentrating on operating work rather than management work, thus losing sight of our primary function.
>
> Don't lose sight of the fact that a successful supervisor must be a capable personnel officer under the changing system of industrial life. The supervisor must consider humanics as important as mechanics. The supervisor may know how the job is to be done with the most efficient people at the lowest costs, but if he or she is not a leader of people or doesn't know how to work with and supervise people, we may soon find the supervisor is not fulfilling the complete role of operations and human relations management.

However, the supervisory issue intensified and had to be formally addressed again in late 1979 by the team coordinator:

> I'm certain the supervisory role is perceived somewhat differently by each and every one of us. To be successful, we must have input from everyone, most certainly the supervisors. Between now and year-end, I plan to have discussions with each supervisor about how they see their new

> role with teams. Two specific questions that will be asked are: (1) In a team atmosphere, for what are you held responsible, and (2) What should you be held responsible for?
>
> It is our objective during the next six months to clearly identify, define and teach the new role of the supervisor in order to meet our needs at Plant G. Once this has been completed, hopefully the supervisor will be able to accept his new role. (emphasis added)

The product of the above discussions produced a delineating of responsibilities along the lines shown in Table 4.

TABLE 4
Delegation of Responsibilities

1) Responsibilities that only the supervisor should perform.

   a. Items of a confidential nature
   b. Performance appraisals
   c. Counseling
   d. Discipline
   e. Building morale

2) Responsibilites that can be delegated, providing the necessary training has been given.

   a. Quality Assurance checks
   b. Paperwork such as controlled process changes and product hold reports
   c. Processing decisions
   d. Project coordination

3) Responsibilities that can be delegated requiring little or no training.

   a. Routine daily tasks
   b. Minor decisions

This was a major step toward a better definition of the supervisory role, but it appears that the major turning point was the emphasis on training which has occurred over the past three years. This training, conducted for all levels of management, focused more on managerial styles as opposed to tasks. Therefore, in combination with

the previous delineation of team versus supervisory responsibilities, supervisors finally were able to put their new role into perspective. As was summed up in a presentation in December of 1980:

> Management underestimated the impact that the team concept would have upon the supervisors' attitudes and morale. Some became very suspicious of their new role as coordinators and unsure of their abilities to adjust. The new role as staff coordinator didn't appear to be an incentive. Some supervisors failed to see the difference between "getting the job done" and "getting the job done through people." In some cases, the change occurred smoothly but in other cases, the change took much longer and was very painful. Those supervisors who could not adjust are no longer with the oeganization.
>
> It was not until October 1979 when we finally announced that we underestimated the importance of the role of the supervisor in relation to the teams. The supervisors' role has actually been expanded. He is now expected to become more of a diplomat rather than someone with dictatorial powers.

First Line Supervisory View of Teams

When asked if anyone would want to go back to the pre-team days, current supervisors were unanimous in preferring the current structure. However, they were quick to add that that response would not have been the same three years ago. Thus, it is clear that today's positive response is not a fair reflection of how supervisors viewed the team concept during the first few years. Those initial feelings can best be described in the words of the team coordinator who stated,

> Mixed feelings existed among the supervisors as to why upper management was changing a management style that had been successful in prior years. Many of the supervisors felt threatened when asked to begin delegating to the teams responsibilities which had been traditionally associates with

> supervision. They received little training and orientation to this new management philosophy and little incentive to relinquish to the teams a larger portion of their responsibilities. The adjustment for some supervisors was very difficult because they viewed this as the first step in elimination of their job. They failed to see it as a means of job enlargement and meeting future needs of the organization. The adjustments went very smoothly for those supervisors who believed in keeping their associates informed and involved in the total operation. They saw it as an opportunity for improving the quality of worklife af all associates (both exempt and non-exempt) by stressing the need for improved communications, more involvement in one's work and more participation. These supervisors had group work in their areas long before the introduction of teams.

During the past five years there has been a sorting of the supervisors so that those who remain are relatively positively disposed toward teams. In spite of this, though, as shown in Table 5, there is quite a bit of variation in supervisors' view of the team activity at Plant G. Although 80-90% of the supervisors agree that teams are helpful in generating ideas and suggestions, improving productivity, and should be continued, they are not quite as positive on dimensions such as improving communications or morale.

TABLE 5
VIEW OF TEAMS
% in Agreement: Responding 5-7
(Sample size = 18)

	Agree to a Great Degree %
Helpful for employees to express their ideas/suggestions	89
Beneficial to the company	83
A program that should be continued	83
Improves productivity	83
Improves the morale of my work group	72
Helpful to me personally as a supervisor	67
Improves communications between me and my employees	66
Improves communication between upper management & the shop floor	61
People respond better to work requests	55
Increases my ability to have one-on-one interactions	39
Improves communications between me and my superiors	33
Causes conflict among my work group	17
Increases the status and authority of my job	11
A way for employees to get around my authority	11
A way for employees to get out of work	6
An extra burden to me as a supervisor	6
A waste of time	6

During the feedback sessions, several supervisors voiced surprise that the number of supervisors who saw teams as a way for employees to get out of work was not higher. A general concern was that there is a small percentage of associates who are taking advantage of the team concept and letting their teams carry them without contributing their fair share. One supervisor commented,

> The biggest problem with the teams is that even though the associates are adults, they often act like children. Some of them either don't want to or can't understand the new concept. However, most associates really do know the structure of the teams and the position that supervisors have been placed in, and they take advantage of it. They only come to us when there are problems such as someone not working up to the team norm or another shift not leaving the area clean. Rather than the team going to another team, they come to us to complain about the other group. They know they

can get away with alot and they push it as far as they can.

In spite of the above comments, two-thirds of the supervisors did agree that teams are helpful to themselves as supervisors. In this regard they noted improvements in communications and a reduction in time-consuming, nit-picky issues such as overtime distribution and time cards.

On balance, 50% of the supervisors stated that they had gained due to the introduction of teams, and only 6% responded that they had lost. Table 6 summarizes the degree to which supervisors see that their role has changed. During the feedback sessions, almost all supervisors were surprised that any of them would view team activity as voluntary. They assumed that the 17% who responded positively were probably the newer supervisors, or possibly older ones responding that they had in essence been "volunteered". Further checking of the data revealed the latter to be the case.

TABLE 6
CHANGES DUE TO TEAMS
% responding yes
(Sample size = 18)

Teams are voluntary for supervisors	17
Supervisory workload has been altered	44
Special training has been provided	35
Performance appraisals include team activity	44
There is an expected change for supervisors	72
Managers have changed	72

Almost three-quarters of the current supervisors clearly recognize that there has been an expected change on the part of supervisors in

response to the team approach. They described this change as follows:

> -The role of the supervisor today is to keep people happy. We also have to get results, but our prime measurement is to keep them happy. That means that no matter how bad things are going or how bad we may feel or how bad an employee may be acting, supervisors are never to fall back on the old ways of supervising.
>
> -Supervisors are expected to get away from day-to-day activities and delegate more responsibility to the associates. In addition, we are expected to deal more with the human side of management.

In addition, 72% responded that managers above them had changed behavior due to the introduction of the team concept. This change was exemplified by the behavior of the production manager during a daily quality panel meeting[5] observed during the field site visit. On this particular day the production manager took ten minutes to explain to everyone why he had shut the line down the prior day. Later in the day, he explained that this was not a typical meeting but he felt that he needed to train the associates to make similar types of decisions when he is absent or after he is gone. Since each team is represented, this meeting acts as a total plant communication vehicle. After the meeting, each communicator is responsible for passing along what was discussed to the rest of the team members. In essense, the production manager was role modeling what was expected of all associates.

Conclusions

Today all associates, both exempt and non-exempt, appear to be pleased with the team concept and noone would prefer to go back to

pre-1976 days and the old system. However, the transition has not been accomplished without stress within the organization, especially at the first line supervisory level.

The real story in this chapter is a change in management structure and behavior. Unlike the previous chapters, this plant did not just impose a problem solving program on top of the existing organization. Instead, it began with the organization of work and gradually directed a change in supervisory behavior to conform with the new work structure. Fortunately, it did not have many years of prior experience to undo or memories of failed attempts at worker involvement to explain away. Hence, the relative newness of the plant was an asset. Yet, supervisory problems did occur.

The initial problem was that management left the supervisors in a state of limbo, not knowing what was really expected of them. Their day-to-day tasks were taken away without giving them a role or function to perform. This included stripping them of their reciprocal powers of job assignments, overtime scheduling, and allowing associates to take time-off. In addition, they perceived that they were no longer allowed to discipline associates or provide direction to associates when problems arose. Whether the latter was a misunderstanding in expectations or a form of subtle resistance, or a cop-out, is unclear. Most likely it was a mixture of both. However, supervisors still were held accountable for the performance of their team while being told that they were no longer to direct day-to-day routine activities. They viewed this as a "hands-off" directive.

Supervisors were threatened by the new role of staff coordinator. Even after the new role was eliminated and they were put back as supervisors, they did not understand how they were to manage under the new concept. They were unable to use their former methods of managing (exchange mechanisms) in the new structure. Hence, resistance took the form of a deserter leaving the teams on their own in hopes of failure. They also criticized the new concept behind the backs of upper management.

The situation slowly turned around when the supervisory role was better articulated and training in the new concepts was provided. The supervisors finally learned what tools they could or could not use. New exchange mechanisms emerged - information sharing, helping, counselling, training, and trouble shooting.

Key to this entire process was the slow change. No supervisors were punished or lost their job as a direct result of the team concept. The 1979 company wide reduction in the supervisory workforce was due to reducing fixed costs, not the teams. Hence, job security was more a perception than a reality and current supervisors no longer perceive their jobs are in danger. Therefore, although the change took five years to complete, many of the positive views today can be attributed to the gradual persuasion or socialization process plant management used to get all associates to internalize the team concept.

Footnotes

1. The one and only union organizing campaign at Plant G was attempted in 1974 by the Teamsters and Meatcutters. The primary issue concerned rotating shifts. The vote was 80-20 in favor of management and the 20% was viewed primarily as a message to management that the nonexempt associates wanted management to listen to what they were saying.

2. The new personnel manager had prior experience as an independent consultant specializing in union avoidance. He had been hired by Plant G during their union campaign the prior year.

3. This role continued up until fifteen months ago when the entire plant was organized into teams.

4. The plant lost a total of six management personnel by this program to reduce exempt staffing.

5. In addition to in process quality control checks, there is a daily quality panel which is attended by most team communicators, supervisors, managers, and associates from support departments (purchasing, engineering, accounting, etc.) in the plant. The production manager and quality assurance manager evaluate hourly samples from the previous day's production for color, texture, odor, etc. and compare it to photographs of reference standards and marketing descriptions. This is accompanied by quality control charts and discussions by supervisors and team communicators as to any unusual events from the prior day. In addition, there is a similar process which occurs at the beginning of each shift where the shift manager, supervisors and team coordinators inspect the product which they produced on their shift the previous day. All production communicators are required to attend and are the ones, rather than the managers, who inspect the product. This session is also the time when supervisors communicate daily instructions to the team communicators.

Figure A
Duties and Responsibilities

Manager - Each manager will have direct authority and responsibility for all activities, including administrative responsiblity, for all associates under his direction. All associates will report directly to the manager on operating conditions, with normal daily communications flowing through the team communicator.

This broad span of control is made possible by the communication of operating information directly to the teams rather than through the traditional "chain of command". Other duties of the manager include:

1. Being scalar authority to teams.
2. Providing broad operating parameters for the team.
3. Disciplining of team members.
4. Performing appraisals of team members with input from the staff coordinators.
5. Assisting team in performance review of objectives.
6. Attending team meetings as required.
7. Coordinating effort of the staff coordinators towards specified objectives.
8. Providing guidance, assistance, and direction to team members and staff coordinators to help them achieve:

    a. Quality and Quantity Objectives
    b. Associate Development
    c. Budgetary and Variance Control
    d. Other

Staff Coordinator - The traditional line supervisory role will change greatly, moving the major emphasis from being on operating work to having the major emphasis on support work. Functions will be staff and support oriented. Each shift will have three staff coordinators.

1. Variance, Data and Budget Coordinator
2. Personnel Services Coordinator
3. Operations Support Coordinator

Some of the major duties in this function will be:

1. Assisting teams in problem solving when requested.
2. Providing meaningful training programs as necessary or requested.
3. Assisting with associate development and counseling.
4. Reporting Data Information Analysis.
5. Performing budget analysis.
6. Maintaining sanitation and safety management program.
7. Assisting teams in objective setting.
8. Assisting teams in information interpretation.
9. Conducting/coordinating necessary studies (i.e., cost savings, variance control, etc.).
10. Participating in task force problem solving.
11. Supplying all support necessary to assigned teams.

Figure B
Team Duties and Responsibilities

1. Quality Control - This is to include the monitoring of ingredients and processes in their module to assure all areas are within Gourmet and government specifications and to take necessary corrective action, place on hold, or remove from the system any questionable process, product, or ingredient. Included is the responsibility for accurate recording and reporting to insure our record system meets Gourmet's and governmental standards.

2. Equipment Operations - Included in this area is the responsibility for the efficient and safe operation of the equipment in the module, the responsibility for recognizing the need for reporting, scheduling, and following through on the repair of inoperable, unsafe equipment. Additionally, the team will communicate equipment operations information to other necessary parties (i.e., manager, maintenance teams, other teams, on coming shifts, etc.).

