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Implementing Deming

DISCUSSION GUIDE

VOLUME 3:  
THE CASE AGAINST MANAGING BY OBJECTIVE

VOLUME 4:  
WHAT TO DO INSTEAD OF MANAGING BY OBJECTIVE

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# **THE DEMING USER'S MANUAL**

## **VOLUMES 3 AND 4**

### **INTRODUCTION**

When different people view a videocassette, each sees, hears, and learns something different. If they discuss their different insights, they will learn more than if they only view the tape. Talking about the cassette helps people to better understand and absorb the information.

This guide is designed to help you start a general discussion. The idea is to raise questions that participants will try to answer. However, the discussion leader is not limited to these few questions. Indeed, the leader is encouraged to help participants raise their own questions about points made on the cassette.

One caution: Be sure the people in the group understand that this is a discussion – it is not a quiz.

### **OVERVIEW**

In Volumes 3 and 4 of THE DEMING USER'S MANUAL, Dr. Brian Joiner, one of the leading proponents of the teachings of Dr. W Edwards Deming, examines the problems with Management by Objective (M.B.O.) and the uses and limitations of numerical data. He discusses strategies for implementing Points 7, 11, and 12 of Dr. Deming's theories, and explains how to plan and achieve quality improvement without M.B.O.

This Discussion Guide is designed to help you get the best possible benefit from these cassettes. The more people think about what they have seen and heard, the more they will sharpen their thoughts. They will also begin to work together – a step toward teamwork. The leader should encourage participants to help each other during the discussions. The emphasis should be on group cooperation.

It is essential that the discussion of each tape come at the end of that cassette, while the information is fresh in the minds of the participants.

## **THE 14 POINTS**

Following are Dr. Deming's 14 Points. Familiarity with them will help in your discussions.

1. Create Constancy of Purpose.
2. Adopt the New Philosophy.
3. Cease Dependence on Mass Inspection to Achieve Quality
4. End the Practice of Awarding Business on Price Tag Alone. Instead, Minimize Total Cost, Often Accomplished by Working With a Single Supplier.
5. Improve Constantly the System of Production and Service.
6. Institute Training on the Job.
7. Institute Leadership.
8. Drive Out Fear.
9. Break Down Barriers Between Departments.
10. Eliminate Slogans, Exhortations, and Numerical Targets.
11. Eliminate Work Standards (Quotas) and Management by Objective.
12. Remove Barriers That Rob Workers, Engineers, and Managers of Their Right to Pride of Workmanship.
13. Institute a Vigorous Program of Education and Self Improvement.
14. Put Everyone in the Company to Work to Accomplish the Transformation.

## **VOLUME 3: THE CASE AGAINST MANAGING BY OBJECTIVE**

### **INTRODUCTION**

In Volume 3 of THE DEMING USER'S MANUAL, Dr. Joiner explains what happens when the primary focus of management is on meeting numerical goals and quotas. In response to the pressure to get results, people will work outside of an inadequate system – they will "distort the system." Dr. Joiner distinguishes between positive uses of

numerical data and Management by Results, which creates fear, rivalry, dishonesty, and chaos in an organization. He explains why the Deming Method is the next logical step in the history of management: "Better results will be achieved only by improving the system. In fourth generation management, managers work collaboratively with people to improve systems and methods, not to judge people on results."

### QUESTIONS 1-5

1. What does Dr. Joiner mean when he says, "Only by knowing the truth and knowing what's going on in your organization can you really begin to improve"?
2. Why does Dr. Joiner say, "It's hard to know the truth. It hurts to know the truth, and it adds a lot of extra responsibility and burden you had just as soon not have"?
3. Dr. Joiner says, "Western management today is a mixture of first, second, and third generation management. First generation management is very simple: You just do it yourself. Second generation management is management by directing. Third generation management is management by results." Give examples of how each of these management methods is practiced in your organization. *See Graphics 1, 2, and 3.*
4. What does Dr. Joiner mean when he says, "We all want better figures, better sales, lower costs, lower absenteeism, lower accident rates, higher productivity, and so on. There are only three ways to get these better figures"? *See Graphics 4 and 5.*
5. Dr. Joiner says that with third generation management, "We say to people. 'We don't care how you get better results, just get them.' People tend to distort the system... to get better figures." In what ways might people "distort the system" in response to pressure in your company? How could this distortion affect other areas inside and outside your company?

