

Notes:

# **Design for Culture**

# **Key Learning Points**

- 1. Describe the importance incorporating culture into improvement.
- 2. Explain how identify cultural needs.
- 3. Utilize cultural design in improvement projects.

# What is Quality Culture?

Quality culture is the patten of human habits, beliefs, values and behavior concerning quality. Technology touches the head; culture touches the heart. Cultural issues apply to all levels of an organization.

To become superior in quality, you must pursue two courses of action:

- Develop technologies that meet customer needs
- Stimulate a culture throughout the organization that continually views quality as a primary goal.

Quality culture is an integral part of corporate culture. Differences in quality culture can have extreme illustrations, both negative and positive.

# "Quality Culture"

The foundation of any quality improvement is to develop a "quality culture" or mindset within the organization and integrate it throughout the company. Organizational Culture is defined as the shared beliefs, values, attitudes, and behavior patterns that characterize the members of an organization.



Culture manifests itself through an organization's values, norms, beliefs, and habits - and these, in turn, impact product quality by guiding team actions. Organizational values typically help prioritize what's most important to teams. Organizational norms define what is considered acceptable behavior, typically through an organization's track record.

Organizational beliefs are shared ideas or principles about the way things should be

Organizational habits guide the regular and often unspoken tendencies that teams have.

# You Can't Rush Change

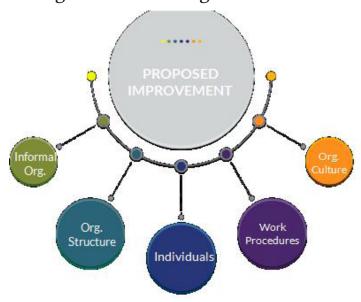
Members of an organization need time to evaluate impact of change. Even if the change seems beneficial, they need to learn what price they must pay in cultural values.

The organization must also include time to reinforce their new direction potentially many times before the change is made.

In this Quality Minute, "Don't Cook Your Chicks," Dr. Juran explains that a chicken egg takes 21 days to incubate, no more, no less, proving that some processes just can't be rushed.

Similarly, a company embarking on quality efforts needs to allow ample time for changes in its culture to take hold.

# **Change Affects the Organization**



#### **Cultural Resistance to Change**

By their very nature, quality efforts create change in an organization. The intended effect of the change is to offer something better to internal and external stakeholders—an enhanced product or service, a more efficient work process, reduced waste, and so forth. The actual effect, even though technologically sound



and appealing, has a social consequence. Any change might be viewed by those affected as a threat and, until the threat is neutralized, change will be difficult to achieve. This objection to change on the part of those affected, such as the workers on the assembly line, the employees in the district office, the technicians in the laboratory, etc., is defined as "cultural resistance."

Cultural resistance is a natural consequence of change, particularly any abrupt change that alters established habits, traditions, beliefs, status, or practices. No one likes to be told that his/her way is no longer the preferred way, especially if he or she has been doing it that way for years. Cultural resistance to such a change can occur even among those who would benefit from the proposed change and may even believe philosophically in it.

Restructuring business processes takes time, both for acceptance of the new system and for retraining employees in their new roles within that system. Hastening the process will result in frustration and resistance.

### Follow the Rules of the Road

### **Provide Participation**

- This is the most important rule for introducing change.
- Those affected should participate in the planning and execution.
- Lack of participation leads to resentment and resistance.
- Allow those closest to the process time to give their input (Voice of the Customer).

#### **Provide Enough Time**

- How long does it take for members of a culture to accept a change?
- Members need time to evaluate the change impact.
- Even if the change seems beneficial, they need to learn what price they must pay in cultural values.
- Include time to reinforce direction potentially many times before the change is made.

#### **Start Small**

- A small-scale tryout reduces risk for advocates and members of the culture.
- Kinks can be worked out before implementing on a wider-scale.
- Momentum on a small-scale can be used moving forward with full implementation.

#### **Avoid Surprises**

• A major benefit of the cultural pattern is predictability.



- A surprise is a shock to this predictability and a disturber of the peace.
- Maintaining dialogue and having a communication plan is a critical factor in avoiding surprises.

### **Choose the Right Year**

Timing can be very important to a change.

#### Example:

ABC Corp. is planning to implement computerized documentation, and has two concurrent projects focused on the completeness of design documentation, and compliance with government regulations. Would this be the right year to do an additional project on documentation at the organization?

### Keep the Proposal Free of Excess Baggage

- Avoid cluttering the process with extraneous matters not closely related to getting the results.
- The risk is that the debates will get off the main subject and into side issues.
- Defining scope in the project charter helps a team focus and stay clear of extraneous matters.

### Work With The Recognized Leadership

- The culture is best understood by its members.
- Leadership can be informal.
- Convincing leadership is significant for change acceptance.
- Recognize whom your informal and formal leaders are. Can some leverage others for additional support?

### Treat People With Dignity

- Respect individual differences.
- Value divergent opinions as an opportunity to see a new perspective.

#### Reverse the Positions

- Ask: "What position would I take if I were a member of the culture?"
- Role play to stimulate understanding of the other person's position.
- Process mapping can help you understand the process as others see it, and walk the process in their shoes. See the process as they live it through their eyes.