3. Houskeeping and Sanitation - The teams will have responsibility for all housekeeping and sanitation within the module during operation This will include housekeeping and sanitation on equipment, floors, drains, locker rooms, cafeterias, etc. with the objective of having a clean, sanitary, safe, and pleasant facility at all times.

4. Scheduling - Scheduling will include items such as:

   a. Scheduling of lunches and breaks of team members to insure efficient, continuous operations without undue burden on other team members.
   b. Scheduling team meetings.
   c. Scheduling rotational assignments and team communicator.
   d. Scheduling of training and information programs.
   e. Scheduling of product changeovers to meet the production schedule.
   f. Scheduling of equipment downtime, when possible, in order to provide for necessary preventive maintenance or repairs.

5. Productivity and efficiency.

6. Inter and intra shift communication.

7. Accident reporting and follow-up.

8. Records maintenance relative to overtime administration and equalization.

9. Participation in safety meetings, making safety recommendations and following up to insure resolution of problems.

10. Work orders and engineering request generation and follow up as required.

Figure B (con't)

11. Quality, production and safety report maintenance, analysis and evaluation.

12. New team members training.

13. Team meetings participation.

14. Minor adjustments, set-up performance, etc. to insure consistent operations.

15. Relief functions performance for lunches and breaks in lower and higher job levels.

16. Familiarization with all jobs within the module.

17. Each member serves as team communicator on periodic basis, normally 1-4 weeks, and performs these types of duties.

    a. Coordinate changeovers, start-ups and shutdowns.
    b. Chair team meetings.
    c. Review and communicate to team daily and weekly achievement reports (i.e., variance, efficiency, housekeeping; etc.).
    d. Request absentee coverage.
    e. Invite support functions to attend team meetings.
    f. Relay communication to/from shift manager to/from rest of team when appropriate.

Chapter 8

Potpourri, Inc.

Plant X

This chapter describes a plant which was conceived with the idea of worker involvement. It does not fit the pattern of redesign of an existing organization, but is instructive from the point of view of what an effective, mature organization that has institutionalized worker involvement might look like. Whether it is representative of the future is a question which can only be answered in years to come. But it preseants one possible model for organizations aimed at providing for decision making at low levels with an hierarchical structure. It also provides some insight into the role of the first line, or interface, manager in such a system. The plant is unique in that it has been functioning under a team concept for over sixteen years and is viewed as the lowest cost, most productive plant by its parent company, Potpourri, Inc. (See Chapter 6 for additional background on Potpourri, Inc.)

Plant Characteristics

Plant X, located in the western mountains of Massachusetts, has been in existence since the late 1960's. As shown in Table 1, the plant employs close to 3000 employees. As such, it is the largest employer in a 40-45 mile radius.

The entire plant houses two distinct manufacturing operations, the processing of raw materials into plastic and the production and packaging of plastic toys. Due to the differences in the operations, they are each managed by a plant manager, both of whom report to a on-site division manager. However, for purposes of this chapter, the two plants will be considered as one.

TABLE 1
Potpourri, Inc.
Plant X Characteristics

Total Employment	2785
Hourly Employment	2440
Age of Facility (years)	16
Union	no
Manufacturing Technology	processing/packaging
Organizational Structure:	
level 5 - division manager	1
level 4 - plant managers	2
level 3 - production managers	16
level 2 - department managers	56
level 1 - team managers	273*

* includes project engineers and staff managers who rotate through assignments as line supervisors

Although it is located in what is usually considered union territory, the plant has remained non-union except for a three year period early in its history when the operating engineers organized the operators in the boiler room. The company negotiated one-year contracts which resulted in a strike at the end of each year. Since the strike involved only a small number of employees and management was able to operate the boiler room, the strikes had almost no impact on the plant as a whole. After the third strike, the union disappeared, and there has been no major threat of unionization since.

Although the current economy has affected employment in many companies, including Potpourri, Plant X has avoided layoffs throughout its history. This has been due to a decision of no hiring for the hourly workforce over the past two years, flexibility in use of the workforce. In addition, due to its cost effective operation, Plant X has been given all new business in its product areas and has had some business transferred to it from other less productive plants.

As with all Potpourri' plants, Plant X has a firm policy of promotion from within. As such, department managers and those above that level are home-grown. Since the plant is one of the key training sites for managers within the company, 10-30 new college recruits are hired each year even during periods of stable employment.

There is an elaborate communication structure which assures a constant flow of information both up and down. First level managers are required to meet every six weeks with employees on a one-on-one basis to show interest in employee concerns and to discuss how things are going. In addition, the division and plant managers hold regular information and discussion meetings with small groups of employees.

Plant Design and Start-Up

Plant X was conceived in 1966. The designers of the plant wanted to design a system in which management could maintain flexibility and employees would have a chance to grow as people. The company felt there was a better way to operate than the incentive pay systems in its

other plants and wanted to design a system which would motivate employees without either individual or group incentive pay. Therefore, there were three main objectives for the new plant:

1. Obtain efficient employee performance at an appropriate cost.

2. Integrate personal and company goals in a manner to provide for personal flexibility and self-direction.

3. Maintain internal equity of pay levels across all areas within the plant.

The first step in designing the plant was to articulate the overall philosophy which would set the direction for the structure. This philosophy can be summarized in the following nine statements:

A. Do what is right

B. Pass the word

C. Have a chance to grow

D. Quality standards

E. Cleanliness

F. Improve through change

G. Set goals

H. Judge by results

I. Safety

With these as the basics, the design team then set about to develop jobs and an organizational structure which provided a mechanism for growth and reward for the employees and the business. They determined that what was needed was a system which would measure skills,

knowledge, behavior, and results. What evolved was a "pay for skill" scheme organized around teams.

After five years of operation, the management found they needed a game plan to describe the values and parameters for the use of human resources in the plant. The structures which will be described in the remainder of this chapter are built on the following eight attributes:

A. Funtional leadership
B. Team determines role assignment
C. Variable team composition
D. Flexible
E. Equal Opportunity
F. Highly skilled
G. Results through team work
H. Self-managing

Pay for Skill

The pay for skill system is built upon six technician (employee job classification) levels. New employees (almost regardless of skill level) enter at Tech Trainee or beginner rate. From that point, they progress through skill levels up to Tech 6.

Employees, from this point on referred to as technicians, remain at the Tech Trainee level for about 12 to 16 weeks while they gain knowledge and skills associated with the basic operation. At Tech II

and Tech III, each approximately 1 year to acheive, they develop a complement of process and equipment proficiencies. The main objective of these first three steps is to develop operating and basic mechanical skills so that they can work effectively with other members of the team and make operating decisions. Technicians at levels IV, V, and VI develop skills in leadership, coordination, and decision making and progressively take on greater responsiblity. These roles will be described in more detail in the following paragraphs. However, before proceding, it should be noted that technicians are not required to progress through all the levels and may choose to remain at one of the lower levels. As one Tech IV who had been at Plant X for 15 years stated:

> I reached Tech IV after two years and decided I didn't want anymore responsibility. However, because I have been in the plant for so long, when something goes wrong, the managers usually come to me.

In response to a union campaign several years ago, an internal transfer system was established. Openings are posted and technicians are interviewed for transfer in line with their seniority. However, if a technician chooses to transfer to a team in another area of the plant, they start at the lowest pay level or the rate for which they can qualify. Unless technicians have formerly been in a particular area or have some special skills, they usually end up not being qualified for any rate above Tech Trainee.

Evaluation for promotion is based upon both tangible and intangible criteria. First there are specific skill qualifications for

which technicians must attend training sessions and pass qualifying exams. They are then evaluated on a General Advancement Requirement (GAR) which considers their reliability, attendance, team contribution, ability to work in the team, and safety. Evaluations are usually conducted by team managers, with input from lead technicians. However, in many of the more mature teams, the lead technicians, and sometimes the entire team, makes the evaluation.

One of the opportunities to build skills and reach the higher level technician rates is to hold off-line assignments. These assignments, which begin at Tech 3, are designed to expose the technician to all facets of the business, similar to the rotational program for the development of managers. It is also intended that these assignments will broaden the skill level of the teams and enhance their decision making ability. These assignments are usually six months or longer in length. Since many are on day shift, some individuals would prefer to remain but are limited to two years. One major draw back to these assignments is that technicians can not be promoted to the next higher rate while off-line. If an opening for a promotion should occur, a technician with shorter service who has remained in the team may be promoted ahead of the longer service technician who is on an off-line assignment.

Team Structure

Since there is no prescribed structure for the teams, it is rather difficult to describe a typical team. The roles, duties, and form of

the teams is basically left up to the team itself. In addition, the structure of the teams varies significantly between the process and packaging areas. However, most teams have matured to a point where they are self-managing relative to day-to-day operating decisions and have a few areas of commonality.

All teams rotate across all three shifts on either a five or seven day basis. (The plant has chosen to continually rotate teams so that technicians on off-shifts do not become second class citizens.) These shifts overlap by thirty minutes to allow each shift to have a team meeting at the beginning of their shift. These meetings, run by the team coordinator (role described below) or other team member, cover production requirements, any information which needs to be passed, problem solving, and any new procedures or safety regulations. They often double as a gripe session which helps to let off steam within the teams. The team manager may sit in on the meetings one or two times per week while the team is on day shift, but the managers usually avoid taking a leadership role in order not to break the habit of the team so that they will continue to hold the meetings on the off-shifts when the team manager is not present.

Each team has a team coordinator who is either a Tech V or VI. One of the requirements to reach the top rate of Tech VI is to have held this role. The primary role of this individual is to handle day-to-day operating responsibilities for the team. Typical job responsibilities would be work assignment, administrating payroll, scheduling overtime and vacations, training other technicians, and

daily problem solving. Tech VI's currently stop when it comes to personnel decisions such as discipline or performance feedback in most cases. In all cases, Tech VI's are looked to for technical advice and expertise because they are often more knowledgable about the process than are their managers who are trained to be able to operate the equipment.

In the process areas, the team coordinator role is often a staff assignment without any decision making responsibility. In this case, the coordinator is responsible for team development, creating job rotation plans, team goal setting, and major improvement projects. The role of day-to-day decision making is left to a Lead Technician. This position is held by a Tech IV or V on a six-month rotating basis. In these areas, successful completion of this assignment is a requirement to attain the Tech V level. The Lead Tech, as it is called, is responsible for the everyday operation of the machines, problem identication and solving, maintanence of a shift summary or log, and the scheduling of breaks and lunch.

Supervisory Structure

During the first few years of Plant X's existance, there was a need to learn the technology of the process and several technicians were promoted to supervisory positions to train the new and expanding workforce. However, in accordance with corporate philosophy of training engineering graduates for management positions, the majority were recruited directly out of college. Since 1974, this has been

almost the sole selection route. As such, most team managers have technical, mostly engineering, degrees but had little or no industrial experience prior to being hired by Plant X.

As described in Chapter 6, these college recruits are hired into a Management Development Program and are rotated through the various managerial and professional functions of the plant. There is no set time frame for this rotation. It could be as quickly as every six months, but not longer than two years on any one assignment. The basic criteria for rotation is business and/or individual development needs. Upon hiring, all recruits, regardless of their education or prior work experience, are put through an extensive series of training sessions. One of the team managers described his entry into the plant as follows:

> They put us through what they call a Behaviorly Objective Training Program. The first phase is a two-week orientation session which covers the behavioral science theories underlying the plant, the Plant X Game Plan, how to talk with employees, why the non-union status is important, and a brief introduction to the technology. Then I spent the next two to three months in training, primarily on the job. I also attended a series of two-hour to two-day classes in what is called the "What Counts" curriculum which includes problem solving, priority setting, counseling and coaching, etc. At the end of the first six months I got evaluated. This is the make it or break it point. They evaluate you on whether you have worked well with the teams and gotten results. This is when many new managers learn that teams don't respond well and often rebel against an autocratic style.
>
> At the beginning of each assignment, including the first, we are given a training manual which describes the area in which the assignment is in, the objectives of the job, the knowledge required to perform it, the projects to be completed, the resources available, and the qualification requirements. We then get together with our new manager and put together a training package or process to acheive the requirements of the new job. Finally, we have to review a "take over" plan with the plant manager.

As in Plant F, there are two types of team managers in Plant X - college recruits and internally promoted team managers who were formerly technicians. About 20% of the current team managers were promoted from the technician ranks between 1966 and 1974. Many of the initial 500 technicians hired had prior supervisory experience and were promoted into the management ranks, but most were unable to move beyond the first level of management. One of the department managers attributed this to their view of management which did not coincide with that of Potpourri, particularly around issues of travelling and moving. The result was that many of these internally promoted managers became stagnant and frustrated. When asked what he would do differently, one of the plant managers who had been in the plant for 15 years responded, "I would not have promoted any of the technicians into management." And this is the position of the plant today. As one of the internally promoted managers commented:

> We are not considered as flexible or compatible with the technical direction of the company because we don't have engineering degrees. We will be used as a resource until we retire, and then the Tech VI's will be used to train the new managers.

It is interesting to note that a large number of college recruits come out of West Point or from other military experience. The very rigid training structure for the first few years is quite similar to the military structure of officer training. As a result, these recruits assimilate quickly into the plant.

The Role of Team Managers

The number one role for team managers within the plant is to help the teams grow and assist them in making day-to-day decisions. They are also the main communication link between technicians and management. Initially, the new team managers do not possess as much process knowledge as the technicians and their role is more of a liaison. Although there are many variations, there are basically two types of team managers - shift managers and line-paired managers.