### QUESTIONS 6-10

6. Dr. Joiner tells us, "The power of what Dr. Deming is saying – 'by what method?' – is to emphasize that we will really only get better results by changing the systems, by improving the systems, by improving the methods." How would you apply Dr. Deming's philosophy of improvement to the systems that you discussed in response to Question 5?
7. What does Dr. Joiner mean when he says, "Dr. Deming is not saying eliminate the use of data. People don't understand the difference between a measurement and a goal"? *See Graphic 6.*
8. Dr. Joiner says, "There are good uses of data: to forecast, to schedule production, to estimate costs,... compare actuals to forecasts, identify opportunities for improvement."

Why does he say you shouldn't use these data to judge people, but rather for learning about your processes and systems?

9. What are some other good uses of data? *See Graphic 7.*

10. Why does Dr. Joiner say, "Dr. Deming is not saying to you that you should meet your competitors' quality levels. You've got to get a whole lot better than that. That's not a goal. That's a fact of life"?

### **QUESTIONS 11-12**

11. Do you agree with Dr. Joiner when he says, "If you always do what you always did, you'll always get what you always got"?

12. Do you agree with Lloyd Dobyns when he says, "It is generally true that only a very few people ever set out intentionally to do what is illegal, immoral, or unethical. Almost inevitably... people gradually slip into patterns of ever worse behavior while trying desperately to reach some goal"?

### **QUESTIONS 13-15**

13. Dr. Joiner gives a number of examples in which desperate, possibly immoral or even illegal methods are used to meet numerical goals. Are there some methods for handling objectives in your company that could be deemed unethical or worse?

14. What does Dr. Deming mean when he says, "Some of the most important numbers are unknown and unknowable"? What is the relation of this statement to Dr. Joiner's comment: "An implication of Management by Results is that goals and quotas must be measurable"? *See Graphic 8.*

15. Why does Dr. Joiner say, "You can't reward or punish somebody for something that won't occur for five or ten years. But so many of your most important things are not short term"?

### **QUESTIONS 16-20**

16. What does Dr. Joiner mean when he says, "Goals and quotas set up conflicting objectives between people"?

17. Give some examples of how goals and quotas might set up conflicting objectives between people and groups in your organization.

18. Why does Dr. Joiner say that these goals and objectives drive fear into an organization?

19. Why does Dr. Deming say "A work standard is a fortress against improvement"?

20. What does Dr. Joiner mean when he says that the most deadly result of Management by Result is "vertical communication that is self reinforcing"?

### QUESTIONS 21-23

21. Why does Dr. Joiner say that your main focus should not be to please your boss?

22. Why does Dr. Joiner say, "You've got to get it so that the main communication is *through* the organization. Your boss is there to help you please your customers. It's a different way of thinking"?

23. What does Dr. Joiner mean when he says that numerical goals cause rivalries and optimization of certain areas of the company to the detriment of other areas, and "You get chaos through the company. You get chimneys of excellence and destruction of the company"? *See Graphic 9.*

### GRAPHICS FOR VOLUME 3

Following are the graphics that appeared in Volume 3 of THE DEMING USER'S MANUAL along with some additional graphics used by Dr. Joiner in his presentation. They make excellent reference notes to recall the main points of Dr. Joiner's discussion. It would be useful for each participant to be able to look at them after viewing the tape and discussing it.

