

An OQPF Commentary on Implementing
Deming's Principles of Management:

REVIEWING ORGANIZATIONAL POLICIES AND RULES

Five monographs were published by The Ohio Quality and Productivity Forum between 1988 and 1994. These were based on extensive discussions by the Ohio Quality and Productivity Forum (OQPF) Roundtable. The first three were part of a planned series on the Fourteen Points for Management (Points 4 and 7 and 1). In the midst of the timeframe in which the Roundtable was discussing the 14 Points, Dr. Deming began to talk about his System of Profound Knowledge. After careful consideration, it was decided not to publish any of the remaining 11 points, and to devote our time and energy to understanding and applying the System of Profound Knowledge, from which the 14 points seemed to be derived. The fourth monograph was titled Reviewing Organizational Policies and Rules, and the last monograph was A Quality Lexicon. These monographs represent our thinking at one stage along the path we were taking in fulfilling our Roundtable mission and are now offered as a contribution to the existing body of knowledge rather than a definitive statement on the subject. Our experience has been that as our understanding increases, we would expect to add to or modify some of what is presented here. The writing and editing was done through the collaboration of Dr. Gipsie Ranney, now consulting with General Motors and Ben Carlson, now retired from Vernay Laboratories. Both have served as members of the Board of Directors of OQPF since 1988.

The OQPF Roundtable was a coalition of six company teams from southwestern Ohio which met bimonthly, from 1986 to 1990 and several times a year from 1990 to 1992. Under the guidance of Dr. Gipsie Ranney, these two-day work sessions had as their mission, the development and expansion of the knowledge needed by the company teams to implement and sustain the organizational changes required to continuously improve quality and competitive ability in their respective companies. The roster of the participating companies as well as the individual team members changed over the years, so it is impossible to identify who contributed to the thinking summarized in these monographs. The participating members acknowledge with appreciation, however, the contribution of Dr. Gipsie Ranney to our understanding of the Deming principles of management and to this publication.

The Ohio Quality and Productivity Forum (OQPF) was founded in early 1985 by volunteers and continues as a proactive organization dedicated to "Promote and further the concept of quality as the guiding principle in management, exemplified by the teachings of Dr. W. Edwards Deming." In addition to the Roundtable which met regularly from 1986 to 1994, OQPF has sponsored 14 annual Deming Conferences. For the first twelve of its fifteen years of existence, OQPF provided numerous quality seminars, monthly meetings for its membership to hear and discuss quality-related issues; actively promoted the quality message to business, education and government organizations and served as a clearing-

house for information about quality management. An OQPF Healthcare Roundtable ran successfully from 1995 to 1999. Financial limitations caused curtailment of all but the Annual Deming Conference.

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REVIEWING ORGANIZATIONAL POLICIES AND RULES

As we learn more about what will be required to remain viable in the new economic environment, it becomes increasingly important to thoughtfully examine rules and policies to ensure that they are compatible with the values and beliefs and consistent with the long-term objectives of the organization.

It is not possible for an organization to avoid having policies and rules. Policies and rules determine or strongly influence how work is done and how people behave and are treated in the organization. Having policies and rules cannot be avoided because in the absence of formal policies or rules, there will be de facto policies and rules (that govern actual practice) which spring up from having to make the same kinds of decisions repeatedly.

In the following remarks, we will not discuss **strategic** policies (e.g. a policy limiting corporate debt to a certain ratio of assets or a policy of pursuing sales in certain markets, etc.). We will focus on policies and rules which govern the decisions and behavior of people as they carry out the day-to-day work of the organization, or govern the reaction of the organization to employee actions.

WHY QUESTION AND REVIEW ORGANIZATIONAL POLICIES?

1) Policies and rules are usually good indicators of an organization's value system, its assumptions about people and human behavior and its understanding of and beliefs about what makes organizations effective. What an organization says and does through its policies and rules has a major impact on how that organization is perceived by its employees (and in some cases, by its customers, suppliers and the community). This perception impacts on the employees' sense of identification with the organization and its objectives. And, this perception influences the degree of "we-they" polarity in the organization and the level of cooperation or skepticism and cynicism which is present in the work force.