A key assignment for all managers is a shift manager's role which rotates with a team for 12 to 18 months. This team manager is responsible for one team of about 20-30 technicians. The role is to learn what happens on a round the clock basis to prepare for future jobs. It is basically a training assignment for the new manager to learn from the technicians. Whenever possible, upper management tries to pair up a new manager with one of the stronger Tech VI's. In this position, the shift manager is responsible for administrative duties, promotions, hiring, performance feedback, and safety. In addition, there may be a limited number of special projects.

The other type of operating team manager role is called a "line-paired" manager. This manager works only on day shift but is responsible for the 24-hour operation of three self-managed teams which rotate. Here the prime role of the team manager is to communicate and coordinate across the teams and focus on team administration rather than the day-to-day operation. In addition, the line-paired manager

maintains personnel files, develops Tech V's and VI's to be team coordinators, and acts as an assistant department manager focusing on the long term needs and goals of the area. The main interface with the teams is through the team coordinator or lead tech, but most managers have one-on-one discusions with all team members every three to six months.

In the process operation, the team manager is more of an administrative and training assignment. This is due to the more technical aspects of the operation. As a result, the team manager spends approximately 60% of the time doing adminstrative duties and coordinating the activities of the team coordinators. The remaining 40% of the time is learning technical skills. In order to do this, team managers are on a "flexible shift" which allow them to learn the operation on all three shifts. However, the majority of their time is spent on day-shift. In addition to the team manager, there is a machine manager who is responsible for the operation on a 24-hour basis.

Another aspect of the team manager's job is to do special projects. The plant assigns these managers projects which will test and challenge them and give them exposure to upper management through formal presentations.

Technician/Team Manager Interface

The line dividing management versus technician responsibility is a

very wobbly line and constantly changing depending on the personalities and skill levels of the individuals involved in a particular interface. A general rule is that technicians handle the day-to-day operation and managers concern themselves more with longer range planning and monitoring monthly goals. As far as team activity is concerned, technicians usually give out work related direction, while team managers handle personnel development activities. But as one team manager stated,

> I view the Tech VI's as peers. I view my role as working with them, rather than managing them. If you are lucky enough to get a good Tech VI, you are pretty much just there for the ride. The objective is to make the chemistry work between you and your Tech VI. The manager just becomes part of the team - you eat lunch with the team, you work on the machines side-by-side with the technicians, etc.

The dividing line on decision making is just as hazy. A general rule is that technicians handle day-to-day personnel issues up to the point where written documentation is necessary. At this point the team manager takes over. But here, as with most other practices in the plant, there are exceptions. Typically team managers will handle any written work for two reasons. First, many of the technicians are reluctant to be responsible for documenting performance feedback for their peers. But, secondly, and possibly a stronger reason, is that having technicians spend time on clerical duties is viewed by both themselves and their managers as a waste of their technical knowledge and expertise.

On issues of discipline the teams usually try to work out problems

among themselves. If necessary the team coordinator will take the initial steps in the disciplinary procedure, but the team manager steps in at the documentation stage. On decisions concerning selection or promotion, technicians may give input but the final decision is left up to the manager. This is an area of complaint by technicians because most of these decisions are based on what is written in a technician's personnel file. Since managers are on a job for only a few months while in training, it is felt that many technicians may not be given a fair evaluation.

Since managers are constantly rotating through an area, technicians also complain that they constantly have to "learn new games" and that many new managers tend to "play old tunes" in trying to do new things which have been tried in the past. As a result, their preferrence would be to have managers remain in a particular job for four or five years. The internally promoted managers would put the ideal timing to be three to five years in the belief that after that amount of time they have solved all the problems that they either can or want to address and then begin to coast. However, college recruits place the ideal timing for rotation at the one-and-one-half to two year mark.

This continual rotation puts the burden of training new managers constantly on the technicians. However, many view it as an important element of their job because they are "training the company leaders of the future." But as one technician noted, "It does become a chore."

> It does hurts to have a new team manager come out on second or third shift to just learn from the technicians and ask questions just to pass the qualifying exam so that they can get promoted. It is particularly bad if he then turns around and starts ordering technicians around.

In light of the above, team managers have to find subtle ways to direct and manage the teams. They described their process for influencing as gaining respect from the technicians by acting as a resource and standing up for the team. They noted that part of the training includes how to use psychological techniques to get people to "buy-in" or accept things. One of the technicians described an ideal team manager as one who is fair, stands up for what is right, and listens to complaints and does something about them, no matter how small.

Another area in which there is an overlap in responsibilities is in the administration of capital expenditure projects. These projects are usually coordinated by project engineers but 50% of the inputs into the projects come from technicians. Each project, which is large enough to warrant one, has a "technical review" meeting with maintanence and operating technicians in attendance. In addition, every project has a sponsor who is responsible for deciding who attends these meetings. More often than not, this sponsor is a technician.

There is, though, a bit of a two-class distinction between technicians and managers. Although this line is often hazy, several technicians noted that the organization is extremely hierarchical and that technicians are only part of the system up to a point which is

usually a point at or right above the team manager level. Although many of the top Tech VI's make more money than entry level college recruited managers, they are still considered the subordinates. One of the team managers described this difference as follows:

> Although we usually, or least should, view Tech VI's as peers, there still is an invisible line drawn between us and the technicians. Part of this is that most of us did not grow up in the area and have different interests, but there are also subtle practices which remind us that there is a difference.

Changes over 16 Years

Initially, the plant management was fairly autocratic in its dealing with technicians, primarily due to the low level of technical competency throughout the plant. In addition, early turnover was quite high because many employees either did not buy into the plant philosopy or could not handle the shift work.

The philosophy of the plant throughout the years has been to manage by "intent" rather than "rules". As a result, there are very few rules with the exception of issues concerning safety or stealing. However there is a book of guidelines which is referred to as the "loose-leaf blue book". This book sets forth all plant policies and practices, but as the name implies, much flexibility remains for each situation to be judged on its own merits. Managers and technicians both agree that these guidelines have avoided becoming bureaucratized and are more flexible today than they were when the plant opened. As one of the technicians noted, "They don't stick to the blue book as

much today as they used to."

Although there appears to be quite a bit of flexibility in decision making and policy application, there is a very strict review procedure for most personnel decisions. The disciplinary procedures and reviews exemplify this system of checks and balances. The procedure has five steps: 1) casual conversation without documentation, 2) one-on-one discussion with the technician in the team manager's office without documentation, 3) a written file entry into the technician's personnel folder, 4) a time-off period of usually one day, and 5) termination. The first three steps are administered by the team manager with review by the department manager. Both steps 4 and 5 must be reviewed by both the plant manager and the industrial relations manager.

During the first few years every team had a manager who rotated with that team on all three shifts. That manager would run the team meeting and directed technicians in a fairly traditional manner. However, as teams matured and technicians began reaching the top rate of Tech VI, it was determined that there was a need for job enlargement in the technician ranks in order to maintain continuing personal development for the technicians. About this same time there was a big push for cost reduction so the plant decided to experiment with the line-paired concept. In 1971, they took the best team manager and the best technicians in the plant and formed the first pilot area. Initially there were many problems and the team manager had to work 15 hours per day for the first six months. One of the managers recalled

the process:

> It took a long time to build up the right expectations to get people to work even when someone wasn't watching them. It just took time to develop interest in the people in how the company is doing and how that affected them. We did no special training, but just started to delegate little by little in areas such as scheduling their own break and lunch times.
>
> The concept also required a change in the managers' style and priorities. Before, managers were only concerned with getting the production out the door. Now they had to shift their focus to cost, quality and people. They were also used to doing everything themselves and had to learn how they could still accomplish the same objective but by working through others rather than doing everything themselves.

This change was ultimately viewed as a positive by the managers because they increased their ownership and responsibility from one to three teams. This eliminated alot of competition which existed between the team managers on competing shifts in the same area. In addition, managers got off shift work and found they had to spend less hours in the plant.

Since technicians are usually not promoted to the lower ranks of management many who have reached the top rate have no place to go. In the past, the plant has adjusted the structure to accomodate the technicians, such as in developing the line-paired concept. In addition, many technicians do not desire the opportunity to be promoted because promotion would require a loss in pay per hour (due to loss of shift premium), more hours in the plant, constant pressure and a need to make presentations to upper management. Others feel that they are more secure in their present jobs because of their technical knowledge

base, while others believe that management would became too top heavy if technicians were promoted into management. However, this topping out is becoming a problem which management is currently addressing. Some technicians see this as a dissatisfier and have recommended that the technician rate be left open ended and that there be stricter requirements to reach the top rate.

The Future

When asked what the future held for Plant X, both managers and technicians responded that there would be fewer managers with Tech VI's doing the team manager's job and team managers would take over many of the duties of the department managers. They saw the role of management to be more of managing change and allowing the technicians to run the operation. One of the department managers also added that there would be a smaller workforce because they hoped to eliminate any machine paced jobs. This in turn would mean smaller teams with more automony.

One of the keys to success for the plant has been a continual re-evaluation of their performance and goals. That is currently being done in two areas. In plastic making they have assembled a core team of technicians and first and second level managers to design a prototype management system which could be used in all of Potpourri' plants. Their objective is to design a system which allows each level of the organization an opportunity to do what it does best, i.e. technicians would run the day-to-day operation and managers would plan for the future.

In the process operation, there are a number of managers who are viewed as too task oriented. As a result, a technician survey was recently conducted to identify the major problem areas. Action plans were then developed to address such problems as communications, goal setting, etc. In three to six months they plan to repeat the survey to see if there has been an improvement.

Another area in which the plant recognizes it has a problem, but no solution as yet, concerns the topping out of Tech VI's with no place to grow. Several technicians voiced grave concerns about this problem. They noted that in the past someone was always qualifying for a promotion and looking to move ahead. However, since the plant has not hired anyone for over two years, many have now become frozen. As a result, fewer are pushing for results. They feel that attitudes are beginning to deteriorate, especially among the Tech VI's. The practice of continual rotation, movement in and out of the team coordinator job and into off-line assignments, is starting to become a demotivator. It is difficult for someone who has once attained a position of responsibility and direction to have to return back to solely running a machine. The plant is attempting to address this problem by special staff assignments, but has yet to come up with a long term solution.

Why It Works

In a plant as complex as the one described in this chapter it is impossible to identify any one factor which leads to its success. However, based upon interviews and observation, there appears to be a

number of key aspects which have helped to make this plant as successful as it is over the past sixteen years. These factors are not in any order of priority because all are important in the grand scheme and it is doubtful that the system would work as well with only one or two of the ingredients present.

The basic plant principles which were developed during the design stage have remained in tact throughout the years. They have not been just a piece of paper, but a living document with an underlying philosophy which is instilled in all new recruits and continually reinforced in all actions of management. The division manager has been there for 15 of the 16 years to further the continuance of this philosophy. The philosophy, built upon sound behavior science theories, have proven to be successful. These include "do what's right", communicate, use all available resources, and make sure that employees at all levels "buy-in" to the process and any changes.

In order to get that "buy-in" there is a committment to and alot of training". The organization is staffed to allow for this training and they have an on-site training staff to conduct it. One of the new team managers went so far as to say, "At times I feel like I'm being spoon fed."

Although the plant is overmanned in order to allow for training, it is relatively sparse on managers. One technician noted that that most other Potpourri plants have the number of managers that Plant X had ten years ago. In addition, it is continually trying to find ways

to reduce the management workforce and push decision making down to the lowest possible point in the organization. As a result, decisions are made by the people who know the operation the best - the technicians. This is aided by the continual rotation of management trainees through the team manager's position who must depend upon the technicians for their skill and knowledge to keep the operation running.

There is a culture which has a built in acheivement orientation for both managers and technicians. This has developed by letting teams set their own yearly goals and tying these goals to the competition both within and outside the plant. Each area has been divided up into small business units which can compete with each other. This is most intense across shifts. In addition, technicians are made aware that their job security is tied to their cost competitiveness with other plants.

What makes this sense of competition so successful is constant feedback. This feedback also leads to continual change. If something is not working, the plant is quick to assess the problems and make changes. One of the technicians noted that recently when one of the Tech VI's was not working well with his group, the managers decided to rotate the Tech VI's around the shifts. This quickly solved the problem.

This continual change has led to an organization which is extremely flexible, which was one of the original objectives. One of the team managers stated,

> One of the first lessons you learn is that change is not just OK but expected. That doesn't mean you can just go out and change things though. First, you have to think it totally through and be able to explain the reason for the change and get everybody to "buy-in" to it. If you try to change something and for some reason everybody doesn't agree, then you are a dead duck.

The elaborate job rotation scheme at all levels helps to facilitate change and also to push decision making down. Every time there is a change in the management hierarchy there is a ripple effect. When a new manager pushes a responsiblity down to the next level, that subordinate, in order to accomplish the task, usually pushes other duties down further.

The whole system is built upon building blocks which requires all employees to start at the bottom and acquire skills and knowledge for promotion. Once an individual reaches the top, as with Tech VI's, there has been a re-evaluation and a job enlargement to allow for future growth. For Tech VI's this was first the line-paired concept, then special projects, and now filling in for managers or engineers. The plant has also sent technicians to new plants, including to Japan, to help in the start-up phase.