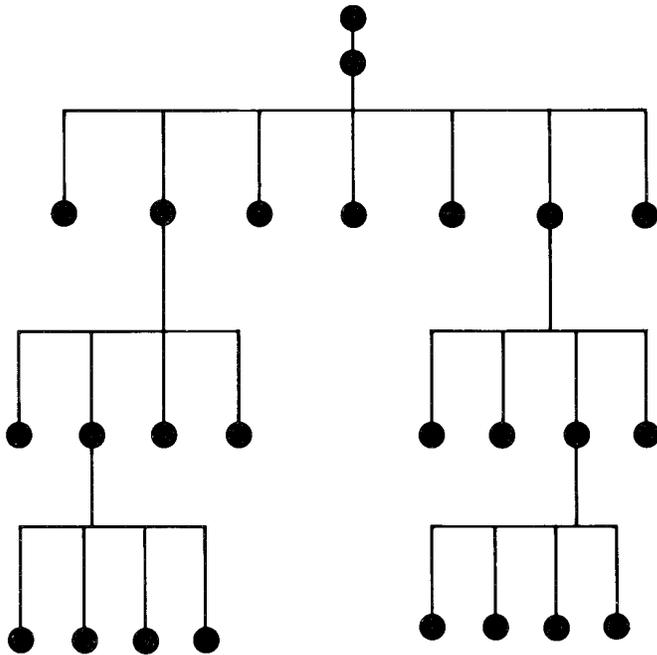
#### GRAPHIC 1

##### **The Four Generations of Management**

1. Management by **Doing**
2. Management by **Directing**
3. Management by **Results**
4. Management by **Method**

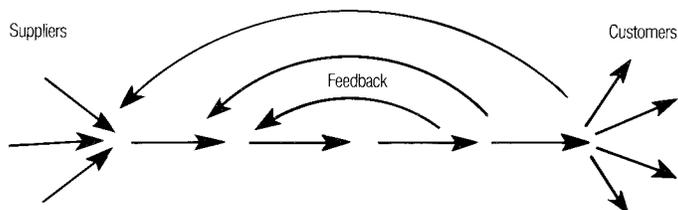
## GRAPHIC 2

### Organizational Chart for Management by Results



## GRAPHIC 3

### The New Way to View an Organization



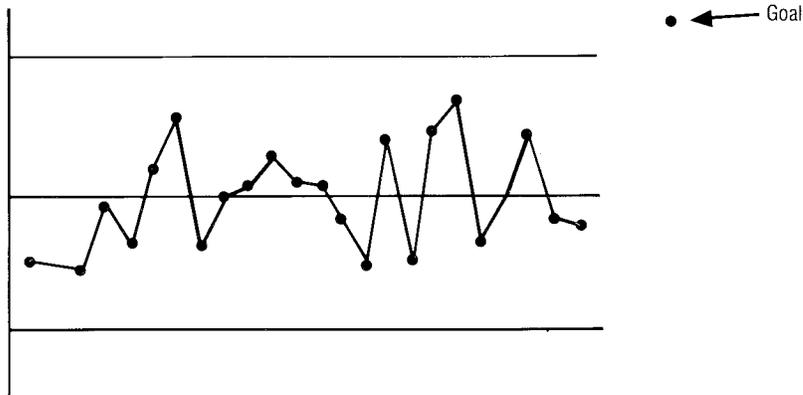
## GRAPHIC 4

### Three Ways for Management to Get Better Figures

1. Improve the system
2. Distort the system  
- get demanded results at the expense of other results
3. Distort the figures

## GRAPHIC 5

### A Numerical Goal Without a Method Leads to Problems



## GRAPHIC 6

### Good Aspects of Management by Objective

- Constructive, forward-looking feedback
- Joint planning of major initiatives
- Reviewing plans and actual outcomes to improve planning (PDCA)

### Weaknesses of Management by Objective

- Using numerical goals and objectives to judge people
- Rewarding and punishing individuals based on outcomes

## GRAPHIC 7

### Good Uses of Numerical Data

Good uses of data are to help or guide, not to judge.