2) A policy may not be consistent with the mission and principles of the organization and may therefore undermine the mission by causing employees to question whether actual practice is consistent with the stated intent of top management.

3) A policy may create waste and inefficiency by requiring employees to obtain authorization for actions which are routine and well within the capabilities of the employee

to carry out without supervision. This may constitute an insult to the employee's intelligence and damage his or her self-esteem and pride in work.

4) A policy may communicate to employees that they are not trusted and thereby may foster untrustworthy behavior.

5) Policies may create a barrier to cross-functional cooperation by assignment of specific activities and accompanying targets to a particular function or job.

In short, policies and rules are a major interface for the employees and their employer-organization, and an important determinant of organizational effectiveness.

In order to have a common understanding of what a policy is, what a rule is and what we mean by de facto policies and rules, it may be helpful to look at their definitions (American Heritage Dictionary - New College Edition) and a few examples:

Policy: "a plan or course of action...adopted by a...business organization, designed to influence and determine decisions, actions and other matters." "A...guiding principle, or procedure considered to be expedient, prudent or advantageous." Examples: the company absenteeism policy, the purchasing policy, a policy of equal opportunity, a policy of posting all job openings, etc.

Rule: "An authoritative directive for conduct or procedure; an established standard or habit of behavior." Examples: "All outside doors will be kept locked between the hours of 5:00 p.m. and 7:00 a.m."; "Personal calls are not permitted on company phones."; "Food and beverages are not to be consumed in the production area."; "Anyone clocking in more than three (3) minutes late will have their pay docked."

de facto: "[Latin, 'from the fact.'] In reality or fact, actually." (What really happens in practice). Examples: "We use substandard materials because we need them in order to keep production going."; "Get customers off the phone as quickly as possible, whether they are satisfied or not."; "You can accept gifts from salesmen, as long as they are not too expensive."; "I know the rule says 'no selling or solicitation in the plant or offices' but everybody does it." "We don't report small cuts like that...they make the accident statistics look bad."

Although formal policies and rules are easily accessible to examination, de facto policies are imbedded in the every-day work of the organization and are less visible. They may be completely contradictory to the formal values of the organization, but may have developed as a result of a system of reward which is strongly tied to short term results. Affecting them most likely requires changing the reward system and the organization's perception of the aims of top management.

Periodic review of an organization's policies is not a natural activity. Thoughtful and meaningful review will occur only when top management makes a formal or deliberate decision to do so and makes clear the objective for such a review. Efforts to examine policies can be initiated within a functional unit of an organization, but policies which

affect all employees or cross functional boundaries must be addressed at the organizational level.

Two points are worth noting here: 1) the initiative for reviewing policies might come from anywhere in the organization and 2) the actual task of reviewing policies can be assigned to any group management chooses to empower for that purpose. It is likely that a team or task force selected from various functions and levels of the organization will bring to the review process the diversity of perspectives necessary to identify the problems and shortcomings of current rules and policies. Whether the review is function- wide or is done at the organizational level, such review must have conscious action and recognition on the part of the top management responsible for that level of the organization.

Because the examination of policies is not a natural activity, it requires planning and a disciplined effort to sustain. An individual or group of individuals who initiate such an activity should be prepared to participate in a process which will result in a recommendation for an improved policy. The reviewers should be able to demonstrate how the improvement will benefit the organization.

We hope the observations made and the questions raised in this article will be helpful to anyone who is undertaking or thinking of undertaking a review of policies.

When a policy is to be examined, the following series of questions can be used as a guide. These questions are intended to provide a means:

- 1) to consider whether the policy supports the mission and principles of the organization, to clarify the intent of the policy and to examine the need for its existence,
- 2) to consider whether it is consistent with the key concepts of: reducing total cost, seeking global optimization, teamwork, continual improvement, appropriate treatment of special and common cause variation, leadership, removal of barriers to pride of workmanship and interdepartmental barriers,
- 3) to examine its clarity and implementation effectiveness.