### **Deal Directly With The Resistance**

• Try a program of persuasion (cookies help).



- Offer a quid pro quo—something for something.
   Example: When developing a new documentation form for test technicians, the technicians' feedback was incorporated into making the form easier to fill out and streamlining information so there is less double entry of results.
- Change the proposal to meet specific objections.
   Example: If having jobs start on time is a bigger problem identified by a department than increasing volumes, determine if start time should be the project focus which would impact the volumes being handled in the department.
- Change the social climate in ways that make the change more acceptable.
- Forget it. Sometimes the correct alternative is to drop the proposal.

#### Theories of Motivation

Behavioral scientists have conducted studies which provide useful theories to help understand how human behavior responds to various stimuli. The following theories identify what motivates workers.

### **Hierarchy of Human Needs**

Under Maslow's theory, human needs fall into five fundamental categories in a predictable order of priorities. The following table shows this "hierarchy of human needs" together with the associated form of motivation for quality.

Maslow's List of Human Needs	Usual Forms of Quality Motivation
Physiological needs: i.e., need for food, shelter, basic survival. In an industrial economy, this translates into minimum subsistence earnings.	Opportunity to increase earnings by receiving a bonus for good work.
Safety needs: i.e., once a subsistence level is achieved, the need to remain employed at that level.	Job security: e.g., quality makes sales; sales make jobs.
Belongingness and love needs: i.e., the need to belong to a group and be accepted.	Appeal to the employee as a member of the team-they must not let down the team.
Esteem needs: i.e., the need for self-respect and for the respect of others.	Appeal to the pride of workmanship, to achieving a good score. Recognition through rewards, publicity, etc.
Self-actualization needs: i.e., the urge for creativity, for self-expression.	Opportunity to propose creative ideas, to participate in creative planning.

#### **Job Satisfaction and Dissatisfaction**

Under this theory, job dissatisfaction and job satisfaction are not opposites. Job dissatisfaction is the result of specific dislikes—the pay is low, the work- ing conditions are poor ("hygienic factors"). It is possible to eliminate these dislikes—raise the pay, change the working conditions. Companies that pay wages lower than the competition pays must face the harsh reality that they will not attract



the best people and are probably doomed to quality mediocrity unless they have some miracle—but miracles don't come easy. Employee basic needs (e.g., wages) must be met before employee training needs (e.g., quality training) can be met successfully. But even when the revised hygienic conditions are accepted as normal, they do not motivate behavior.

In contrast, job satisfaction depends on what the worker does. Satisfaction comes from doing—motivation comes from factors such as job challenges, opportunities for creativity, identification with groups, and responsibility for planning. To illustrate: At the end of the day, an assembly line worker is happy to leave that monotonous job and go home to something more appealing. In the same company, a researcher may not leave precisely at closing time—the research project may be more fascinating than the outside hobby.

### Theory X and Theory Y

Two theories bring us to a controversy about whether workers have lost their pride in their work. Is the change in the worker or in the work? These two alternatives have been given names—theory X and theory Y, respectively.

Under theory X, the modern worker has become lazy, uncooperative, etc. Managers must combat this decline in worker motivation through skillful use of incentives and penalties.

Under theory Y, there has been no change in human nature. What has changed is the way in which work is organized. The solution is to create new job conditions that permit normal human drives to assert themselves.

f these theories. Even within the same company, it is common to find some managers who support the- ory X and others who support theory Y. This support is not merely philosophical—it is reflected in the operating conditions that prevail in different departments.

Both theory X and theory Y have their advocates. However, there seems to be no conclusive evidence that either can outperform the other in economic terms, i.e., productivity, cost, etc. But some evidence suggests that the theory Y approach makes for better human relations. Some studies have shown that certain workers regard repetitive, routine work as less stressful than the broader range of work with its demands for decision making and creativity.

# **Corporate Culture**

Corporate culture consists of habits, beliefs, values, and behavior. Management needs to define and create the culture necessary for business success. In a classic book, Miller (1984) identifies eight "primary values" that promote employee loyalty, productivity, and innovation. His ideas reflect the thinking of many behavioral scientists and managers regarding the roles facing management.

### **Eight Values**

- 1. Purpose. Purpose is the vision stated in terms of product or service and benefit to the customer.
- 2. Consensus. Three decision-making styles—command, consultative, and



consensus—should be matched to particular situations.

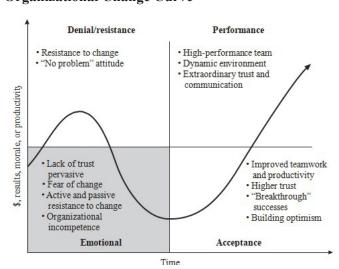
- 3. Excellence. Management creates an environment in which the pursuit of knowledge for improvement is pervasive.
- 4. Unity. The emphasis here is on employee participation and ownership of work.
- 5. Performance. Individual and team rewards are the focus along with performance measurements to tell individuals how they are doing.
- 6. Empiricism. Management by fact and the use of the scientific method form the basis of this value.
- 7. Intimacy. Intimacy relates to sharing ideas, feelings, and needs in an open and trust- ing manner without fear of punishment.
- 8. Integrity. The norm here is for managers to act as role models for ethical practices.