#### Forecasts:

- to schedule production
- to make engineering decisions
- to estimate costs
- compare actuals to forecasts (not judge)
- strategic decisions

#### Opportunities for improvements:

- process capability
- eliminate special causes

- design robust products
- select improvement projects
- coach/help individuals (not judge)
- assess training

Facts of life:

- break even point
- cost of capital
- competitors' quality levels
- economically based specifications

## **GRAPHIC 8**

### **Hidden and Negative Implications of Management by Results**

- Measurable
- Short term
- All knowing
- Conflicting objectives
- Barriers and blame
- CYA
- Games playing
- Dishonesty
- Fear
- Limits improvements
- Self reinforcing
- Vertical communication
- Hides problems
- Rivalry
- Suboptimization

## **GRAPHIC 9**

### **Dr. Joiner Summarizes the Major Themes Covered in Volume 3 of THE DEMING USER'S MANUAL.**

- Using numerical goals and quotas as a method of management leads to serious negative side effects that usually go unnoticed.
- Expecting of a process what it cannot deliver will lead to frustrated expectations.

- Demanding of a process what cannot deliver will lead to a loss of morale, inappropriate actions, and brute force results. This will destroy other results, people, and ultimately the company.
- Better results will only be achieved by improving the system.
- Work with people on methods, don't judge them on results.

## **VOLUME 4: WHAT 'TO DO INSTEADOF MANAGING BY OBJECTIVE**

### **INTRODUCTION**

In Volume 4 of THE DEMING USER'S MANUAL, Dr. Joiner uses Dr. Deming's 14 Points and the Shewhart Cycle to delineate a step-by-step approach for replacing M.B.O. with the Deming Method for continuous improvement. He explains how to organize improvement efforts according to key business needs, develop better and better improvement methods, and build cohesiveness throughout an organization. He says, "Using the best known *method* to attain objectives is the most important criterion for success. M.B.O., judging people on outcomes, is no longer world competitive. Using Dr. Deming's 14 Points and the Shewhart Cycle to focus improvement efforts is what it takes today:"

### **QUESTIONS 1-5**

1. Why does Dr. Joiner say, "We should set to work on the 14 Points. We must recognize them as things that need action today, and will need action next year and the year after, and for all time"? *See Graphic 10.*
2. Dr. Joiner tells us that when a company begins to work on the 14 Points, it should identify "broad, general themes for improvement." What are some important themes for improvement in any organization?
3. What does Dr. Joiner mean when he says, "You need to improve peer-to-peer communication, in-depth communication, not surveys"?
4. Why does Dr. Joiner say, "It is not enough to get the communication; you've got to get the cooperation to go with that"?
5. What does Dr. Joiner mean when he says, "We become what we measure. You're measuring results today, and you're getting a results-focused organization"?

## QUESTIONS 6-10

6. What does Dr. Joiner mean when he says: "You'll need different data to manage than you have today. So a very important, early step is to identify what data we should be collecting to help us to look more upstream at how things are working in an upstream kind of way"?
7. How do "barriers between departments;" "a lack of constancy of purpose," "fear," and "lack of training" create barriers to improvement, according to Dr. Joiner?
8. In order to select major themes for improvement in the PLAN phase of the Shewhart Cycle, Dr. Joiner explains that top executives must first identify: 1) key business needs, viewed from the customer's perspective, 2) processes and systems key to these needs, and 3) processes and systems most in need of improvement. Why does Dr. Joiner say that the customer's perspective on key business needs is important? What are some examples of major themes for improvement in each category listed above? *See Graphics 11 and 12.*
9. What does Dr. Joiner mean when he says, "In the early years it is very important to focus your resources on your highest-priority business needs, because you have very, very limited improvement resources"?
10. Why does Dr. Joiner say that for each improvement theme, it is important to "develop measures of key quality characteristics"?