There has also been a trust built up between management and the technicians throughout the years. This is partly due to no layoffs in periods when other companies, particularly within the local area, have had to make drastic cuts. But also, there has been a constant effort to blend the interface between management and the technicians. There

is a genuine respect for the knowledge and skill of the technicians and their input is constantly sought out and valued.

There is a belief within the plant that their non-union status also aids in their ability to remain flexible. One of the technicians, who had visited a unionized plant which made the same products, stated,

> Here managers really rely on technicians for training and they aren't put down to learn from us. But a union says that managers have to be bosses and therefore they can't learn from the employees. The managers can't work side-by-side with the employees and it hurts communication.

Lastly, it must be noted, that Plant X has a captive labor market. They are the only major employer within a 40-45 mile radius and their wages and benefits are substantially higher than any other employer within the area. Therefore, employees either buy into the philosopy and system or they don't work there. This allows for a limited number of dysfuntional elements within the system, such as the topping out of Tech VI's. As one Tech VI stated, "If I could find another job with the same dollars and benefits I have here, and a chance to grow and gain more responsiblity, I'd leave in a minute."

Why It Works for Team Managers

The fact that it works for and is beneficial to team managers is also a key factor. When looking at why it works at this level, it is necessary to separate internally promoted managers from the college recruits.

The college recruited team managers are basically in training as team managers, and although they may be on a particular assignment for over a year, their major objective is to move on to another assignment, something other than a team manager. As such, they do not build up on-going relationships or power structures which have to be altered if additional decision making is pushed downward in the organization. In fact, since pushing decisions down is a valued trait, working oneself out of a job and allowing technicians to take over responsibilities is viewed as a ticket to promotion. That is, assuming the team manager is promotable, which usually is not the case for internally promoted managers.

The system does not work quite as well for those who were promoted from within, but they are a dwindling breed whose job security is basically guaranteed until they retire. Upper management has found slots for these managers which optimize and reward their skills, but it has been decided not to have to face this issue anymore by not promoting any additional ones into management. In addition, whenever there has been a major change in their role to date, there has been a reward for their participation. A good example of this was the transition from rotating team managers to the line-paired arrangement. Internally promoted managers liked this change for several reasons. First, they got off shift work onto days and were required to spend fewer hours per day in the plant. In addition, prior to the change there was intense competition between team managers across the shifts. The line-paired concept gave the internally promoted manager more responsibility as well as alleviating this competition since each

manager was now responsible for the entire 24-hour operation. Therefore, they whole-heartedly supported this transition.

Before ending this chapter, it must be noted that Plant X's solution to supervisory resistance to change is one solution. However, it is doubtful that the decision to only have college educated management trainees at the first level of management is a viable alternative for many organizations. The reason it works here, without serious resistance from or turnover in the technician ranks, is that the hourly technicians have no other choice if they want a job with good pay and benefits. The question for the future is whether at some point technicians will feel totally boxed in to a point which becomes dysfunctional to the organization.

Chapter 9

Supervisory Resistance Towards Worker Involvement Programs

> "We were so worried that the employees would not accept the program, that we spent all our time trying to convince them of the benefits. On the other hand, we assumed since supervisors are managers that they would just accept the program. What we found was that it was much easier to sell it to the employees than the supervisors." - a plant manager

This chapter will attempt to distill the major issues leading to supervisory resistance in the seven plants which have made a transition, or are in the process of changing, from a traditional to a more participative style of management. It appears from the interviews conducted in these plants that there are three overriding issues which form an umbella under which supervisory resistance occurs. These are concerns of most supervisors regardless of their background, leadership style, etc. In addition, within the sub-group of those supervisors who oppose worker involvement programs, there are five categories of supervisors which help to explain the underlying reasons for much of this resistance.

Supervisory Concerns with Worker Involvement Programs

The first overall concern relates back to one of the key issues in the rise of the Foremen's Association of America, job security. The popular press has alluded to the redundancy of supervisors with the use

of participative management and this is a prime concern of all supervisors whether management is really considering reducing the supervisory workforce as in Plant G or has no intention of eliminating any line personnel.

Once job security issues are alleviated, the next concern is "what is my job?" Again, Plant G presents the classic case of supervisors not knowing what their role is. On a lesser scale, the concern is present even in quality circles where supervisors must balance their behavior one-hour per week within the circle with their day-to-day interactions with their employees.

Lastly, the burden of these programs ultimately falls on the supervisor which means additional work. This may be only short term as in the development and training of teams in Plant F or on-going as in the administration of quality circles in Plant E.

After addressing these three major overall concerns, there are still five categories of supervisors who tend to resist the worker involvement programs studied in this research. Before describing these concerns, a general view of supervisory attitudes will be presented based upon the survey responses. Then five categories of potential supervisory resisters will be discussed and supported through a comparative analysis of the seven plants. An appendix is also included to present a model for further analysis of survey data.

First Line Supervisory Attitudes Toward Worker Involvement Programs

Survey respondents were asked to what extent they agreed or disagreed with seventeen statements concerning worker involvement programs. Based upon a scale of one (disagree) to seven (agree), a response of five to seven was considered agreement for each statement. These statements really deal with three distinct dimensions of worker involvement programs; whether the program is good for the company, good for employees, and good for supervisors[1]. Therefore an index was created for each of the three attitudes by averaging the responses to the statements within each grouping (for statistical analyses, negative statements have been reversed to make them into positive statements). The statements which clustered within each of these categories were as follows.

Good for Company

Worker involvement programs:
- -Are beneficial to the company
- -Improve productivity
- -Are a program that should be continued
- -Get things accomplished that normal channels do not
- -Are helpful for employees to express their ideas/suggestions
- -Are a waste of time

Good for Employees

Worker involvement programs:
- -Improve the morale of my workgroup
- -Improve communications between upper management and the shop floor
- -Improve communications between me and my employees
- -Cause conflict among my work group
- -Are a way for employees to get around my authority
- -Are a way for employees to get out of work

Good for Supervisors

Worker involvement programs:
-Are helpful to me personally as a supervisor
-Increase the status and authority of my job
-Improve communications between my and my management
-Cause people to respond better to my work requests
-Are an extra burden on me as a supervisor

Table 1, which lists responses by plant[2], shows that almost three-quarters of the supervisors (72%) view worker involvement as a program that is generally good for the company. Over half (60%) see the programs as helpful for their subordinates, but less than a third (31%) view it as helpful to themselves as supervisors. It is particularly interesting to note that this rank order holds true in all plants except Plant C, the smallest of the sample with only nine supervisors.

TABLE 1: % POSITIVE TOWARD WORKER INVOLVEMENT PROGRAMS
% responding 5-7
(sample size in parathesis)

	Plant								
	A (26)	B (12)	C[1] (9)	C[2] (9)	D (19)	E (26)	F (20)	G (18)	Ave. (138)
Good for Company	46	75	44	67	53	96	83	94	72
Good for Employees	42	58	22	44	53	81	78	72	60
Good for Supervisors	15	42	33	44	32	23	39	44	31

C[1] quality circles
C[2] quality of worklife program

These findings lend support for the popular phrase that worker involvement programs are merely "the top telling the middle to do something for the bottom". Another way to interpret these results is that since upper management should know what is best for the company

and they have said that worker involvement is good, then it must be good for the company. Since it is a program aimed at involving workers, it must be good for employees. And, to the extent that it improves relationships on the shop floor, then first line supervisors will also benefit. But the belief that there is little in it for the supervisor is shown by the relatively small percentage of supervisors who view the program to be good for their themselves. As one supervisor noted,

> For five years we have been beaten over the head with the need for more participation by workers. By this time we know we better believe, or at least say, that it is good for the company and for employees. However, no one has really stressed that it would be good for us, except that we either believe it or we don't have a job. Since whether it is good for supervisors is a more personal thing, we were probably more honest.

However, one might wonder if supervisors should feel that it is good for them in that the aim of the programs in this research was only to involve workers in order to attain increased productivity. As one personnel manager noted when he saw this analysis,

> Quality circles were never designed as a program to enrich the supervisor's job. I'm just pleased that they (the supervisors) view it as a good program.

Therefore, according to this point of view, if the programs end up being viewed as good for the company and good for employees, they have fulfilled their objective. In addition, the programs were never designed to be good for supervisors. Some have even argued that the ultimate goal of worker participation is the elimination of a layer of

management, that is, first line supervisors. As a result, it may be unrealistic to make worker involvement programs good for supervisors.

A counterargument suggests that although worker involvement programs were never designed to be good for supervisors, supervisors are the ones who are ultimately responsible for the successful transition or implementation of the concept. If these individuals see relatively little benefit in the programs for themselves, the probability of having overwhelming supervisory support is slight. To the extent that supervisors see the program as detrimental to their role, program success[3] is place in doubt.

Inter-plant Differences in Attitudes

A further look at Table 1 reveals a significant amount of variation across plants in the percentage of supervisors positive towards the programs at each level. Table 2 compares overall supervisory views of the programs (an average of responses in the three categories) with an overall satisfaction index (an average of all questions comprising the indicies for job dimensions - see Chapter 3).

TABLE 2: % POSITIVE TOWARD WORKER INVOLVEMENT PROGRAMS
% responding 5-7
(sample size in parathesis)

	Plant								
	A (26)	B (12)	C[1] (9)	C[2] (9)	D (19)	E (26)	F (20)	G (18)	Ave. (138)
Good for Company	46	75	44	67	53	96	83	94	72
Good for Employees	42	58	22	44	53	81	78	72	60
Good for Supervisors	15	42	33	44	32	23	39	44	31
View of Program	34	58	33	52	46	67	67	70	54
Overall Satisfaction	69	83	67	67	74	96	100	100	85

C^1 quality circles
C^2 quality of worklife program

Not surprisingly, there is some carry over between satisfaction in general toward job dimensions and supervisory attitudes toward worker involvement programs. Plants E, F, and G appear to be most positive on both measures. However, the correlation is not as strong in Plants A through D. In addition, although Plant E is one of the most positive plants in general, it ranks next to the bottom on worker involvement programs being good for supervisors. What within the structure or culture within the plants might explain these differences?

To begin, the programs within Plants A through D were failing at the time of the survey and are now non-existant. This most likely led to less satisfactory supervisory views of the programs. The failure of the programs was partly attributed to lack of management and union support which implies a less than cooperative atmosphere within the plants. Plant B's positive responses can be attributed to a more participative plant manager and a family-like atmosphere. As one of the managers in that plant noted,

> We don't need a QWL program in this plant. We already have employee involvement at all levels and don't need a label to identify it.

As for Plant C, at the time of the survey supervisors were more positive toward the QWL program than quality circles because the QWL program had just be given reinforcement and high visibility, while the quality circle program was a bad memory for many.

The two most positive plants, F and G, spend a great deal of time on cultivating a closely knit management philosophy which places an emphasis on valuing individuals at all levels of the organization. Hence, the positive responses only validate their success in socializing managers into their culture (VanMaanen & Schein, 1979).

Lastly, the most interesting plant is E due to its high scores in general but low score on good for supervisors. This reflects the value that supervisors place in programs that the company sponsors, but they view the value gained via quality circles to be at their expense in the extra work that they entail.

However, part of the extra work that supervisors feel in Plant E is based on their value of how much say workers should have. Table 3 lists the percentage of supervisors within each plant that responded that workers should have alot or complete say in decisions concerning safety equipment and practices, how work is done, wages, hours and days worked, and hiring and layoff procedures. It is interesting to note

that Plant E ranks low on worker say, especially on how work is done.

TABLE 3
WORKERS SHOULD HAVE SAY
% Responding A Lot or Complete Say
(Sample size in parenthesis)

	A (26)	B (12)	C (9)	D (19)	E (26)	F (19)	G (18)	Ave. (129)
Safety	58	92	55	63	77	95	89	75
How work is done	35	67	56	16	39	63	72	47
Wages	4	8	33	16	0	21	6	10
Hours/Days	8	0	33	16	8	47	11	16
Hiring/Layoffs	0	0	33	0	4	10	0	5
Say Overall	21	33	42	22	26	47	36	31

Supervisory responses in the other plants fairly well paralleled supervisory attitudes toward their job and the worker involvement programs. Again, Plant C was positive due to recent management actions to reinforce the QWL program, and Plant F was the most positive overall[4].

Categories of Resisters

It is not uncommon to hear comments such as "the older, more senior supervisors just can't accept these new participative programs." But each plant had older, more senior supervisors who were very positive toward the programs. It may be that the more senior supervisors are the more influential within the plants and, therefore, have a greater impact when negative. But, the above statement appears

to be an unfair indictment of the core of many plant's supervisory workforce.

The data collected in Plants A through F provide a basis for beginning to sort out speculations as to what factors lead to either positive or negative supervisory attitudes towards worker involvement programs. This section will present evidence, gathered through the interviews, to support the five types of supervisors who tend to hold negative attitudes based upon this study. In addition, several of the survey questions will be used to supplement the analysis.

These categories should be viewed as preliminary hypotheses which may or may not encompass all sources of supervisory resistance. In addition, none are mutually exclusive and any supervisor may fit into more than one group.

Theory X Proponents

McGregor (1960) defined leadership styles by separating individuals between Theory X and Theory Y beliefs. Theory Y managers are those who use participative techniques and value the input of their employees. On the other hand, "Theory X Proponents" believe workers need to be controlled and told exactly what to do. Comments such as "workers are really just children and if you don't watch them, they will take advantage of the worker involvement program" indicate such beliefs.