### **Corporate Change**

A discussion of culture quickly moves into an examination of the actions necessary for change. Miletich (1997) describes how Honeywell Space Systems identified seven "dimensions of organizational culture" and then developed a process for changing the culture. The seven dimensions of culture are risk orientation, relationships (of people), information, motivation, leadership, organizational structure, and organizational focus. For each of these dimensions, the executive team debated and documented a definition, determined the current state of the dimension, defined the desired state, developed an action plan to close the gap, and devised a method for measuring progress.

Mackin (1999) presents an organizational change curve that shows how the process of change moves through time. This curve is based on experiences at Merrill Lynch Credit Corp. When people are made aware of such a curve, they are personally able to move through the changes more successfully.

#### **Organizational Change Curve**





# **Quality Culture**

Quality culture is an integral part of corporate culture. The discussion here concentrates on the aspects of corporate culture that relate to the quality of products and services.

Differences in quality culture can have extreme illustrations, both negative and positive.

### **Differences in Quality Culture**

Two examples of differences in quality culture are:

- Negative quality culture ("hide the scrap" scenario). The culture in a paint manufacturing plant put pressure on supervisors to avoid reporting any batch of paint that did not meet specifications. One supervisor resorted to hiding some paint; he directed his workers to dig a hole in the yard and bury the paint. In the service industries, reporting on the processing of transactions (e.g., insurance claims, mishandled baggage) is sometimes subject to data manipulation to yield good performance reports.
- Positive quality culture ("climb the ladders to delight the customer" scenario). The culture in a hotel resulted in taking an extraordinary step to please a customer—on short notice. About an hour before a seminar was to be presented, the seminar leader heard a steady, clear tinkling sound. The cause—small glass prisms in two chandeliers colliding due to air movement from the air conditioning system. He mentioned this distraction to the hotel management. Action was immediate—two work crews were assembled, ladders were set up, and every second prism was removed (about 100 in all).

#### **Changes in Quality Culture**

Culture can be changed. You need to provide goals and measurements, evidence of upper management leadership, self-development and empowerment, participation, and recognition and rewards—critical success factors for achieving a positive quality culture. These paths are the means to drive changes in actions that lead to changes in attitude and finally to changes in quality culture. Above all, there must be a sense of urgency and initiative on quality throughout all levels of the organization. Instilling such a sense is easier said than done because "talk doesn't cook rice."

The paths for quality culture must be integrated with the methodologies and structure for quality. The three elements of self-control are really prerequisites for achieving a quality culture. Thus you must provide people with the knowledge of what they are supposed to do, provide feedback on how they are doing, and provide a means of regulating a capable process. Actions to "motivate" people will not be successful unless the basics of self-control are in place.



### **Technology and Culture**

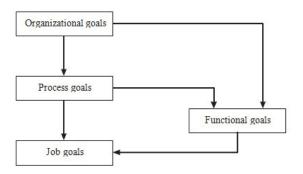


### Provide Goals and Measurements at All Levels

To ensure action on quality, a starting point is to provide quality goals and measurements at all levels. In this process, you develop goals and measures that are aligned with the mission, the critical success factors, and the quality strategy of the organization).

### **Goal Alignment**

Clear quality goals for individuals are important stimuli for inspiring superiority in quality. Human beings commit themselves in two different ways: external and internal. Under external commitment, management defines the goals for employees and also the tasks required to achieve those goals. Under internal commitment, management and employees jointly define goals, and the employees define the tasks to achieve the goals. Management must foster an environment of internal commitment.





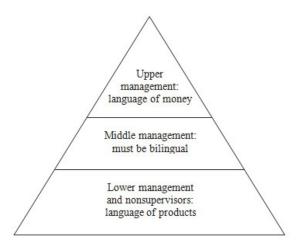
### **Common Languages**

You need to present information in different "languages" for different populations in an organization. The pyramid referenced below depicts these populations and the corresponding languages. At the apex is upper management, usually the general manager and the top management team; at the base are first-line supervisors and the workforce; in between are middle managers and specialists.

These segments of the organization use different languages in everyday operations, and creating awareness of the need for quality must reflect this fact. Middle managers must understand their local dialects and also be fluent in the languages of the other levels (upper management and lower management and workforce). Thus middle managers must be "bilingual."

At the upper management level, creating an awareness of quality is best done in the language of money. Highlighting threats to sales income or opportunities for cost reduction are important.

### **Common Language Pyramid**



#### **Upper Management**

At the upper management level, creating an awareness of quality is best done in the language of money. Highlighting threats to sales income or opportunities for cost reduction are important. When quality can be related to either of these factors, an essential step in inspiring upper management action has been taken.

A study on marketplace standing will identify threats to sales income; a study on the cost of poor quality will highlight opportunities for cost reduction; a study on quality culture will help to identify some of the obstacles to inspiring action. Each of these assessments can be made for the total organization or for individual areas such as product development or operations. Note also that a presentation of the company's current status should be accompanied by an explanation of the benefits that can be expected from a new approach to quality.

#### Middle & Lower Management

At middle management and lower levels, sometimes you can translate the impact of quality directly into the language of job security. When this step can be based on



data, the result can be dramatic.