## QUESTIONS 11-15

11. Why does Dr. Joiner suggest that planning goals can be very helpful, but warns that they can be very dangerous?
12. What does Dr. Joiner mean when he says that once company executives have chosen improvement themes, measures for judging progress, and the magnitude of their goals, "it is time to meet with the next two to four levels of management to get their active collaboration and get a *reality check*"?
13. Why does Dr. Joiner say "It is so critical to build that reality, the collaboration, and the consensus necessary for success"?
14. Do you agree with Dr. Joiner when he says, "People need to know why, and we omit that. It sure takes more time to explain why, but it's tremendously valuable so that people can do a better job"?
15. What does Dr. Joiner mean when he says that, in the DO phase of the Shewhart Cycle, "task forces work on improvements using a *data-based, planful, teamwork approach*"? *See Graphic 13.*

## QUESTIONS 16-17

16. Why does Dr. Joiner say, "You want to pay attention not only to what you are expecting to have happen, but how you will go about it. We just have to add the why and how into our way of thinking about things"?

17. In the CHECK phase of the Shewhart Cycle, Dr. Joiner explains that focusing reviews on *system improvement* will "change the way we look at the organization, the questions we ask, the comments we make, the measures we receive." Give some examples of how questions, comments, and measures will be different in an organization that has fourth generation management. *See Graphic 14.*

## QUESTIONS 18-20

18. What does Dr. Joiner mean when he says, "Managers that do reviews must understand how to help other people make improvements. [They should] use self-discovery questions and resist the temptation to meddle, to over-manage"?

19. Why does Dr. Joiner say that, in the ACT phase of the Shewhart Cycle, it is important to "improve the way we communicate lessons we have learned to a broader audience of people"? *See Graphic 15.*

20. Why does Dr. Joiner say that through subsequent years of working with the 14 Points and the Shewhart Cycle, a company should "*increasingly* use data as a basis for decisions"? *See Graphic 16.*

## QUESTIONS 21-23

21. What does Dr. Joiner mean when he says that with M.B.O., "objectives are often secret contracts between manager and subordinate"? *See Graphic 17.*

22. What, according to Dr. Joiner, should managers do in fourth generation management when results differ from forecasts, or when somebody misses an objective?

23. Contrast M.B.O. with the Deming Method in terms of A) the person(s) considered most important to please, and B) the most important criterion for success.

## GRAPHICS FOR VOLUME 4

Following are the graphics that appeared in Volume 4 of THE DEMING USER'S MANUAL.

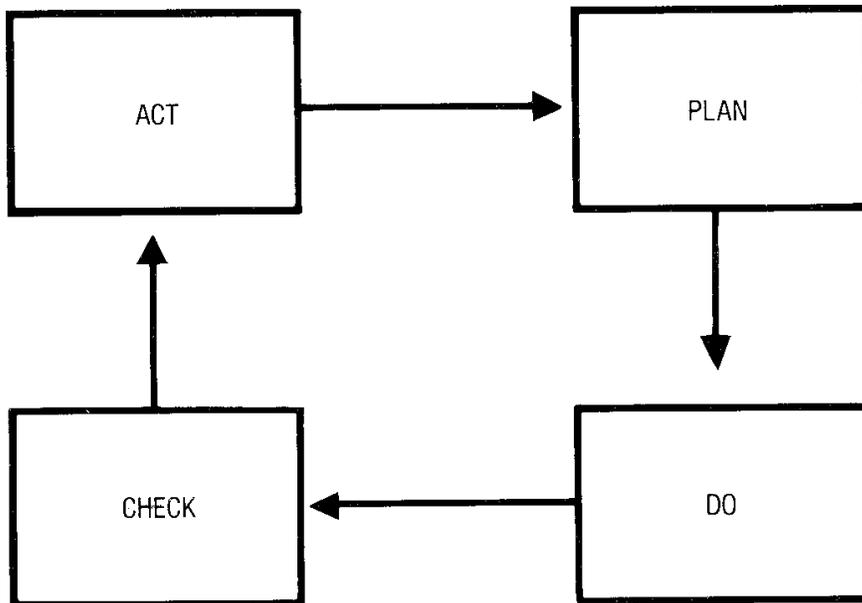
### GRAPHIC 10

#### Early Years of Continuous Improvement

- Set to work on the 14 Points; communicate actions
- State broad, general themes for improvement, such as
  - improve peer-to-peer input from external customers
  - improve internal customer-supplier communication and cooperation
  - bring processes under statistical control by eliminating special causes
  - identify and reduce causes of rework, delays, and inventory
  - identify and reduce barriers to pride of workmanship
- Follow up with training, questions, and support aimed at getting everyone started
- Use what you learn about barriers to expand your work on the 14 Points