Psychological theory argues that attitudes are a function of values (Viteles, 1932; Peak, 1955; Vroom, 1964). An organization can sort its supervisors through the hiring or termination process, or it can provide awareness or behavior-modification training, but it is questionable whether the values an individual holds after 25 to 50 years of age can be significantly altered by a short term structural change in the work environment. It is those supervisors who hold a Theory X belief that tend to discount worker involvement programs as viable ways of managing their employees.

One measure of values available in the survey is the degree to which supervisors believe that workers should have a say in the things that affect them on the job. The prior section showed how closely responses on this dimension paralleled supervisory attitudes towards worker involvement programs. Table 4 sorts attitudes toward the programs by the amount of say workers should have in how work is done. This variable is indeed highly significant in whether or not worker involvement programs are good for supervisors[5].

TABLE 4: RELATIONSHIP BETWEEN SUPERVISORY VALUES AND ATTITUDES TOWARD WORKER INVOLVEMENT

	WORKERS SHOULD HAVE ALOT OR COMPLETE SAY IN HOW WORK IS DONE		
	YES (N=20)	NO (N=117)	Chi Square significance
% RESPONDING			
Good for Company	80	70	.3639
Good for Employees	75	57	.1349
Good for Supervisors	75	24	.0000

Each of the plants, to some degree, had some Theory X Proponents. In most cases, these were many of the supervisors who were sorted out over the past five years. However, there was evidence of a few who had been able to modify their behavior sufficiently, in spite of their attitudes, to "play the game."

Status Seekers

The second group of resisters, Status Seekers, enjoy the prestige associated with being the supervisor and are reluctant to relinquish their status. This was exemplified by the comments in Plants C and E that "supervisors will always end up the leader in a group because you can't be an equal within the worker involvement group and a supervisor outside it." These supervisors may believe that workers can be intrinsically motivated, but they personally enjoy the prestige associated with being the "boss". The idea of being equal or a support function to workers is belittling. Thus when the inverted organization chart with supervisors reporting to teams was circulated in Plant G, many supervisors reacted negatively.

The reward systems within most organizations recognize outstanding performance by promoting individuals into supervisory positions. Sharing some of the tasks of this position may be viewed as rewarding workers even though they may not have earned it. Thus Status Seekers perceive their rewards being diminished in the eyes of their fellow workers. In addition, as in Plant C, they resent employees by-passing them and going directly to the plant manager.

In Plant E the culture of the plant was shaped around a belief in "respect those above you in the hierarchy". As such, supervisors viewed their role as leaders and, in some respects, as "influencers" in what should be discussed in quality circles. Since quality circles were designed to have the supervisor act in a leadership role (at least in Japan), this is not detrimental to the productivity improvement aspects of the program. However, this results in an environment were workers are granted involvement in voicing their opinion or generating ideas, but participation in shared decision making or in determining which problems to discuss may not exist.

Skeptics

Organizational change is most often top down with upper management telling the supervisors to make the program be a success. But, the sincerity of the top management has a significant impact on whether supervisors view these programs as "just another program to rally up the troops" or a real change in management philosophy. One of the most common reasons cited at Neptune as to why quality circles were not more successful was lack of upper management support. Therefore, supervisors asked, "Since quality circles didn't last, so why should we believe that the QWL program will get the support?"

But Neptune was not alone in this regard. In most every plant the issue of skepticism was raised during interviews. At Paraphernalia, it was cited as one of the major concerns when quality circles first began and, even today, supervisors question the commitment of new managers as

different priorities surface. Similarly, at Plant F, some supervisors (and managers) questioned whether the change process was just words with no concrete actions. Only at Plant G, where the transition to teams had been completed, was skepticism minimal. There the work organization had been altered throughout the plant which convinced all associates that the change was permanent. The team concept had ceased to be a program and was now just the way the workforce is managed.

Skepticism is often rooted in supervisors having experienced short-lived programs in the past or seeing incongruent actions by managers above them which convinces them that those above are not sincere or committed. To this end, supervisors were asked to what extent managers in their plant were concerned with the people who worked there. Using this index as a measure of upper management's sincerity in promoting worker involvement, Table 5 shows that those supervisors who viewed their managers to be concerned were more positive than those who saw upper management as unconcerned.

TABLE 5: RELATIONSHIP BETWEEN SUPERVISORY VIEWS OF UPPER MANAGEMENT AND ATTITUDES TOWARD WORKER INVOLVEMENT

	MANAGERS ARE CONCERNED WITH PEOPLE*		
	YES (N=56)	NO (N=80)	Chi Square significance
% RESPONDING			
Good for Company	82	65	.0283
Good for Employees	66	56	.2493
Good for Supervisors	39	25	.0759

* those responding 6-7

This result is not too surprising in that worker involvement programs are designed to improve the quality of work life for employees. If managers are unconcerned about two important aspects of quality of work life, morale and working conditions, then why should supervisors stick their neck out for a program which may not get long-term support from their superiors?

Equality Seekers

The fourth group of resisters, Equality Seekers, are asking for increased involvement for themselves. They are basically arguing that the programs should not be merely "the top telling the middle to do for the bottom". They want the middle to have some say both in the decisions made above them in the process of involving those below. Supervisors at Neptune voiced frustration over being left out when they complained, "They ask for our opinion, but then ignore it and do whatever they were planning in the first place." In retrospect, managers at Gourmet recognize that they should have included supervisors in the design process for the team concept.

Since worker involvement by definition means that first line supervisors must relinquish some of their power to their subordinates, their attitudes toward the programs should be mediated by the amount of power they perceive they actually have. If they feel secure in their position and have power or authority, they should be more willing to share some of it. On the other hand, if the supervisors feel that they, themselves, do not have any power, they would be less inclined to

see their subordinates receive some power unless they also were the beneficiary of additional power.

Therefore, based on the assumption that a loss of this power base may be an explanatory reason why many supervisors might prefer limiting worker involvement, responses were broken down by the amount of say or involvement that supervisors perceive themselves to have. One key element in the amount of power supervisors have on the job is the amount of participation their manager grants them. Table 6 shows that supervisors who are more satisfied with their own participation in decision making are more positive toward worker involvement programs.

TABLE 6: RELATIONSHIP BETWEEN SUPERVISORY INVOLVEMENT AND ATTITUDES TOWARD WORKER INVOLVEMENT

	PARTICIPATE IN DECISIONS*			SAY ON OWN JOB*		
	YES (N=48)	NO (N=89)	Chi Square sign.	YES (N=85)	NO (N=52)	Chi Square sign.
% RESPONDING						
Good for Company	85	64	.0082	79	60	.0156
Good for Employees	77	51	.0025	71	42	.0010
Good for Supervisors	44	25	.0220	39	19	.0165

* those responding 6-7

Another dimension of supervisory involvement concerns supervisory control over their day-to-day tasks. The argument here parallels that of participation in decisions in that many worker involvement programs give workers some element of control over their day-to-day activities. Table 6 shows that these results were quite similar to those for participation in decision making.

Dealmakers

Lastly, a significant source of supervisory power lies in a supervisor's ability to make reciprocal exchanges. Over the past several decades, these exchanges have become quite informal and involve issues such as job assignment, scheduling time off, etc. However, most of these exchanges occur on a one-on-one basis, often without the knowledge of other workers. With the advent of worker involvement programs, supervisors are being forced to now interact on a group basis which lessens their ability to make their traditional one-on-one exchanges. In addition, many of their exchanges are being delegated to the work group. Therefore, those supervisors who are unwilling to relinquish their formerly held exchange powers and have yet to develop new ones tend to resist the involvement of workers in decision making. These supervisors are referred to here as "Dealmakers".

Since most exchanges are either unconscious or "off the record", it was difficult to directly address reciprocity through the survey. As a result, several questions were designed to help stimulate a discussion on reciprocity during the interview process. One of these questions was whether or not formal policies and procedures are viewed as useful to supervisors in performing their jobs. The survey indicated that 80% of the respondents do find rules useful. However, the interviews revealed that supervisors use rules less than the survey responses would indicate. Many of the supervisors felt that if they had answered the question honestly, the percentage who found rules

useful have been significantly lower. A couple of comments help to illuminate this point:

> - Rules aren't really all that useful. You just get used to a feel of how to get things done. It's not black and white. You have to make decisions as what to do at what time.
>
> - Rules are only used to push those individuals who are outside the limits of what is acceptable when those individuals start affecting your own performance on the job.
>
> - The longer you are a foreman, the more you get burned by rules, especially by industrial relations. You can try to enforce a rule but if you aren't backed up, it's useless. You just have to learn the mode of survival.
>
> - Supervisors in this plant get most of their satisfaction from "squirreling the system" and getting around quality and other policies.
>
> - The most difficult part of the foreman's job is working around the plant's established systems in an effort to meet an urgent need.

On the surface, one might expect that since worker involvement programs require an increased degree of flexibility upon the part of management, that those supervisors who find rules least useful would be most positive toward such programs. Although only 20% responded that rules were not useful, Table 7 shows that when supervisory attitudes toward worker involvement programs were sorted by the supervisors who found rules useful versus those who did not, the exact opposite was found. Those supervisors who found rules useful were also more positive towards worker involvement programs[6].

TABLE 7: RELATIONSHIP BETWEEN USEFULNESS OF RULES AND ATTITUDES TOWARD WORKER INVOLVEMENT

	RULES ARE USEFUL		
	YES (N=111)	NO (N=26)	Chi Square significance
% RESPONDING			
Good for Company	78	42	.0006
Good for Employees	63	46	.1134
Good for Supervisors	32	27	.5858

This result lends support to the reciprocity argument. Those supervisors who manage their employees via informal one-on-one exchanges or arrangements have the least concern for formal rules, and hence do not find them useful in performing their job. As a result, Dealmakers are less positive toward worker involvement programs because they interfere with their style of supervision. As one supervisor noted,

> Under a quality of work life program everyone gets involved and knows the rules and, in some cases, is involved in making the rules. It is an extremely democratic process. Therefore, those who do not like rules are negative because everyone knows about what is going on and things become more formalized.

Another question asked supervisors how they preferred to interact with their employees. 85% responded that they preferred to interact on a one-on-one as opposed to a group basis. Predicting that that would be the response, supervisors were also asked whether worker involvement programs increased their ability to have one-on-one interactions with their employees. Less than half (45%) responded that they did. This low percentage is not surprising in that worker involvement programs in

these plants force supervisors to deal with employees on a group rather than individual basis. However, as Table 8 shows, those supervisors who do agree that worker involvement programs increase their one-on-one interactions are significantly more positive toward the programs.

TABLE 8: RELATIONSHIP BETWEEN IMPACT ON ONE-ON-ONE INTERACTIONS AND ATTITUDES TOWARD WORKER INVOLVEMENT

	INCREASES ONE-ON-ONE INTERACTIONS		
	YES (N=28)	NO (N=34)	Chi Square significance
% RESPONDING			
Good for Company	100	85	.0343
Good for Employees	93	65	.0083
Good for Supervisors	54	18	.0029

Several specific examples may help to clarify how Dealmakers are resisting worker involvement programs.

> -In one case a team was formed under a supervisor who was notorious for making deals with the steward in the area. Shortly after the team was formed it was discovered that both the supervisor and the steward were attempting to undermine the team. The team had determined that if the supervisor handed out work requirements at the beginning of the week and allowed the team to assign it to themselves, manpower could be reduced. After several unsuccessful attempts to get the supervisor to support the team and their ideas, the supervisor was transferred to another area in the plant where there were no teams. Shortly thereafter, the team flourished.
>
> -In another plant, supervisors often obtained time allocations on specific jobs prior to when the job appeared on the shop floor. These time allocations are extremely important because employees have to voucher their time against these allocations. In one area, the supervisor held those allocations and handed them out on a one-on-one basis rather than passing them along with the job assignments. A quality circle decided to address this issue and the supervisor prohibited it.

> -A major objection supervisors in another plant had towards worker involvement concerned work teams setting their own vacation or time-off schedules. In the past, supervisors allowed employees to take time off as a reward. When employees took this task over, the supervisors lost this form of reciprocity.

It is interesting to note that these examples spanned all types of worker involvement programs from quality circles to semi-autonomous work teams. However, as will be discussed further in the next chapter, many supervisors have found new forms of reciprocity to replace these lost tools.

Summary

This chapter has focused on the sources of negative supervisory attitudes and reactions toward worker involvement programs. It was shown that while 72% of the supervisors in this study saw worker involvement programs to be good for the company and 60% of them agreed that the programs are good for employees, only 31% found them good for themselves as supervisors. This led to the question of why the programs were not good for supervisors.

Three overriding concerns were discussed - job security, job definition, and workload. However, even after these issues were addressed, some supervisors still opposed the programs. Five categories of resisters, summarized in Table 9, were found through a comparative analysis of the seven plants in transition.

TABLE 9
SUPERVISORY RESISTANCE TO WORKER INVOVLEMENT PROGRAMS

Who Resists	Why They Resist
-Theory X Proponents	-Counter to belief system
-Status Seekers	-Don't want to lose prestige
-Skeptics	-Doubt support of upper management
-Equality Seekers	-Why not us?
-Dealmakers	-Interference with use of reciprocity

It should be reiterated that these categories form only beginning hypotheses as to why some supervisors are opposed to worker involvement programs. However, by recognition of these issues, upper management can begin to alleviate much of the resistance in the lower levels of their management structure. The next chapter will focus on how upper management can address these supervisors and what the role of the first line supervisor is in a worker involved organization.