A manufacturer of a consumer product was able to collect data on current customers who replaced the product made by the company. In one year, about 430,000 customers replaced the product by purchasing a competing brand—and thus were lost customers. About one-third of these lost customers stated that the main reason for switching to another brand was "poor quality" (four times more important than price and other factors). The sales income lost due to poor quality was then calculated as \$1.3 billion. This sales income would have provided about 2000 jobs—as many as were employed by one of the company's plants.

### **Quality Measurements as a Continuous Focus**

The message on quality must be sustained through continuous reinforcement. One form of reinforcement is quality measurement.

Units of measure must be carefully defined to inspire a positive priority for quality. An example that does just the opposite is a poorly defined measure of productivity. Measures of productivity are usually a ratio of product output to input resources. Some companies calculate productivity using total output (instead of output meeting specifications) divided by input resources. Although total output must be measured, a single productivity measure based only on total output sends a clear message that meeting goals and specifications is not important. Changing such deadly measures to count only good output provides continuing evidence that management sets high priority on quality.

Reports and scoreboards of quality measurements can be highly effective, but caution must be exercised. Where the measurements show an unfavorable level of quality, the distinction between management-controllable and worker-controllable causes must be recognized. When the problem is mostly management controllable (the typical case), management must clearly be responsible for taking action. Otherwise, publication of the data implies that the low level of quality is the fault of the workers. Such an implication will be fiercely resented and will undermine a positive culture about quality (and even result in people hiding the defective output). For problems that are mostly worker controllable, the publishing or posting of the data must be accompanied by showing the workers exactly what steps they must take personally to improve their quality of output.

Steps that are "obvious" to management may not be obvious to employees. Maintaining an awareness of quality can draw upon an array of ideas and techniques. These include quality newsletters, quality items on all meeting agendas, announcements on quality by key executives, conferences on quality, and "interest arousers" (e.g., letters from customers, quality puzzles in paycheck envelopes).

Sometimes a simple action stimulates awareness of quality. At a private accounting firm, employees were shown a blank marketing research form used by a competing firm to obtain feedback on customer satisfaction. The form had specific questions about quality, and the employees were surprised that the competition was addressing quality so rigorously.

Human ingenuity provides an unending array of possibilities. But ideas for maintaining a focus on quality can never be a substitute for real action by



management. Some management groups expect clever posters and other media to improve quality when the management-controllable causes of poor quality have not been corrected. If management has this expectation, the posters should be placed high off the ground; otherwise, vulgar comments may appear on them.

# Provide Evidence of Management Leadership

Management commitment is necessary but not sufficient. To inspire action within a company, the most important element is management leadership in quality—with the evidence to prove it.

The leadership role of upper management in strategic quality management includes establishing, aligning, and deploying quality goals and strategies and then serving on a quality council to lead the quality effort.

In brief, upper management must initiate and support a vision of a total quality culture.

### **Quality Related Activities**

Upper management quality-related activities will take about 10% of the managers' time—a heavy price to be paid by people who have many other demands on their time. (Establishing "proof of the need" is essential to convincing upper management to make the time investment.) When upper management spends time on these activities, it provides the evidence of leadership that inspires others to do their share.

Some upper management groups have chosen to be highly visible in the quality process by leading quality training. In such cases, managers at a variety of levels personally conduct some of the managerial training for their subordinates. Sometimes, the concepts presented are emphasized by the manager/instructor in everyday practice.

A further form of evidence is upper management quality improvement teams. Each team, consisting solely of upper management members, addresses a problem that requires attention at its level. Examples include the effectiveness of the product development process, the quality of decision making in selecting new product managers, and the administrative aspects of high warranty costs.

The visibility of upper management taking such training and then conducting such projects sets an example for other levels to follow.

Occasionally, upper management has opportunities to take dramatic action to demonstrate its commitment to quality. Here are some examples:

A manufacturer of tires traditionally sold, at a discount, tires that had imperfections. (These imperfections had no impact on safety.) The sales income from these "seconds" made an important contribution to total sales income. A policy decision was made to discontinue all sales of tires with imperfections. The policy, one part of a broader company emphasis on quality, sent a strong message to all employees that quality was a top priority.



- A manufacturer of a small electronic product had always emphasized quality but found it necessary to rework about 8% of production. A potential customer objected to the rework concept, claiming that the rework might degrade the overall quality. (That customer was not satisfied that the product would be retested after rework.) The manufacturer announced that no rework would be permitted and that any non-conforming product would be discarded. In this case, the strong message proclaimed by the policy helped to uncover many hidden causes of defects that had previously been tolerated and corrected by rework.
- One major utility requires department managers to submit and obtain approval of their departmental budget each year. This organization also requires each manager to prepare an annual quality plan. Each quality plan must be approved before the annual budget is approved.
- A government agency had a reporting system on work output. Managers were evaluated on the quantity of output results versus goals. As the agency moved to a quality- oriented culture, the director took drastic action to demonstrate his feeling about the priority on quality. He discontinued the reports on output (even though he still had output goals from a higher level) and told his people that quality was the top prior- ity. He explained that improvement in quality would contribute to meeting output goals by reducing the time spent on reprocessing activities due to poor quality.