REVIEW AND CLARIFICATION OF INTENT

A. **What is the Aim of this policy or Rule?** (State the intent or intents. Is one more important than another?) If the policy has as its intent requiring explanations of errors or deviations from arbitrary targets or defining actions to be taken to deal with errors made, it is very important to address the causes of the errors or deviations. Simply writing a rule for dealing with errors perpetuates the conditions leading to the error and imbeds waste in the system. Requiring explanations for deviations from arbitrary targets ignores the existence of variation and the capability of the system or process which produces the result being examined. Policies which react to problems as they are detected are a wasteful approach to dealing with problems. The better approach is to remove the causes of problems.

If the policy is intended to formalize punishment to be meted out in reaction to unacceptable behavior by an employee, possible causes for such behavior, created by the environment in which the employee works, should be addressed.

B. **B. Is the policy consistent with the mission and principles of the organization?** Policies which are perceived to be inconsistent with the stated mission and principles of the organization send a powerful message that the organization does not have constancy of purpose and is not dedicated to a set of core values which guide the decisions of the organization. Policies which are inconsistent are often the result of practice of situational ethics*, rather than adherence to a set of core values.

C. **Is the policy or rule necessary?** Could a long list of rules or a thick policy manual be avoided by clearly stating the organization's mission and guiding principles and by the leadership adhering to those principles? A large proportion of policies might not be needed under those conditions.

If the rule is written to satisfy a law or government regulation, it may be difficult to alter in substance, but should, nevertheless, be subjected to scrutiny for possible improvement within the intent of the law or regulation.

If the policy is intended to comply with the conditions of a labor contract, the substance may not be subject to alteration in the near term but a conflict between a contract-related policy and the mission and principles of the organization should be a subject for negotiation.

* A system of ethics "in which acts are morally evaluated within a situational context rather than by application of moral absolutes." (Webster's New Riverside University Dictionary)

D. **D. Is there a de facto (operational) version of the policy which differs from the policy as stated? If so, why?** Is the policy, as written, unclear? Is the policy ignored or altered in practice because it is superfluous or because it is inconsistent with the operational principles of the organization? Alternatively, has a conflicting de facto policy arisen as a result of the system of reward coupled with the organization's perception of the aims of management? Answering the first question requires discovery of actual day-to-day practice. Only those who apply the policy or the recipients of its application know the reality. Discovery of actual practice demands, therefore, serious efforts to interview those who come into direct contact with the policy or rule.

E. **Is the policy or rule a reaction to something that has happened?** Is it intended to prevent something that is considered to be undesirable, or is it proactive and intended to promote behaviors or actions that are considered by the organization to be desirable?

F. **To whom is this policy or rule directed?** Are there legal requirements or implications? Some rules or policies are established in order to limit the organization's liability in case of an incident which might cause legal action against the organization.

G. **How well does it meet the aim or intent** (see item A)? Is it still relevant under today's conditions? Will it be suitable for our vision of tomorrow? It is not uncommon to discover that rules "on the books" were put there to deal with a problem or set of conditions that no longer exists. The presence of such rules taints the remaining rules and creates cynicism about all rules.

CHECK FOR ALIGNMENT WITH KEY CONCEPTS

(Note: A brief description of the Key Concepts published as part of an Ohio Quality and Productivity Roundtable monograph on Deming's Point Seven [Leadership] is included at the end of this article.)

A. Special or Common Cause? Was the policy or rule written as a reaction to a single event (produced by a Special Cause) or was it established to deal with a chronic problem? It may be that many regulations, policies and practices are generated by the desire to "never let that happen again!" when the likelihood of occurrence of the event is very low. It is not uncommon to set up a rule for everybody rather than to directly address the few exceptions.

B. Constancy of Purpose (to keep an organization on a steady course toward its long term aim):

- * Does this rule or policy encourage improvement?
Or, does it interfere? Does this policy help to create conditions which allow innovation to occur?
- * How does it address Total Cost? Does it recognize that there may be costs and benefits that are not readily apparent or that are not easily quantified?
- * How does it support Global Optimization (serving to benefit the objectives of the entire organization rather than the needs or goals of some part of it?)
Local optimization, by comparison, stresses the goals of a subset (e.g., department or division) of the organization, without regard for whether the goals of the whole organization are compromised.
- * Does it support the Long Term objectives, or is it short-sighted, favoring an immediate gain at the expense of a more important, long-term aim? (It might be helpful here to have a mission statement or a list of long-term objectives for your organization to serve as a check-list in your review process.)