Footnotes

1. This conclusion was based upon some preliminary correlation analysis, followed by discussions with managers and supervisors during survey feedback interviews.

2. For purposes of the analyses throughout the remainder of the this chapter the total sample is considered to be 139 supervisors. This is comprised of the 130 supervisors in the seven plants plus a double counting of the nine supervisors in Plant C because they responded to the seventeen questions on worker involvement programs twice - once for quality circles and again for the quality of work life program.

3. The issue of what is success and how to measure it is a subject in and of itself. For purposes of this research, success is the elimination of any resistance to the implementation process or on-going administration of a worker involvement program.

4. Further analysis showed that the internally promoted supervisors were very positive on questions of hours/days and hiring/layoffs, while the college recruits more closely paralleled the sample in total. During the feedback sessions, most supervisors commented that this was due to the internally promoted supervisor's union experience when in the hourly workforce.

5. The skewed distribution toward supervisors who responded that workers should not have a lot or complete say may be the cause of the high Chi Square significance for good for company. A narrower measure of supervisory values is responses on worker say for only how work is done. Although the total sample split more evenly, the relationship did not hold due to the large number of supervisors in Plant E who were positive toward the quality circle program but did not believe that workers should have say in how work is done.

6. Due to the small number of respondents who stated that rules were not useful, conclusions based solely on this question are weak. However, although the Chi Square significance for good for supervisors was quite large, the direction of the relationship is indicative and verified in the interview responses.

Appendix to Chapter 9

Further Analysis of Survey Responses

The survey responses provide the opportunity to begin to empirically sort a number of possible job characteristic or demographic hypotheses concerning factors leading to negative attitudes toward worker involvement programs. The following sections will address several of these and then a regression model will be presented as a way to begin to identify key factors.

Specfic Job Characteristics

Much of the earlier work done on first line supervisors compared the role in different work organizations - batch, process, assembly (Woodward, 1965; Westley, 1981). This work would suggest that the manufacturing process or industry might affect supervisory views of worker involvement programs. Although this study provides a cross-section of manufacturing processes, it is impossible to sort out this variable from other plant specific factors. It is apparent, though, from the preceding chapters, that resistance has occurred, to some degree, across all plants and this resistance had tended to focus on loss of power.

One variable which can be focused on in this survey is the number of subordinates reporting to a supervisor. In all five plants that had quality circles, the program was viewed as an extra burden to the

supervisor. In plants F and G, many supervisors noted that during the start-up phase of teams there is extra work for the supervisor until teams start to function as a group. Thus, it might be expected that the number of subordinates a supervisor has, to the extent that this can be a proxy for workload, would impact supervisory views of worker involvement programs. Interestingly, this appears to be a minor factor only for whether the program is good for supervisors.

Demographic Characteristics

Earlier in Chapter 9, managers were cited to have said that age and time on the job appeared to be a major factor in predicting which supervisors would be positive or negative toward worker involvement programs. Table 1 summarizes the percentage differences in supervisory attitudes across several demographic characteristics. Thus supervisors under forty years of age were 16% more positive towards worker involvement programs being good for the company than their peers over forty years of age, but were only 9% more positive relative to the programs being good for employees. When it came to whether the programs were good for themslves, as supervisors, there was no difference in attitudes based upon the age of the respondents. Similarly, there were few consistent significant differences across the other demographic characteristics.

TABLE 1
% DIFFERENCES IN POSITIVE RESPONSES
TOWARD WORKERS INVOLVEMENT PROGRAMS
(Sample size in parenthesis)

	Good for			
	Company	Employees	Supervisors	
Age: under 40	16 *	9	0	(77/60)
Education: 4-yr. degree	21 *	18 *	8	(38/97)
Sex: female	23	36 **	8	(13/124)
Race: minority	15	29 *	43 **	(13/117)
Time as supervisor: under 5 yrs.	9	12	6	(64/71)
Time on assignment: under 3 yrs.	20 **	19 *	12	(77/58)
Prior job: hourly	-18 *	-16	-3	(76/57)

* Chi Square significance at .01 to .05
** Chi Square significance at .01 or less

It should be noted that most of these characteristics are highly correlated. The older supervisors are also those who have been on the job, as well as a particular assignment, longer. Supervisors with higher education tend to be younger and often on management development programs which shortens their time on the job. Also, due to affirmative action, women and minorities usually have less time on the job.

Since all programs, except the quality of work life program in Plant C, began approximately five to seven years ago, supervisors who went through the transition can be easily sorted from those who have only seen the role within the context of the worker involvement program. A close approximation of transition versus non-transition supervisors can be made by the number of years on the job. By making

the cut at five years, only one supervisor does not meet the proper criteria.

It is interesting to note that there was relatively little difference in positive responses between transition and non-transition supervisors. Here again, the removal of non-supportive supervisors over the past five years has most likely worked as a mitigating factor. This may also be a factor across the other demographic charateristics.

Career Satisfaction

Many managers in the sample plants stated that their better supervisors were the most positive. Unfortunately, due to the anonymity of the survey, it was impossible to control for supervisory performance as measured by middle and upper management in the form of individual performance evaluations. However, career satisfaction may be a good proxy for performance in that there may be a close correlation between career progress and skill as a supervisor.[1]

The career satisfaction variable measures supervisory satisfaction with their progress within the organization to date and their belief in future growth and development. There is a high positive correlation between career satisfaction and whether worker involvement programs are good for supervisors. There are two possible explanations for this relationship.

If supervisors are satisfied with their career and where they are

going in the organization, then it is likely that their personal beliefs, goals, etc. are congruent with company policy. If company policy is toward increased worker participation, it is then likely that the more satisfied supervisors, careerwise, would also hold such a belief and would see worker involvement programs to be good for themeselves.

Secondly, if supervisors are satisfied with their position within the organization, they should also be more secure in terms of their ability to perform their job successfully. A change such as worker involvement programs would therefore be less of a risk to them personnally.

A Final Check

As a final validation, a model was developed for each of the three categories - good for company, good for employees, and good for supervisors - and tested on the entire sample and then separately for both quality circles and teams.

Good for Company = f(demographic and job characteristics)

Good for Employees = f(demographic and job characteristic)

Good for Supervisors = f(demographic and job characteristics)

Tables 2 through 4, at the end of the appendix, provide the regression results for each level. Each equation includes those factors deemed appropriate for each level based upon the discussion in

the prior sections of this chapter.

Measures for supervisory values and use of reciprocity were used at all three levels based upon an assumption that they are relevant regardless of the frame of reference. In addition, three demographic characteristics were included in all equations - age, education, and time on assignment. The choice of demographic characteristics was based upon trying to sort out the often heard assumption that "the newer, younger and more educated supervisors accept participative management more readily than the old-timers."

Two additional measures were added in the equation testing for whether worker involvement programs are good for the company. The first had to do with supervisory perceptions of upper management's committment to the program (manager's concern for people). If supervisors do not view their superiors to be concerned about the workforce, then it is doubtful that they would view worker involvement programs as worthwhile. The second independent variable added at this level was information availablity since worker involvement programs, if successful, should improve both the communication and the decision making process.

Similarly, at the second level - good for employees - two measures were added. One was manager's concern for people under the assumption that the relationship would be identical to that of whether the program is good for the company. The second measure was the number of employees reporting to each supervisor. If supervisors are responsible

for a large number of employees, it is doubtful that they would have time for regular interaction with all their employees in order to give them some input into their work environment. It is expected that supervisors with fewer employees would be more positive because they would regularly seek out their employees' ideas and most likely have a more open relationship with them. In addition, these supervisors would have more time to devote to worker involvement activities.

At the more personal level for supervisors, whether the program is good for themselves, three independent variables were added. The first was the number of employees reporting to each supervisor for reasons discussed above, especially the time dimension. Another variable added was supervisory satisfaction with their career progress within the organization. As discussed earlier, this variable was used as a measure of supervisory performance in an effort to sort out if the better supervisors are really the more positive ones. Lastly, since the two indicies, participation in decisions and say on the job, were highly correlated (.67), they were combined for purposes of the final regression analyses to measure supervisory involvement in the organization.

As shown in Tables 2 through 4, most all coefficients were of the expected sign. However, the coefficient for supervisory involvement was negative, but not significant, for the total sample and for quality circles. There could be a counter argument for this negative sign. Those supervisors who are priviledged in having some input into decision making may covet it so much that they view worker

participation as robbing them of some of their power and narrowing the distinction between them and their subordinates. In this case, those who have no participation have nothing to lose, and may even gain some say themselves, if workers become more involved in decision making.

It is also interesting to note that age was not a significant variable at any level, while education was highly significant for the complete sample relative to the company attitude and for teams at all levels. Although not highly correlated in this sample, education most likely has a large influence on values towards participation. Most anyone receiving a four-year degree in the past ten years or so would have had some exposure, albeit quite limited, to worker participation. As a result, worker involvement programs would not be a totally unknown entity. Therefore, education should eliminate a bit of the "fear of the unknown."

Lastly, it is important to note that time on assignment was a highly significant variable at all levels for the total sample and for quality circles. This lends support for the reciprocity arguement in that exchanges take time to develop. Supervisors who are new on their assignment, have not had time to develop any on-going rapport and give-and-take relationships, and, hence, have less to loose by worker involvement programs.

Summary

Since many practitioners are quick to use demographic or job

characteristic variables to generalize about supervisory responses to worker involvement programs, this appendix has presented a model which can be used to begin to test these assumptions. However, due to the colinearity and size of this sample, validation must await further research.

Footnotes

1. This assumption may not be totally valid. Career satisfaction may be as much a function of expectations as performance, but it is the best proxy available.

TABLE 2
GOOD FOR THE COMPANY

	Total Sample (N=132)	Quality Circles (N=88)	Teams (N=36)
Mean	5.21	5.02	5.75
S.D.	1.34	1.36	1.03
Worker say	.43 *	.29	.52 *
	(.26)	(.44)	(.32)
Rules Useful	.24 *	.39 **	-.28
	(.18)	(.23)	(.26)
Managers' Concern for people	.18 *	.27 **	.09
	(.12)	(.15)	(.26)
Information Availability	.23 **	.04	.40 **
	(.13)	(.17)	(.21)
Time on assignment	-.13 *	-.18 *	.02
	(.09)	(.12)	(.15)
Education	.18 *	.05	.47 ***
	(.13)	(.16)	(.20)
Age	.005	.0003	.03
	(.01)	(.02)	(.02)
R^2	.19	.17	.30

* significant at 10% level (one tailed test)
** significant at 5% level (one tailed test)
*** significant at 2% level (one tailed test)

TABLE 3
GOOD FOR EMPLOYEES

	Total Sample (N=132)	Quality Circles (N=88)	Teams (N=36)
Mean	4.82	4.69	5.25
S.D.	1.18	1.19	.97
Worker say	.23	.05	.32
	(.24)	(.39)	(.33)
Rules Useful	.20	.19	-.05
	(.16)	(.20)	(.27)
Managers' Concern for people	.28 ***	.33 ***	.15
	(.10)	(.13)	(.27)
No. of Direct Subordinates	-.01 *	-.01 *	-.02
	(.01)	(.01)	(.02)
Time on assignment	-.16 *	-.21 ***	.12
	(.08)	(.10)	(.15)
Education	.12	-.04	.32 *
	(.11)	(.14)	(.21)
Age	.01	.01	.02
	(.01)	(.02)	(.02)
R^2	.15	.16	.15

* significant at 10% level (one tailed test)
** significant at 5% level (one tailed test)
*** significant at 2% level (one tailed test)

TABLE 4
GOOD FOR SUPERVISORS

	Total Sample (N=132)	Quality Circles (N=88)	Teams (N=36)
Mean	3.99	3.80	4.39
S.D.	1.33	1.29	1.15
Worker say	1.01 ***	.97 ***	1.15 ***
	(.24)	(.38)	(.35)
Rules Useful	.18	.11	.07
	(.17)	(.21)	(.29)
Career Satisfaction	.20 **	.21 *	.03
	(.12)	(.14)	(.25)
Supervisory Involvement	-.05	-.04	.56 **
	(.11)	(.14)	(.29)
No. of Direct Subordinates	-.03 ***	-.03 ***	-.02
	(.01)	(.01)	(.02)
Time on assignment	-.04	-.09	.09
	(.09)	(.11)	(.16)
Education	.22 **	.10	.36 **
	(.12)	(.15)	(.20)
Age	.01	.01	.01
	(.01)	(.02)	(.03)
R^2	.27	.24	.42

* significant at 10% level (one tailed test)
** significant at 5% level (one tailed test)
*** significant at 2% level (one tailed test)

Chapter 10

Implications for the Management of First Line Supervisors in Worker Involved Organizations

Although this study focuses primarily on supervisory resistance, the case studies in the earlier chapters provide insight into on both successes and failures in the transformation of the first line supervisory role in these new work organizations. One of the major problems encountered was a redefinition of the role and functions of the position. A general belief is that the new organization will have fewer supervisors in number and that the supervisory role will change, but how? And, how will supervisors in these new work settings maintain influence?

This chapter addresses the above questions further and describes the roles which may evolve for supervisors in worker involved organizations. In addition, some alternatives are discussed for dealing with supervisors who have yet to accept these new assignments.

Is There a Need for Supervisors?