Such dramatic actions are inspiring, even though they are rare.

A particularly sensitive issue that has a major impact on quality culture is job security. The turmoil of downsizing and outsourcing understandably causes major apprehensions among employees. Employees correctly understand that improving quality to increase sales may create jobs, but they are concerned that reducing errors and other forms of waste may eliminate jobs. ("Am I working myself out of a job by participating in this quality improvement team?") How upper management handles this issue makes a deep impression on employees.

Providing evidence of leadership may involve changes in the way management interacts with employees, i.e., the "style of leadership." A prerequisite to such change is understanding the present style. A division of the Rockwell Corporation decided that understanding the style was a key element in gaining employee support for quality. A survey was made to determine the management style of the president, his direct reports, and the people who reported to the direct reports (Warren, 1989). The management team exhibited six leadership styles: coercive, authoritative, affiliative, democratic, pace set-ting, and coaching. The predominant style was pace setting ("The do-it-myself manager who performs many tasks personally, expects subordinates to follow his or her example and motivates by setting high standards and letting subordinates work on their own"). Although the pacesetting style had advantages, it was not deemed suitable for changing the organization or gaining employee support. (Pace- setters often take over a job themselves, have trouble delegating, are intolerant of mis- takes, etc.) Further analysis revealed that a better management style is one where management prides a vision, sets clear standards and goals, shows individuals what is expected of them, lets employees do the job, and gives feedback along with rewards. A coaching



process was developed to help managers change their style.

The matter of leadership for quality applies to all levels of management. Middle management and supervision must take the initiative to act as leaders in quality. In an innovative approach, the CEO of SSM Health Care (a system that includes 21 hospitals) calls for everyone in her organization to be leaders for continuous improvement. Middle management, in particular, is encouraged and expected to create a work environment for improvement (Ryan, 1999). Some organizations tell personnel that they have two jobs—one is in their job description; their other job is improvement.

DeFeo and Barnard (2004) point out that achieving performance breakthrough requires a highly supportive culture. Certain cultural norms appear to be instrumental in providing the needed support. Some of the more enabling norms are:

- A belief that the quality of a product or process is at least of equal importance and probably of greater importance than the mere quantity produced.
- A fanatic commitment to meeting customer needs.
- A fanatic commitment to stretch goals and to continuous improvement.
- A belief that there should be no "sacred cows."
- A customer-oriented code of conduct and code of ethics.
- A belief that continuous adaptive change is not only good, but necessary.

Cultural patterns helpful in achieving performance breakthrough are:

- A collaborative, as opposed to a competitive mode of performing work.
- A generally participative, as opposed to a generally authoritarian management style.
- A high level of trust (feeling safe), as opposed to a high level of fear (feeling unsafe, unwilling to offer true opinions, or take stands or risks). For example, messengers bearing "bad" news must not be shot.

# Provide for Self-Development and Empowerment

Inspiring people to take positive steps in quality is greatly influenced by the nature of the work performed by those people. Below some history, job content, empowerment, and performance appraisal are addressed.

### The Taylor System

Frederick W. Taylor was a mechanical engineer who had worked as a machinist, foreman, and plant manager. He concluded from his experience that the supervisors and workers of his day (late 19th and early 20th centuries) lacked the education to make various essential decisions, e.g., which work methods to use, what constitutes a day's work.



Taylor's remedy was to separate planning from execution. He assigned engineers and specialists to do the planning, and he left to the supervisor and workers the job of executing the plans.

Taylor's system achieved spectacular increases in productivity. The resulting publicity stimulated further application of his ideas. The outcome was widespread adoption of the concept of separating planning from execution. Through this adoption, the Taylor system (later called "scientific management") became widely used and deeply rooted in the United States and, to a lesser degree, among the industrialized countries of the West.

Originally the Taylor system, which is applied to both manufacturing and service industries, resulted in a rigid definition and specialization of work for individuals, particularly at the workforce level. Meanwhile, Taylor's major premise—lack of worker education—has been made obsolete by the remarkable rise in education at all levels including the workforce. As a result, organizations increasingly use the education, experience, and creativity of the workforce. Taylor's momentous contribution has been instrumental in achieving a surge of affluence during the 20th century in developing countries.

The Taylor system is based on the scientific analysis of work using knowledge and experimentation. The design of work can be further augmented with the concept of self-control.

### Self-Control and Job Design

In self-control people must have knowledge of what they are supposed to do, feedback on their performance, and the means of regulating their work if they are failing to meet the goals.

The lack of one or more of these three elements means that quality problems are management controllable. (Generally, at least 80% of quality problems are management controllable.) Placing workers in a state of self-control is a prerequisite to using behavioral approaches to motivate employees.

The following forms of job design place workers in a greater degree of self-control.

#### **Job Characteristics**

In a classic book, Hackman and Oldham (1980) describe five characteristics of jobs that provide more meaningful and satisfying ("enriched") jobs for workers. These characteristics and the actions needed to enrich jobs are shown in the table linked below. Approaches to the redesign of jobs include several forms of job enlargement. In horizontal job enlargement, the scope of a job is increased by having workers perform a larger variety of tasks. The extreme of horizontal job enlargement is for each worker to produce a complete product unit. In vertical job enlargement, the job is enlarged by making workers responsible for tasks previously performed by others vertically higher in the organization (e.g., a supervisor).