### GRAPHIC 11

#### In Later Years Use Shewhart/Deming Cycle at Macro Level



## GRAPHIC 12

### How to Use the Shewhart/Deming Cycle for Quality Improvement Planning and Execution

(PLAN-DO-CHECK-ACT at Macro Level)

#### PLAN

- Select major themes for improvement (top executives)
  - What are our key business needs viewed from the customer's perspective?
  - What processes and systems are key to these needs?
  - Which of these processes and systems are most in need of improvement?
  - For each theme:
    - develop measures (key quality characteristics)
    - perhaps select *planning* goals
- Caution: Planning goals should *not* be used until the organization understands that the goals will be used to plan, *not* to judge on outcomes.
- Meet with the next two to four levels of management to review and, if appropriate, modify themes, measures, planning goals
- If appropriate, set up a cross-functional task force to coordinate improvement on each theme
- Discuss themes and reasons for these themes down through the organization
- Have middle and lower levels use analysis tools such as Pareto charts and control charts to decide what they can contribute and how they will go about contributing to each theme
- Task force aggregates and integrates methods and forecasts; may require iteration to obtain effective alignment

## GRAPHIC 13

#### DO

- Line organizations and task forces work on improvements using data-based, planful, teamwork approach
  - emphasis is on the *method* of improvement
  - results are expected to follow if good methods are used
  - methods may be revised if progress is not adequate
  - resources may be reallocated to address tougher themes

## GRAPHIC 14

#### CHECK

- Review progress periodically (weekly, monthly, quarterly)
  - focus reviews on systems improvement

- use picture-book format and general improvement steps to present logical flow
- use control charts to present results in a way that minimizes tampering
- use "self-discovery" questions and resist the temptations to meddle, to overmanage
- Obtain input from customers
  - problems
  - needs, uses
  - futures
- Obtain input from inside the organization
  - results and opportunities surfaced by past improvement efforts
  - problems surfaced by employees
  - futures
  - barriers
  - 14 Points

## **GRAPHIC 15**

### **ACT**

- Communicate improvements to a wide audience
- Use what you have learned about how to make improvements to improve your improvement methods
- Standardize your improvement methods to ensure that the gains that have been made are sustained

## **GRAPHIC 16**

### **Repeat the Shewhart/Deming Cycle Continuously**

In subsequent years, increasingly use data as the basis for your decisions.

#### **Important Note**

Managers and others must *not* be judged on whether or not planning goals are met! Emphasis throughout is on the degree to which effective improvement *methods* are used. Feedback and coaching are based on appropriate use of improvement methods.