C. Effects on People

- * Will it create or diminish barriers between people or groups of people (e.g., departments, or hourly vs. salaried; old vs. new; union vs. non-union, etc.)?

- * Will it enhance or interfere with a person's ability to take pride and joy in his or her work? Does the policy or rule tend to enhance or diminish a person's self-esteem?
- * Does it recognize that each of us is both a supplier and a customer to others with whom we work? Is teamwork encouraged or discouraged by this policy?
- * Does it create fear or anxiety...so that the employee is distracted from performing his job as well as he can or does not take action that he knows he should?
Would the lack of a clear policy create fear or anxiety...if so, how and why?
- * Does it promote Teamwork and Leadership, or does it promote and require the imposition of numerical goals or quotas (that Dr. Deming refers to as a "fortress against improvement")?
- * Are people held accountable for the effects of the system - things which they cannot, by the nature of the system, control?
- * Does the rule or policy rely on someone "inspecting" another person's actions or behavior? Does it create the "watchdog syndrome" (e.g., "must have written authorization from two or three levels before this is approved" or "the supervisor must sign off on all vacation requests.")?
- * Does it cause all or many personnel to do extra work and to obtain extra authorization for the sake of preventing a rare occurrence (one with low frequency, low likelihood)? What is the cost of all of this prevention and how does it compare to the predicted cost if the rare occurrence should happen?
- * What are the underlying assumptions about peoples' behavior? Is the policy or rule based on the premise that people can be trusted (or that because a few may not be worthy of trust, we will trust no one)? Is the assumption that people will act responsibly? Or, rather that people will always act in their own self-interest, even at the expense of the others in the organization?
- * Does the policy or rule foster decision-making at an appropriate level? Is the person or the people who are closest to the situation and who are often most impacted allowed to make decisions or does the policy require the decision to be made at some higher level (often by a person less well-informed)?

IMPLEMENTATION AND IMPROVEMENT

- A. How complex is the policy or rule...will it be easy to administer?
- B. Will it be readily understandable by those people affected by it? Is it:

- * Brief, concise, to the point?
- * Unambiguous?
- * Complete? (Will it address the issues it is intended to address?)
- * Presented in a language and form appropriate for the situation? How do you know?

C. Will it produce the desired results?

- * Is it stated positively or negatively? ("should" vs. "shall not")
- * Will we explain WHY this rule or policy is necessary? Will the explanation make sense to the employees?
- * What is the plan to determine if it is producing the desired results and if it needs improvement?

D. Is it possible to try the policy or rule on a limited or temporary basis before applying it to the whole organization? Such a trial might permit some needed modifications prior to implementing it more widely.

E. How is it (or will it be) communicated to the organization? Who will make that determination?

- Who will be the communicator?
- In what form?
- When? Where? Will it need to be communicated periodically for new employees or to keep it fresh in peoples' minds?

The preceding questions address policies on two dimensions: 1) the **logical** dimension of alignment with organizational mission and values and the creation of waste and organizational barriers to effectiveness, 2) the **psychological**, or emotional dimension of the effects on people - their sense of self-worth and dignity and their ability to take pride in their work. We would submit that neither dimension can be ignored if policies are to contribute to organizational survival and improvement.

For all of the reasons stated earlier in this article, many organizations are now taking a closer, more thoughtful look at their rules and policies. The driving force for doing so may come from any part of an organization, but top management's understanding and willingness... or insistence on doing so... will be key to the success of such a review.

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APPENDIX

- KEY CONCEPTS -

The Fourteen Points are based on understanding that a business enterprise is operated in a time continuum. The results of today were preceded by results in the past and will be followed by results in the future. The job of leadership is to understand the cause system which produced yesterday's and today's results in order to act on that cause system and improve future results. In working to improve the future, it is necessary to understand that variation in results always exists and an understanding of the nature of variation is essential to managing for improvement.

The Fourteen Points are distinct in their individual messages, but inseparable in achieving an understanding of Deming's theory and in implementation. Running throughout this set of management principles, are some key concepts which a Leader must know and understand. The following brief paragraphs are intended only to provide enough information to identify the nature of the concept. Each is worthy of its own study. The concepts are interrelated and are presented, therefore, without an attempt to discuss them in any order.