Hackman and Oldham recommend caution on job redesign. They point out that most—but not all—people want more demanding jobs. The opportunities are



endless, but we must avoid placing employees in jobs to which they are not receptive or otherwise suited.

#### **Job Enrichment Characteristics and Management Actions**

Characteristic	Definition	Action	
Skill Variety	Degree to which the job has a sufficient variety of activities to require a di- versity of employee skills and talents	Combine sequential tasks to produce larger work modules (horizontal en- largement)	
Task Identity	Extent to which work requires doing a job from beginning to end and results in a completed visible unit of output	Arrange work into meaningful groups, e.g., by customer, by product	
Task Significance	Extent to which the job affects internal and external customers	Provide means of direct communication and personal contact with customer	
Autonomy	Amount of employee self-control in planning and doing the work	Provide employee greater self-control for decision making (vertical enlarge- ment)	
Feedback	Degree to which direct knowledge of results is provided to employee	Create feedback systems to provide employees with information directly from the job	

#### **Self-Directed Teams**

A special form of job enlargement is that applied to a group of workers, i.e., a self-directed team. Two elements are emphasized: (1) each worker is trained to have a variety of skills, thereby permitting rotation of tasks, and (2) the team is given formal authority to execute certain job-planning and supervisory tasks.

### **Empowerment**

Empowerment is the process of delegating decision-making authority to lower levels within the organization. Empowerment of the workforce is particularly dramatic. But empowerment goes far beyond delegating authority and providing additional training. It means encouraging people to take the initiative and broaden their scope; it also means being supportive if mistakes are made.

As employees became more empowered in their work, the feelings of ownership and responsibility become more meaningful. Further, the act of empowering employees provides evidence of management's trust. Additional evidence is provided when management shares confidential business information with employees. For many organizations, such steps are clearly a change in the culture.

The concept of empowerment applies both to individuals and to groups of workers.



Self-managed teams provide an illustration of empowerment for groups of workers. With empowerment comes the need to redefine the basic roles of upper management, middle management, and the workforce. One model at a bank looks like this:

- Upper management should act as shapers and coaches. As a shaper, it should create, communicate, and support the organization's mission. As a coach, it should help when asked but avoid entering into the day-to-day problems of middle management.
- Middle management should run its area of responsibility and also work as a group to integrate all parts of the organization. In addition, it must support the workforce by eliminating obstacles to progress.
- The workforce is the primary producer of the output for customers. Its
  closeness and knowledge about its work means that it should use its
  empowerment to determine how the work can best be done.

Note, under empowerment, how essential it is for management to provide employees with the information, feedback, and means of regulating their work, i.e., meeting the three elements of self-control is a prerequisite for empowerment and subsequent motivation. Self-control includes the training needed to make good decisions under empowerment. Empowerment requires employees to have the capability, the authority, and the desire to act.

Wetlaufer (1999) describes a dramatic example of empowerment at a global electricity company. The characteristics include organization around teams to run operations and maintenance, elimination of functional departments, every person a generalist (a "mini-CEO"), and upper management acting as advisers.

But despite all the talk in many companies, "empowerment is still mostly an illusion" according to Argyris (1998). He believes that difficulties in achieving an empowerment environment are due to a failure by management to achieve an internal commitment from employees by jointly setting quality goals with employees rather than management unilaterally setting the goals.

# **Performance Appraisal**

Performance appraisal is the process by which an organization periodically evaluates an employee's behavior and accomplishments. Performance appraisal has become a subject of intense debate (and confusion). It is believed that, when properly conducted, performance appraisal is a useful tool. Appraisal that coaches employees to a higher level of performance can be helpful; appraisal that is done only to rank employees for purposes of pay and advancement can be destructive. Graber, Breisch, and Breisch (1992) clarify some misunderstandings about the subject and provide constructive suggestions for beneficial appraisals. Eastman Chemical replaced its traditional performance appraisal system with an "employee development system" that focuses on employee development and coaching. Clearly, an appraisal process must de-emphasize past performance and focus on assisting employees in their future job- related quality efforts.

An associated approach is the 360-degree appraisal process. In this approach,



several individuals who frequently interact with the employee participate in the appraisal process. Anyone who has significant contact or useful information about the employee's performance may be included. In the ideal 360-degree process, the individuals participate in both goal setting (at the beginning of a period) and performance appraisal (at the end of a period). Milliman and McFadden (1997) discuss the traditional view of human resource management versus the view of total quality management and then explain how the 360-degree system can contribute to more effective performance appraisals.

### **Selection and Training**

Selection and training of personnel clearly have an important influence on people's development. Many of the principles are well known but are not always practiced with sufficient intensity.

The Japanese have invested extensively in selection and training. Interviews and testing prior to employment assure compatibility of the candidate and the job. Rotational assignments then help to develop a broad base of technical skills, thus facilitating cooperation across departments. At the managerial level, rotational assignments help to develop the individual's concern for the company as a whole.