## GRAPHIC 17

### M.B.O. and Quality Improvement Planning: Common Differences in Practice

M.B.O. (in practice)	Quality Improvement Planning
<ul style="list-style-type: none"> <li>Emphasis on results to be achieved; methods are left to the individual</li> </ul>	<ul style="list-style-type: none"> <li>Emphasis is on methods as well as results</li> </ul>
<ul style="list-style-type: none"> <li>Emphasis is on individual accountability for results</li> </ul>	<ul style="list-style-type: none"> <li>Emphasis is on improvement of systems and processes that are often cross-functional</li> </ul>
<ul style="list-style-type: none"> <li>Objectives are often secret contracts between manager and subordinate</li> </ul>	<ul style="list-style-type: none"> <li>Objectives and methods are public information within the company so others can understand and help</li> </ul>
<ul style="list-style-type: none"> <li>Attainment of numerical objectives is used to reward or punish individuals</li> </ul>	<ul style="list-style-type: none"> <li>When results differ from forecast, management analyzes to learn to understand and to improve the system</li> </ul>
<ul style="list-style-type: none"> <li>Attainment of the numerical goals is THE criterion for success</li> </ul>	<ul style="list-style-type: none"> <li>Using the best known method to attain the objectives is the most important criterion for success</li> </ul>
<ul style="list-style-type: none"> <li>Meeting the objective despite the system is considered inevitable and desirable</li> </ul>	<ul style="list-style-type: none"> <li>Improvement of the system rather than working outside and despite the system is considered essential</li> </ul>
<ul style="list-style-type: none"> <li>Your boss remains the most important person for you to please</li> </ul>	<ul style="list-style-type: none"> <li>Your inside and outside customers remain the most important people for you to please</li> </ul>
<ul style="list-style-type: none"> <li>Tends to optimize subsystems</li> </ul>	<ul style="list-style-type: none"> <li>Tends to optimize the whole</li> </ul>
<ul style="list-style-type: none"> <li>Judging people on result outcomes</li> </ul>	<ul style="list-style-type: none"> <li>Deming's 14 points; Shewhart Cycle</li> </ul>

### APPENDIX: TOTAL QUALITY LEADERSHIP VS. MANAGEMENT BY RESULTS

#### OVERVIEW

The following is a paper written by Dr. Joiner and Peter Scholtes on the topic of M.B.O. Familiarity with it will enhance your understanding of the material covered and will help you in your discussions.

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## **I. INTRODUCTION**

America faces a deeply troubling future.

We are in the midst of a transition to a world economy increasingly dominated by the Pacific Basin countries, a turnaround in the economy from the red-hot inflation years of the late 1970s, and a revolution in technology that is altering battle plans on nearly every front every day. America is struggling in a world where companies, governments and organizations have to run fast and smart to stay alive.

Many American companies are in trouble, losing old, customers and failing to find new ones. Yet many managers can not comprehend what is happening or why it is taking place.

Manufacturers have been hurt badly by foreign competition that is producing higher quality goods at lower prices. Many firms – both manufacturing and service companies such as airlines and banks – are facing chaotic market conditions as a result of deregulation. State and local governments, already subject to cutbacks of federal funds, struggle to make up revenues through higher taxes. State is pitted against state in fierce competition to attract new jobs.

We believe that one major cause of these problems is the failure of American managers to realize that there is a "new" way to manage their organizations – a way that yields much higher quality, higher productivity, more jobs and better return on investment.

We call this management system Total Quality Leadership.

Total Quality Leadership is a way of managing any organization – whether it be a Fortune 500 corporation, a university or a family restaurant. Total Quality Leadership can create sustained growth from the chaos of today's marketplace. With Total Quality Leadership practiced throughout the economy, America can regain its competitive position in the world market.

All managers have a job to do to help their companies learn and implement the new approach. In this article, we will describe the new approach to management which needs to be practiced by the entire organization. And then we will give some details about what individual managers can do to help implement these changes. First we will examine what we call "Management by Results," the most common form of management practiced in American companies today.

## **II. MANAGEMENT BY RESULTS**

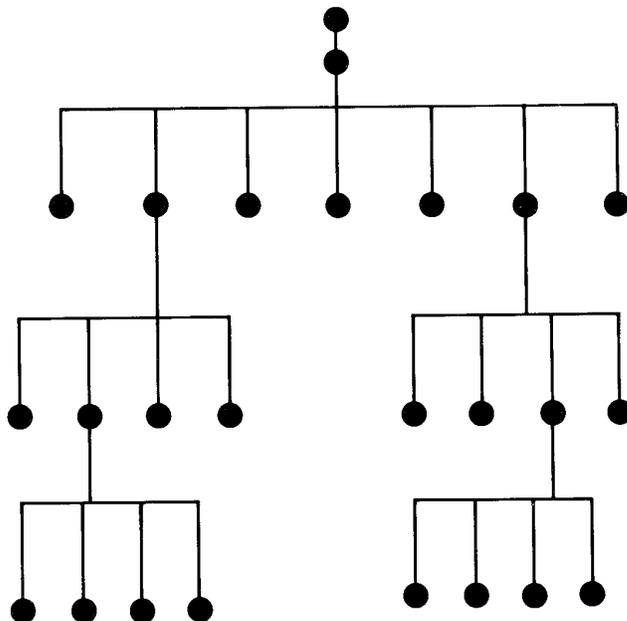
American managers, for the most part, are a tough lot who have accomplished much. They have helped build the strongest economy the world has known. And yet they are