In 1973, when the Work in America task force recommended participatory management as one of their solutions to declining worker satisfaction and productivity, they noted,

> Some managerial jobs, however, do tend to be eliminated. such as some of the lower- and middle-management positions as well as foremen. . . Without retaining opportunities for individuals in these jobs, however, either they would be put out of work or, with the threat of that possibility, oppose the redesign of work (Work in America, 1973, p. 104).

Much of the literature on quality of worklife parlays this theme and states that one of the major benefits of these programs is the eventual elimination of the first layer of management. Even the writings focused specifically on the supervisor seem to be saying the same thing. For example,

> The supervisor is expected to delegate as much as possible of his functions. He ought to work himself out of a job completely or to some significant extent (Walton & Schlesinger, 1979, p. 28).

But is it really realistic to expect no interface role between management and the workers? Experience tends to indicate the exact opposite:

> - Cole (1979) found in Japan, the role model for much of this effort, that there was "no diminution" and, if anything, an "increase in the authority and role of the foreman" (p. 209).
>
> - A plant manager in one of Schlesinger's (1982) case studies noted, "It was also clear that our notion of running without supervisors was either premature or infeasible. The management staff simply could not adequately stay in touch with our workers to the extent that appeared necessary (p. 16).

Indeed the experience of Plant G support these observations. Initially the management team was divided on whether there was a need

for supervisors, so they devised a new support role. But a short trial using the new coordinator role as a staff function showed the plant that there was a need for a supervisory role. But the role of the supervisor under the new work system could not continue to be the "hard-line", "carrot and stick" foreman. A new role had to be developed.

A New Role for First Line Supervisors

Plants G and X help to shed some light on how the role of the first line supervisor may be redefined. Not surprisingly, the supervisory position in both plants fits the supporting, counselling model of recent research (Westley, 1981; Schlesinger, 1982; Rosow & Zager, 1982).

Westley (1981) suggests that the new interface role between management and the work teams will be that of a front-line coordinator.

> The shift in roles from that of supervisor to co-ordinator include giving up traditional responsibilities for control and discipline, adding skills in supporting and teaching the work teams, and adding skills in liaison, negotiation and information (p.26).
>
> To summarize, the co-ordinators must be teachers, counsellors, and co-ordinators. They must fulfill these functions as a colleague, an equal, and a friend (p. 27).

Plant X optimized this relationship by having technicians as teachers for newly hired management trainees. As a result, team managers viewed the top rated technicians as collegues because they had nowhere else to

turn to learn the manufacturing processes. This strategy has been successful, in part, due to the soon to be exclusive use of management trainees in the team manager job. It is questionable, though, that this is a viable, or recommended, solution for an existing plant attempting to implement worker involvement programs. In this respect, Plant G is more representative.

After five years of stumbling, Plant G finally delineated the supervisory role into nine role obligations[1]:

1) Team Commitment - Supervisors must promote teamwork and convey a genuine interest in and support for the concept. They should encourage cooperation and work with the employees in developing team competence and cooperation.

2) Communications - Supervisors are the major link in the communications channel between management and the hourly employees. Supervisors must learn to communicate daily instructions through the team communicators in order to develop communications among team members.

3) Training Skills and Assessment - Supervisors are in the best position to assess the specific training needs of their employees. As such, they are responsible for identifying, coordinating, and, where possible, conducting the necessary training.

4) Human Relations Skills - Since supervision is a key to maintaining positive employee attitudes and high morale, supervisors must develop good human relations skills. This means becoming "employee-centered" by listening and showing an interest in employee problems, emphasizing communications and team spirit, and showing a sincere interest in the welfare of employees.

5) Motivational Techniques - Supervisors must learn to be motivators not just disciplinarians. Motivation results from giving employees responsibility, and accountability, and a sense of contribution. Supervisors should learn to use such phrases as, "What's your opinion?", "What can I do to help?", "Thank you", etc.

6) Delegation - Delegation allows supervisors the opportunity to assume additional duties and alleviates many of the petty,

routine details which can be efficiently accomplished by employees. It helps to bolster both individual and team morale by giving everyone an opportunity to share the responsibilities and rewards.

7) Decision Making - Supervisory performance ultimately evolves around the decisions made by supervisors. Teams can be allowed to make day-to-day routine decisions, but supervisors must set priorities and explain why some decisions take precedence over others.

8) Discipline - Supervisors must always remember that employees are individuals as well as members of a group. The majority of the employees will respond to techniques of positive motivation, but a few may not. In these cases, the supervisor may have to administer discipline in an effort to remedy improper conduct.

9) Follow-up and Feedback - There are times when every team, regardless of its maturity, will need guidance, support, and reinforcement. Both verbal and written feedback is necessary to make both individuals and teams aware of their strengths and weaknesses.

But all of the above aspects of the job are conditional upon the amount of influence the supervisor maintains over the work groups. However, in order for workers to be truly involved, this influence cannot manifest itself back into traditional control behavior. What then is this new type of influence? The next section shows that exchange theory is still a foundation for supervisory influence but now in a slightly different mode.

The New Role of Reciprocity

Many have used the words "coach", "support" and "teach" to describe the new role, but how do these translate into the day-to-day activities of first line supervisors? Are these the new bases of influence? Technicians at Plant X were asked to describe the ideal

team manager. The following is representative of their responses:

> The best team manager is one who is fair and stands up for the teams. He or she will support us with upper management and help get us the resources we need to make the job better.

The phrases "help" and "get resources" sound very much like new forms of reciprocity. A team manager can use these as levers to get the teams to perform. Likewise, the technicians have their own form of reciprocity.

> - You help new managers learn because you figure that you may want some help in the future when one of them becomes the boss.
>
> - It becomes a kind of give and take relationship. Managers learn that we (the technicians) are the ones who really know the operation best and can either make or break them.

These new forms of reciprocity sound relatively simple, especially with "green" managers recently recruited off college campuses as in Plant X. But, how does this translate into a plant in transition where the supervisors are as knowledgeable about the operation as the workers? What are the stepping stones in an existing plant which help supervisors move from the traditional "power through fear" to "power through participation and caring"? One of the senior supervisors at Plant G gave a clue when he complained about their current state.

> You know, when this whole thing started I was basically against it, but now I've been converted. I see that it can work and the associates can handle many of the repetitive, day-to-day activities. But upper management still has one thing wrong. They tell us to totally get out of the day-to-day activities and that's impossible. Somebody still

> needs to do the "fire-fighting", and that's where we can be most effective.

This is quite similar to Landen & Carlson's (1982) description of supervisors under General Motors' Quality of Worklife Program,

> A new support system (is) made up of experienced supervisors who now take on new responsibilities such as planning, plant-wide problem solving, interfunctional coordination, and, generally, "trouble shooting" (p. 307).

Delving deeper into what "fire-fighting" or "trouble shooting" entails revealed one-on-one problem solving, not a whole lot different than the supporting/coaching role at Plant X. This one-on-one interaction allows supervisors to now pick and choose the individuals or teams they choose to support or help in an effort to reward or punish. The reciprocity may be more subtle, but it is there nonetheless. One of the plant managers described the process as follows:

> The strong foremen have an ability to manage people. They do this through three tools; 1) they ask for advice from their people, 2) they give recognition and positive feedback, and 3) if they can't answer a question, they admit it and then get back to their people with a response. In this way they make a contract. If they break it, they loose confidence.

Another new form of reciprocity was described as helping or working side-by-side with employees. For example,

> - One supervisor fills in on the line when employees need to take a break.

- Another supervisor noted that he makes it a habit to try to either carry over a box of supplies or help operators in loading a machine while chatting with them in order not to appear to be watching or spying on them.

Granted, these last examples may be a bit difficult in unionized plants, but other forms of helping or training exchanges can, and do, exist in all organizations.

Incentives for Supervisors

Change seldom occurs without some impetus or pressure (Lewin, 1947). This applies as much for supervisors as anyone else. More often than not, though, change activities, and in this case worker involvement processes, take the form of "Do it or find another job!" This only causes supervisors to view the programs as an order or a distasteful pill they have to swallow. In contrast, there are ways to make support for, and participation in, worker involvement activities a reward as opposed to a punishment.

One answer may be to include participation in the worker involvement programs as part of the formal measurement and reward system for supervisors (Walton & Schlesinger, 1979). Another possibility is to provide supervisors the same type of recognition as the workers. Plant X makes it a practice to have team managers make presentations to upper management whenever possible. Plant C found that a QWL team for foremen which meets regularly with the plant manager was a way to regain supervisory support for the program.

Other aspects of the supervisory role should also be reviewed such as the workload. If worker involvement programs are just added along with the many other elements of the job, as quality circles were in Plants A through E, supervisors are apt to view them solely as an extra burden. However, if supervisory duties are delegated downward, other tasks, such as planning activities or special projects, need to be added to fill the void left in supervisory positions (Westley, 1981; Walton & Schlesinger, 1982).

Supervisors may also use worker involvement programs to enhance their reciprocal arrangements with their managers. Reciprocity is not a mechanism used only by first line supervisors and their employees (Emerson, 1962; Kotter, 1977). Astute supervisors may see support for the programs as a trade for favor from above. In addition, by being actively involved with the programs, they can have more control over the process and flow of information up and down the organization (Mechanic, 1962).

Lastly, a major incentive is to reduce the disincentives that supervisors see. To this end, managers need to begin to address the concerns of the supervisory resisters. In some cases, their complaints can be remedied. For others, the supervisors, themselves, may be a major part of the problem.

How to Deal with Resisters

Once the role has been defined, how is upper management to get

supervisors to accept their new duties? As described throughout this research, many supervisors readily accept their new role, but others do not. This section will look at each category of resister outlined in the last chapter and suggest how management might address these supervisors.

Theory X Proponents

Theory X Proponents are probably the hardest to deal with. For whatever reasons, they hold a belief which is exactly counter to the worker involvement process. They believe that workers need to be controlled or they will not produce. This is a value they have most likely held for many years and will not easily be changed. This is not to say that they are hopeless, but that changing their basic assumptions about workers may be extremely difficult.

These supervisors should be given some basic training and be exposed to some success stories. Plant F found it helpful to send some of its disbelieving supervisors to plants such as Plant X to see a worker involvement program in action. This converted several of the "hard-liners". However, successful turn arounds, such as above, may be limited. This is one of the cases where "strategic replacements" (Gouldner, 1954), or movement to "less damaging positions", may be necessary.

Status Seekers

This group of supervisors are the second most difficult to deal with after the Theory X Proponents. The Status Seekers have chosen the job of supervision because they like the prestige associated with being "the boss". The distinction between Status Seekers and Theory X Proponents is that Status Seekers may hold a Theory Y view of the workforce. However, they hold to the belief that there should be two classes of workers, i.e. managers and workers. These supervisors may believe that workers do have something to contribute, but they need to be shown that workers will contribute even more if they are not treated as second-class citizens. They need to be convinced that workers can be viewed as equals, but with different jobs to perform.

Corrective actions for Status Seekers should be quite similar to those used for Theory X Proponents, i.e. training and exposure to successful worker involvement sites. In addition, time and patience may change their attitudes. This is what happened with several of the new team managers at Plant X. They came in, fresh out of college, with the image that they were the boss. As one of the technicians explained,

> Some of the new recruits come in really "gung-ho" thinking they are the boss. It takes them about six months and they learn if they treat us with respect we'll perform and they will look better.

Skeptics

Skeptics need to be shown that upper management is really committed to this new way of managing. One step is to openly explain why worker involvement processes are different than former programs which have come and gone. Another possibility is to ask supervisors what it would take for them to believe that upper management is committed. Then management can either accept or reject these conditions. However, if rejection is necessary, further skepticism will be created unless clear and candid explanations are provided.

All too often the middle managers are just as much "Skeptics" as are the supervisors. The key is for managers at all levels to convey their commitment, not only in words, but also through their actions. Along these same lines, managers should be particularly conscious of their unspoken, or "body language", messages. As one manager noted,

> One of the main problems, early on, was that we really didn't have the support of the middle managers. Often a manager would walk up to one of the employees and sarcastically say, "Oh, aren't the teams running well!" which would be viewed as the manager making a joke out of the teams. When the supervisors heard this, they questioned the wisdom of supporting the teams if their boss didn't believe in it.

Once managers are converted and convey their support, the only answer for supervisors may be time and patience. Experienced supervisors have gone through too many short-term programs to be quickly convinced that this one is really here to stay. As Plant E illustrates, even after five years of success with quality circles,

some foremen are concerned that priorities are changing and that the program may still be on the way out.

The main message is that managers have to keep working on showing their committment long after they think the program is in place. They cannot slack off for even a moment. One small window of doubt will bring out the Skeptics. Only after worker involvement becomes institutionalized as the way of managing, as in Plants G and X, will skeptism finally be put to rest.

Equality Seekers

There are two types of Equality Seekers; 1) those who want to be part of the design process, and 2) those who want a program for themselves. The key to the first group is to get them involved early. As Westley (1981) recommends, the definition of the supervisory role should be a participatory process with those who will be affected. This also applies to the total worker involvement process as has been done in Plant F. This should not be viewed as a cost because supervisors, just like the workers, have good ideas to contribute. However, this will be a risk for managers. By involving the supervisors, managers will have to give up some of their power, just as the supervisors must with the introduction of the worker involvement programs. As with the Skeptics, part of the problem may lie with the middle managers. This is a problem which has only begun to be investigated (Schlesinger & Oshry, 1982). Most likely, many of the issues raised by first line supervisors are identical for one level up.