# **Provide Participation to Inspire Action**

It is tempting to believe that, to inspire action on quality, we must start by changing the people's attitudes. A change in attitudes then should lead to a change in behavior. In reality, the opposite is true. If we first change people's behavior, then that will change their attitudes. Psychologists call this concept "cognitive dissonance."

### **Participation**

The concept of participation is an age-old principle that helps to change behavior. By personally participating in quality activities, people acquire new knowledge, see the benefits of the quality disciplines, and obtain a sense of accomplishment by solv- ing problems. This participation leads to lasting changes in behavior.

Participation at all levels is decisive in inspiring action on quality. At the workforce level, however, participation can have impacts that border on the dramatic. In conducting research on workforce teams, some unforgettable events were observed. Participation should include the officers of labor unions. Competitive economic challenges faced by most organizations require that management and unions find ways to work together for their mutual benefit.



# **Forms of Participation**

Form	Descrip- tion	Upper Manage- ment	Middle Manage- ment	Specialists	First Line Supervi- sors / Workers		
Quality council	Serve on the council	X					
Quality improvement teams	Serve as a leader or mem- ber of a cross-functional improvement team	X	X	X	X		
Quality work- force teams	Serve as a leader or member of a team within a department		X	X	X		
Quality task forces	Serve on quality task forces ap- pointed by the quality council	X	X	X	X		
Process owner	Serve as owner of a business process	X	X				
Design review	Participate in design review meetings		X	X			
Process review	Participate in process review meetings		X	X	X		
Provide plan- ning	Identify ob- stacles to self- control		X	X	X		
Set quality goals	Provide input or set goals	X	X	X	X		
Plan own work	Handle all aspects of planning	X	X	X	X		
Customer visits	Hold discussions on quality with customers	X	X	X	X		
Supplier visits	Hold discussions on quality with suppliers	X	X	X	X		
Meetings with management	Make presenta- tions on quality activities		X	X	X		
Visit other companies	Learn about quality activities	X	X	X	X		
Job rotation	Work in the quality department or other departments	X	X	X	X		
Conferences	Make presenta- tions or chair sessions	X	X	X	X		



# **Provide Recognition and Rewards**

We define recognition as public acknowledgement of superior performance of specific activities. Rewards are benefits (such as salary increases, bonuses, and promotions) that are conferred for generally superior performance against goals.

Such expressions of esteem play an essential role in inspiring people on quality. An even more sustaining form is the positive feeling that people have internally when (1) their jobs have been designed to focus on self-development and (2) they are given opportunities to participate in planning and decision making. This environment tells employees that their skills, their judgment, and their integrity are trusted. Imagine their feeling when independent inspection is changed to self-inspection.

Recognition through public acknowledgment of superior activity can be provided at several levels—individual, team, and business unit. In planning for recognition, here are some questions to address:

What type of activity will receive formal recognition, e.g., normal participation in an activity such as workforce teams, superior effort, or tangible results? Will recognition be given to individuals, to groups, or to both? Will selection of those to receive recognition be on a competitive or noncompetitive basis? What form will the recognition take, e.g., ceremonial, token award, or other? Who will decide on the form of recognition, e.g., a group of managers? Will others have input?

Who will select the recipients, e.g., a management committee, peers of potential recipients, or someone else?

How often will recognition be given? Many managers overestimate how often they provide recognition to employees.

As these questions apply to other activities (e.g., safety), experience is available in planning recognition.

# Forms of Recognition

Forms of recognition range from a simple verbal message for a job well done (often overlooked in the rush of daily activities) to modest, or "token," awards. Token awards may be tangible (e.g., a savings bond, time off, a dinner) or intangible (sending a letter of praise, sending an employee to a seminar or conference, letting an employee be boss for a day).

Recognition must be genuine and must fit the local culture. Unfortunately, managers are sometimes naive about what best fits the culture. For example, each member of a quality team was given a shirt emblazoned with the name of the team. Some members, however, refused to accept the shirt—they viewed it as a "gimmick" that made a joke of their participation. In another case, a banquet was held for members of teams. The plant manager made some brief remarks thanking the employees for their efforts. An enjoyable evening was had by all. Employees were quite appreciative, but some of them remarked (constructively) that it was the first time they had ever seen the plant manager: "Wouldn't it be nice if he occasionally toured the production floor and spoke with everyone?" In deciding



on forms of recognition, managers should ask for suggestions from respected employees. Not only will their ideas fit the culture better, but the act of asking for suggestions shows recognition of their judgment.

Recognition can often be provided in an atmosphere of fun. Weinstein (1996) describes 52 ways (one for each week) to create an environment of fun and help create a positive corporate culture.

Sometimes programs of recognition are more useful than monetary rewards. One organization reviewed the results of its suggestion system. About 800 suggestions were received each year; about 25% were accepted and personnel received monetary rewards. But most people were dissatisfied—the winners said the decisions took too long and the monetary reward was too low; the others felt their suggestions should have been accepted. Under a new program, monetary awards were eliminated and replaced by a simple "thanks." Also, decisions on suggestions must be made within a short time interval. Under the new program, 7700 ideas are received annually, and 60% are accepted.

Recognition systems at both the individual and team levels should reinforce both small wins and big victories.