Long-term thinking - The actions taken today influence the results of the future. It is important to make decisions and take actions which will not prevent the organization from being able to survive and be economically viable in the future. For example, increasing short term profits by eliminating investment in training, research, maintenance, and so on, is likely to result in costly consequences at a later time.

Total cost - Too often, only the costs which can be captured by existing accounting systems are recognized and taken into account in making business decisions. It is imperative that **all** of the various related and consequential costs associated with a given decision be recognized, even when they may not be easily quantified. For example, the unit cost or purchase price is often the only cost given consideration in making a purchasing decision. In addition to the unit cost, there are costs from downtime, service, warranty, process adjustment to accommodate incoming product variation, and so on, incurred in the

use of the product. In some cases these costs cannot be quantified or predicted. The fact that they will be incurred to a greater or lesser degree depending on the selection of the supplier should, however, be taken into account in making the sourcing decision.

Variation - Variation exists in results, whether those results are values of a characteristic measured on successive parts produced by a manufacturing process, or values typically used to observe performance of an entire business enterprise over time, such as costs, profits, or production quantities. This variation can be viewed as the result of two kinds of causes, common and special. **Common causes** of variation are part of the system and act on all results; **special causes** of variation do not act on all results, but rather act sporadically and produce unpredictable results. It is essential to understand the difference between common and special cause in order to take the right kind of action to remove causes, reduce variation and improve results of the future. Deming notes that "the type of action required to reduce special cause variation is totally different from the action required to reduce variation and faults from the system itself..."

Action to change the system on the basis of a result influenced by special cause can damage the system and add cost. Action to continually adjust the system in response to single common cause outcomes can constitute tampering and worsen future results (increase variation), rather than improve them. The vast majority of variation which exists is due to common cause and therefore due to faults of the system. Since management is responsible for the system, the major portion of the work needed to gain improvement is the responsibility of management. Efforts to reduce variation can result in increased quality and consequently, decreased costs, by removing the waste associated with detecting and correcting problems.

In order to know the difference between common cause results and those influenced by special cause and take appropriate actions for improvement, Dr. Deming notes that it is essential to have a "sound understanding of statistical control." Management by Objective (Management by Results) is an example of failure to understand the concepts of cause and effect, variation and global optimization. Much of the waste imbedded in an organization is the result of attempting to improve results without examining the cause system.

Continual improvement - The ability to improve depends on having a significantly different mindset from the popular position of "if it ain't broke, don't fix it." Reactive efforts to fix problems as they occur result in maintenance of the status quo at best. Continual improvement requires proactive efforts to find means to improve quality and remove the causes of waste on the part of every member of the organization, including the top leadership.

The discipline of continual improvement comes through practice of the Deming (or Shewhart) Cycle: Plan, Do, Check, Act...and the use of statistical methods and tools to gain knowledge for improvement. The underlying assumption is that there are always opportunities to improve in an ongoing, incremental fashion. Even small improvements can amount collectively to significant gains in quality and reduction of cost. Continual improvement implies a steady reduction in the number of chronic and incidental problems which must be dealt with on a daily basis and a resulting increase in the resources available for innovation of product and process for the future.

Removal of barriers that prevent people from taking pride and joy in their work -

This is a key management principle that is based upon the recognition that best efforts of people at all levels to contribute to the organization are thwarted by barriers put in their way by the larger system. Hourly workers are often provided with faulty materials and equipment, are given arbitrary work standards and quotas and are improperly trained and coached in their jobs. Many salaried workers are prevented from acting in the best interests of the organization by the need to compete for an annual rating and the need to meet departmental objectives which may not benefit the organization as a whole.

Recognition of interacting forces within a system - This concept recognizes that there are many factors which impact on results achieved by the individual, the department and the company as a whole. The influence of each of these factors may vary over time and the factors almost surely interact with one another in their influence on the results. The relationships among these factors are very complex and may be difficult, if not impossible to analyze. When observing the results achieved by an employee, do we recognize the effect of:

- the quality of the training he/she has received?
- the quality of the information and other resources provided to do the job?
- the quality of leadership provided?
- the complex and multidimensional nature of the job?
- the disruptions that distract him/her?
- the policies and practices that create fear?