The second group, those who want equal treatment with the workers, are basically asking, "Aren't supervisors as important as workers?" As one manager recalled,

> In the design process we decided we should take the reserved parking spaces away from the foremen as a show of good faith to the union. However, the foremen made an issue out of it and we had to reverse our decision. In essence, they were asking where the quality of worklife was for them.

The concern is not that workers are getting recognition or respect, but that it is happening at supervisors' expense. Establishing a supervisory QWL team, as in Plant C, or a Foremen's Forum, as in Plant E, may solve many of these concerns.

Equality Seekers also need to see some reward for their support of the program. The answer may lie in the incentives discussed earlier. But, in addition, supervisors need to see the programs as helpful to themselves as supervisors. (See sections on first line supervisory views of programs in Chapters 4-7.) The best vehicle for this is for Equality Seekers to learn from their positive peers just how worker involvement programs are helping them in performing their job. Management can try to convey some of this but it can backfire. As one supervisor recalled,

> The main problem was that they (upper management) kept telling us how helpful it would be for us. They built up our expectations and then we found out that it wasn't all that good for us. It would have been better if they hadn't said anything about how it would help us.

The longer the dissatisfaction festers, the harder it will be to correct. The memory of neglect still lingers on in all of the plants in this study even though actions have been taken to now involve the supervisors. The following are representative comments from two of the plants:

> -Although they (upper management) have tried to correct for overlooking us, the damage has be done. They stripped us of our power and the workers saw this. We lost a lot of respect in just a few months.
>
> -Although the plant has since corrected the supervisory problem, many of the supervisors will never forgive us for the fear that was instilled in them by the program.

Dealmakers

Every supervisor to one extent or another is a dealmaker. The key is to encourage those exchanges which are useful or helpful in contrast to the dysfunctional, or compromising, ones. The dealmaking resisters are those supervisors who are unwilling to let go of their current exchanges for one of two reasons; 1) they believe that their "deals" are superior to any new ones, or 2) they have yet to discover the new forms of reciprocity.

In the first case, Dealmakers may fall in the same group as the Theory X Proponents and Status Seekers, i.e. train them and provide them with exposure to successes, but if they don't change they may have to be replaced. The second group just needs assistance in seeing how worker involvement programs can help them with their one-on-one exchanges with employees. Along this line, those supervisors, who

stated that these programs increased their one-on-one interactions, were asked to explain their response. The following statements highlight many of their comments,

> -Teams help you to get to know everyone better so you just naturally talk with them on a one-on-one basis more often. This is especially true for some of the soft spoken people who end up showing you how knowledgeable they are. In this way supervisors start interacting with those individuals who they may not have in the past.
>
> -They break down the barriers between supervisors and hourly people. By giving us a common reference point, it is easier to communicate with one another.
>
> -Teams help primarily in upward communication. The program helps team members communicate with supervisors where in the past they were often reluctant to talk with a supervisor on a particular issue.

As with Equality Seekers, the best vehicle for helping Dealmakers to recognize the potential benefits is through peer assistance from the positive supervisors. It would be very difficult for management to enlighten supervisors concerning reciprocity because it is such an unconscious process. If it is discussed as a management tool, it can easily be viewed as manipulative.

If Replacement Becomes Necessary

Unfortunately, there will be instances where remedial actions will not convince some supervisors that worker involvement programs are a better way or where training is not successful in changing supervisory behavior. When all else fails, replacement may be the only recourse. Although Plant E went through a supervisory replacement process for

different reasons (to remain nonunion), their experience may be helpful here. They were able to make the replacements without undue stress on the part of those involved by spreading the moves over a three-year period. In addition, they did it in a way that supervisors did not feel as though there was a threat to their job security. The latter is key because even the supervisors who hold a Theory Y view will turn against the program if they perceive a threat to their job security. Therefore, movement to "less damaging jobs" may be more appropriate than termination.

One of the issues in replacement is the selection of new supervisors who will fit this new environment. What are the skills to look for and is there a general stereotypical ideal candidate? Several of the plants in this study have swayed toward hiring more, or solely, college graduates. Success along this account has been mixed as it was in the 1950's when this was viewed as the answer to the mismatch between actual and needed supervisory skills to manage the newly unionized workforce (Hopper, 1967). Potpourri is moving more in the direction of only hiring management trainees directly out of college, while Neptune has fallen back to trying to promote internal candidates who have attained further education on a part-time basis. The optimal may be a blend between the two.

Summary

The evidence indicates that there is a need for supervisors and that the new role is just as critical as it has been in the past. However, the role has changed and supervisors in transition will need assistance in learning some new skills. As a recent Work in America Institute study (Rosow & Zager, 1982) stated,

> - The supervisor's job has to be redefined.
> - The supervisor has to be reoriented and retrained for the new job.
> - The supervisor's employment security must be confirmed.
> - The supervisor must be given time for consulting with subordinates, and not be pressed for results that compel him or her to revert to the old methods of giving orders (p. 89).

The above are all keys to successful supervisory transitions and need to be addressed simultaneously. Supervisors need to know what is expected of them and how they will be measured. They must be provided the necessary training and support (both morally and in the form of resources) and given some time (within reasonable limits) to transition into this new role. Above all, they need to know there is a real job for them and that they are not just being used to set up the teams, after which they will be declared "redundant".

Experience shows that neglect of supervisory concerns will lead to some degree of resistance. But the needed attention may not be as overwhelming as some now view it to be. With management attention to the issues raised by the five types of supervisory resisters, supervisory opposition can be readily transformed into active support.

Footnotes

1. Excerpted from plant document, "The Role of the Supervisor", Plant G, June 23, 1981, written by the Team Coordinator.

Chapter 11

Conclusions and Implications

As long as there are managers and workers, there will be a power struggle and there will be someone caught in the middle. Whether that individual is called a foreman, supervisor, team manager, team leader, or what, there will be a leadership role which will have to answer to the needs of both those above and below. Experience indicates that this occurs even in organizations with worker involvement programs.

Resistance to change is a common phenomenon and there is no reason to suspect that supervisors will be immune to change. But if the role is here to stay, in one form or another, and the individuals in the position are expected to support and implement worker involvement programs, then it is important to thoroughly understand what worker involvement means to the role. This is especially so in traditional, autocratic organizations which are attempting to change the management style and behavior of their current supervisory population. Therefore, this research studied supervisory reactions to worker involvement programs through the experiences of eight plants.

Review of Research

This research began with an historical review of the first line supervisory role in an effort to better understand how supervisors have adapted to changes in the past. A parallel was drawn between the

1940's and today. In 1941, foremen banded together to form the Foremen's Association of America in response to concerns over pay, job security, and loss of authority. Today, worker involvement programs are once again raising issues over two out of three of those same concerns - job security and loss of authority. Although our current legal system precludes the reformation of a supervisory union and responses may have to be less overt, pressures today point to a resurgence of supervisory resistance.

With history as a backdrop, eight plants were then investigated in detail to explore today's workplace changes. Each case explored the development of worker involvement activities and the role of first line supervisors in those efforts. Then through the use of a survey and feedback interviews, supervisory attitudes toward their job and the worker involvement program within their plant were reviewed. As in prior research, reactions were mixed ranging from very positive to very negative. Since little is known about the underlying reasons why some supervisors oppose the implementation of worker involvement programs, the core of the analysis focused on this sub-group.

Conclusions

The case studies in this research spanned various industries and types of worker involvement programs. The supervisors studies were both young and old, new and experienced, internally promoted and recruited off college campuses. Yet, there was a similar thread throughout all their attitudes. In general, they saw worker

involvement programs as good for the company and workers, but did not see direct benefits for themselves in their role as supervisor. This is not to imply that just because they did not see a direct benefit to themselves that they did not support the programs. Many recognized that if the programs were good for the company and employees, they would also be good for themselves in the long run, because overall what is good for the future of the company is also good for them. However, not all supervisors held this perspective, and some were even unconvinced that the programs were beneficial at all.

In a few cases, supervisory opposition took the form of outright refusal to participate, but this was rare. More often, the resistance was more subtle. The most common form of opposition was silence or non-support for the programs. Employees often look to their supervisors for guidance, and, by not encouraging employees to participate in the worker involvement activities, supervisors were quietly protesting and hoping the programs would fail due to lack of employee interest. In several cases, a few went a step further and critized the programs behind the backs of upper management.

Initially, during the implementation process, supervisory concerns focused on "Is there a role for me in this effort, and, if so, what is it?" Another concern was "How am I to get this done along with everything else they expect me to do?" However, even after issues of job security, role definition, and extra workload were addressed, some supervisors still opposed the programs.

Through a comparative analysis of the seven plants in transition, five types of supervisors were found to resist worker involvement programs. None are mutually exclusive and any supervisor may fit into more than one group. The five supervisory groupings are as follows:

1. Theory X Proponents - These supervisors are fundamentally opposed to worker involvement programs because they don't believe that workers can contribute anything, and, if given the opportunity, they will abuse or take advantage of the situation. This is exemplified by comments such as, "Workers are just children who need to be told what to do."

2. Status Seekers - These are the supervisors who took the job because they like being the "boss". They like the prestigue of being the supervisor and don't want anything to reduce the distinction between management and subordinate.

3. Skeptics - These supervisors are fearful of being left out on the limb by their managers without any safety net to fall into. They have seen programs come and go where the supervisor is often left holding the bag.

4. Equality Seekers - These supervisors are saying, "Why not me?" They see themselves as just the messenger of good tidings for the workforce with nothing in it for themselves. Included in this group are those that feel that if they were allowed some input, the program could be improved. However, as it is, there are problems which will lead to failure of the program (which they may help along).

5. Dealmakers - Lastly, these supervisors are the ones who depend solely on one-on-one exchanges to motivate their subordinates. All supervisors, to some degree, use this mechanism, but those who resist are the ones who have yet to find that worker involvement programs are an additional tool in influencing or motivating their employees.

Need for Further Research

The above are only beginning hypotheses as to why some first line supervisors oppose worker involvement programs. The task is now to validate them. The model in the appendix to Chapter 9 presented one

possible approach. However, before such an anlysis can be made on a larger sample, better quantification of the independent variables is needed.

Since exchange theory appears to explain much of the negative reactions, better methods must be found for measuring reciprocity. One possibility is to have supervisors respond to a questionaire containing a series of scenarios addressing the use of reciprocity and how worker involvement programs may, or may not, be impacting various types of exchanges.

Throughout this research lack of middle and upper management support for worker involvement programs surfaced as a key variable. It may be that many of their concerns are quite similar to those of the first line supervisors. Their job security is also being put in limbo as many organizations question the effectiveness of, and need for, many middle level positions (McKersie & Klein, 1982). In addition, many middle managers are faced with "lack of power" issues (Schlesinger & Oshry, 1982). As such, this research may provide a framework to begin to investigate changes occurring in the middle layers of the organization.

Extensions for Other Research

Although this research focused on the impact of worker involvement programs, other changes, such as the introduction of computer-based technology, are also altering the supervisory role (Davis & Taylor,

1975). As such, the hypotheses generated in this study may help in better understanding supervisory reactions to new technology. Here supervisory resistance is also beginning to surface, as evidenced in a recent newspaper article.

> It wasn't the welders who didn't like the robot, it was the supervisors. When you oversee a perfectible robot, it's your fault, not the worker's, is something goes wrong (Montogomery, 1982, p. 18).

The parallels between the impact of worker involvement programs and new technology on the status of first line supervisors are striking. In the early stages, where the limelight is often on the new technology, supervisors may have to maintain a closer watch on the workforce to insure that everything runs smoothly and that everyone looks productive when visitors or the upper brass tour through the shop (Gouldner, 1954a). However, over time, the new technology may transfer the control and monitoring of production flow and quality control from the hands of the supervisor to a computer program. As such, these new systems may further erode many of the supervisory reciprocal arrangements. Unions have already begun to include specific demands concerning the use of computer-based technologies in their contract talks because the worker can no longer negotiate with the foreman for a rapid pace during the morning and a relaxed pace in the afternoon (Zuboff, 1981).

The prestige of many of today's supervisors will also be lessened as younger, newly trained workers are more knowledgeable about the inner workings of the new equipment because they have grown up in the

"computer generation." This lack of perceived technical competence will reduce a supervisor's expert power (French & Raven, 1959; Kotter, 1977). For example,

> One of the strongest causes of resistance to change is the fear of losing one's job or being required to learn new skills. This fear may be especially strong among supervisors, since much of their authority lies in their special knowledge of the system which may have been built up over many years (Weir and Mills, 1973).

Implications for Practitioners

The main purpose of research is to expand our body of theory, but the ultimate test of that theory is whether it is relevant to those who attempt to apply it. All to often, managers and change consultants have forgotten about the "man in the middle" and supervisory non-support has gradually underminded many worker involvement programs. First line supervisors often do not feel they have the protection necessary to question management directives and, hence, outwardly comply with these new programs. However, eventually, their dissatisfaction surfaces in subtle and non-supportive behaviors.

The five types of resisters presented in this research may help managers and design consultants to modify their change processes or provide the training and support necessary to address much of the supervisory opposition. But attention to these issues in a vacuum will not be sufficient. Reflecting back to the 1940's, managers must also address other issues leading to dissatisfaction with pay and job security among first line supervisors.

On the brighter side, many supervisors are very positive towards worker involvement programs and whole-heartedly support the transition to more participative management styles. It is from these supervisors that both academics and practitioners can learn to optimize the beneficial aspects of these programs in an effort to make them more productive for the organization and amiable to all participants.

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