#### Forms of Rewards

Rewards for quality-related activities are increasingly becoming part of the annual performance evaluation of upper managers, middle managers, specialists, and first-line supervisors. Forms of reward may include changes in base pay, merit increases, incentives, skill-based wages, a bonus, and stock plans.

The weakest area of quality motivation for managers is that of improvement of quality—for breakthrough to superior levels of performance. This weakness arises primarily because the problem of control—of meeting this year's goals—has a much higher priority.

Control sets its own priorities. When alarm bells ring, they demand corrective action then and there. The alarms must be heeded or the current goals will not be met. The manager wants to meet these current goals—managerial performance is judged mainly by measuring results against these goals. Firefighters get the best rewards—they are the heroes.

In contrast, improvement of quality is not needed to meet this year's goals—it is needed to attain leadership in some future year, or at least to remain competitive. Hence improvement can be deferred, whereas control cannot. Moreover, improvement to new levels requires special organizational machinery. Such special machinery is not needed to maintain current control.

One company has incorporated performance on improvement activities as part of the annual appraisal of managers. A rating of less than adequate means that the manager will not receive a salary increase or a promotion for one year.

Texas Instruments measures the contribution to quality of every manager who has a profit-and-loss responsibility. Managers are evaluated annually using four measures: leading indicators, concurrent indicators, lagging indicators, and the cost of quality. The first three refer to quality measures before, during, and after creation



of a product or service. For example, the field-complaint level is an example of a lagging indicator.

Upper management must change the reward system to inspire middle management to make breakthroughs to improved quality levels. A prerequisite, however, is for upper management to provide the infrastructure, resources, and training for such breakthroughs.

A clear trend in management compensation is the increased use of variable compensation programs, i.e., monetary rewards above a base salary. These rewards include various incentive plans, gain sharing, pay for mastering additional skills, and profit sharing. Berman (1997) provides an exhaustive list and shows how the various rewards relate to team-based performance. Often these concepts can be applied to individuals or teams, but team-based programs are becoming increasingly popular.

In the service industry, GTE California relates quality improvement to incentive compensation for both individuals and teams (Bowen, 1988). Team objectives that apply to key performance units or are company-wide have both quality and cost objectives.

Kluge (1996) reports how Varian X-Ray Tube Products installed an incentive compensation plan on quality. For every tube manufactured, money is added to or subtracted from a quality incentive pool—\$125 added for every good tube produced, \$500 subtracted for each tube scrapped, and \$600 subtracted for each dead-on-arrival tube that is returned from customers. At the end of each quarter, the money in the pool is divided equally among all people who influenced product quality. Previously, the culture was geared toward meeting production numbers at the end of each month. The incentive plan "radically changed the work ethic" and now employees focus on supervisors. Forms of reward may include changes in base pay, merit increases, incentives, skill-based wages, a bonus, and stock plans.

# When Should You Design for Culture?

Creating and sustaining a quality culture that promotes continuous change and improvement is crucial for long-term organizational success. Changing organizational culture is a challenging and time consuming process as it necessitates changes in the way people think and behave. To ensure success, cultural change efforts must focus on formulating a clear, compelling and shared vision; securing sustained top management commitment; role modeling of desired behavior by top leaders; promoting employee involvement and empowerment; conducting appropriate training at all levels to understand and accept the new culture; maintaining open and honest communication; fostering a climate of trust and collaboration; and embedding cultural changes in the organization's structure, systems and policies. It is highly important to ensure that the desired culture is compatible with organizational strategy.

### Pitfalls to Avoid

Adopting other company's culture: A common mistake people make in building their own culture is taking other company's culture and using it for your own company. In other words, stealing the culture. While



it may work for some, it usually does not for the rest. Focus on what your company needs and are aiming for instead looking into what other companies are doing. Remember, what works for another company may not work with yours!

- Build a culture without planning: One of the mistakes to avoid when building a company culture is starting out a culture without planning. A company culture is a matter of determining what is important for the company; setting the tone and direction. It is all about actions and behaviors.
- Leadership absence most of the time: Leadership presence has a great influence on how people experience the work environment. If leaders are absent most of the time due to meetings or away on some conferences, they are missing the main opportunity to shape the culture and environment of the company.
- Lack of communication: To establish a strong business relationship, effective communication practices must be established from the start. Make sure the team knows what is expected of them. Poor communication will strain the productivity of the company. Being aware of such problem is the first step toward solving them. Remember that positive communication is the key to a positive culture.
  Spreading negativity: Leaders must set the tone of the company. A leader should be aware of the mood and what type of energy one is spreading to the team. Spreading negativity, even if unintentional, creates an unhealthy culture that severely hampers results.
- Long-term and short-term goals: A mistake to avoid when building the company culture is not having goals, regardless if it is long-term or shortterm. Goals motivate us to be focused and productive.
- Make poor hiring decisions: Building a great company culture is impossible if the organization keeps making bad hiring decisions. If a company has to choose between skills and cultural fit, remember that one can train anyone for skills; however you cannot train someone to change the characteristics that define them.
  Implement meaningless or illogical rules: A mistake to avoid when building the company culture is having rules that do not make sense. When setting up ground rules do not forget to ask if there is a good reason for
- Overlooking social needs: Most employees do not want to just show up at work and leave. They want a meaningful work experience.

Notes:

them.