All of the preceding are related to the way in which the organization is managed and the employee's performance may be significantly impacted by each of these, but the employee is often held responsible (and blamed) for results which are produced by the combined effect of the individual interacting with the system.

Managing causes rather than results - Any process, be it the entire system or a single activity, produces results. At the system level in particular, demanding specific quantitative improvements to certain results can create damage to other results. For example, specifying that costs be reduced by 10% can translate into cutting out activities which can bring long-term improvement of competitive position, such as training, improvement to equipment, research and development, and so on. Another example is the imposition of a 20% across-the-board reduction in the size of the workforce. Such an action can lead to the loss of personnel with critical skills and knowledge, to the detriment of the organization's competitive position. Another example is the reduction of inventory without addressing the cause for its existence. Much inventory exists as insurance for failures; buffer stock to protect against interruptions in production when equipment or quality problems occur. The question which should be asked in these cases is: What are the causes of high cost, of inflated staffing levels, of high inventory levels? Asking questions about cause can lead to more realistic identification of sources of waste and redundancy and allow improvement without unanticipated damage.

Traditional managers have placed a great deal of emphasis on comparing the results of this month to last month this quarter to last quarter, this year to last year, without recognizing that the history of performance extends beyond the previous time period. Informed study

of results requires analyzing the results of this period, last period and the periods which preceded them as the outcomes of a process. When the variation in results over several time periods is analyzed for statistical control, knowledge can be gained for planning and taking appropriate action to improve those factors which will determine future results.

Tampering (Rules of The Funnel) - Managers who fail to understand special and common cause variation, have often incorrectly concluded that the variation observed in results was due entirely to special cause. They have attempted to "adjust" (take action) on the process or system in order to improve the next result by compensating for the deviation of the last result from the desired target or goal. However, when the results observed are influenced only by common cause (the system is stable), such attempts at adjustment will increase variation and make future results worse. These misguided attempts to improve results without an understanding of the nature of variation are called "tampering" by Dr. Deming. Examples of four kinds of such "tampering" are provided in his discussion of the "Rules of the Funnel" in Out of the Crisis.

Global optimization - Management of results and rewarding performance of individuals or organizational units on those results is often done without consideration of potential damage produced elsewhere in the organization by achieving them. This creates internal competition to achieve local and individual goals and can seriously damage the competitive position of the organization in the marketplace.

Decisions should be made and actions taken at levels which will produce internal cooperation and a search for options and strategies which optimize the position of the entire organization. Internal competition will likely produce win-lose results; internal cooperation among individuals and units can produce win-win (all-gain) results for the benefit of the organization. Developing and adopting strategies which produce all-gain results requires not only commitment to and practice of teamwork but elimination of reward systems which promote local optimization and global damage.

Customer-Supplier relationships - This concept takes on new meaning within the Deming principles of management. The first is that rather than the usual adversarial relationship created by the economic interests of the two parties, Deming advocates that customer and supplier work **together** to improve quality and reduce costs. A strong case can be made for the benefits to both parties of such an arrangement (see the OQPF Commentary on Deming's Point Four).

The second is a departure from the typical view that a customer is the final purchaser or potential purchaser of the organization's product or service. In the new perspective, each employee also has "internal" customers, the recipients or users of his or her work. In this context, each person is both a supplier and a customer within the organization. Improving the quality of work delivered by each supplier to each customer reduces waste and allows the delivery of a quality product to the marketplace at a competitive price.

Quality redefined - "Quality" has often been defined as conformance to specification and most efforts to achieve quality have consisted of producing, and then attempting to screen out, non-conforming product. Little recognition has been given to the waste and cost

associated with this approach to achieving quality. Deming enlarges the view of quality to include every activity which takes place in an organization.

The Deming principles emphasize the importance of the customer and supplier working together to develop operational definitions of product characteristics important to the customer. Deming also emphasizes the need for the supplier to innovate in anticipation of the customer's needs. He cites many cases in which suppliers have provided the customer with a product or service without the customer having thought of it. In the marketplace, the organization which delivers value, innovates and provides goods and services which surprise and delight the customer will have the best chance for long-term success.

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