losing control. They have not used the full potential of their organizations. They have failed in many respects to satisfy their customers. And so they are losing them.

Most American managers manage, at least in part, by Management by Results. In this style of management, the emphasis is on the organizational chart and the key control points within that structure (Figure 1). Each manager, beginning at the top, is given certain goals for the next year. They, in turn, set goals and impose controls on each of their subordinates. A CEO, for example, may be given simply a profit objective. He or she will then typically give each division head a profit objective. A division head then has to set goals or quotas for each department head. In a manufacturing organization, for example, the sales department may be told to increase sales by 10%, production to increase productivity by 5%, engineering to get products into production 10% faster, purchasing to reduce costs by 5%, quality to decrease warranty costs by 20%, and so on. At the lower levels, these goals become quotas or work standards.

### Figure 1: Management by Results

The classic organization was invented 150 years ago, born of the separation and decentralization of functions. The chart also depicts the downward path of control that operates under Management by Results. Each person, represented by a dot on the chart, is governed and evaluated through a set of numerical objectives, performance standards or work quotas – the *results* that his or her manager wants. This network of controls is typically constructed so that the sum of the accomplished objectives at one level will fulfill the objectives of the person immediately above. The apparent logic of this system of control tends to obscure its harmful side effects.



Management by Results is simple, logical and consistent. It seems to have been quite successful. It is practiced by nearly every major American corporation. It is widely taught in business schools. And it is attributed by many for getting us to where we are today.

But there is an underside to Management by Results. Consider these examples:

- An electronics firm typically ships 30% of its production the last day of the month. Why? In order to meet the monthly shipment quota. How? By expediting parts from around the country, by moving partially completed instruments ahead of their place in line, and, occasionally, by letting quality standards slip.
- Another firm sometimes ships incomplete instruments. A service representative then flies around the country installing the missing parts. The shipment quota for the month is met again. Profits, at least on paper, hold firm.
- A chemical plant reports it cannot efficiently run at the mandated inventory levels, so it keeps inventories higher until June 30 and December when inventories are measured. For those days, it depletes the inventories to an acceptable level, perhaps losing two days production as a consequence.
- Many managers annually negotiate safe goals and manage to exceed them, just barely. Some managers include on their list of negotiable goals, which were already secretly accomplished prior to negotiation.
- Production which exceeds the standards is stored so it can be pulled out and used another day.
- A meter reader stops at a tavern at 2:00 rather than exceed his work standard.
- Problems are hidden from management, in hopes they will blow over or not be noticed.

These are just a few examples of problems that occur with Management by Results. It has many shortcomings. Most occur because the larger purpose and greater good of the work being done gets displaced by the controls themselves. The workers, supervisors and the managers get caught up in organizational pretense where looking good overshadows doing well.

Here are but a few of the many negative aspects of Management by Results:

- It is a system of controls. The rewarded accomplishments are therefore necessarily measurable and short-term. The near horizon gets attention and countable accomplishments get priority even though an organization's survival may depend on the unmeasurable activities undertaken to accomplish long-term results.

- Systems of controls without a long-term, larger purpose will always set up conflict in an organization. The controls which direct one unit's short-term gain will contradict the controls which direct the short-term gains of another unit. Sales will make promises which production can't keep. Engineers will rush products into production before they are ready. Purchasing will buy materials which the warehouse can't store and the people on line can't use. Planners and policymakers plan programs which service personnel aren't equipped to provide. Each group struggles to conform to its controls independently of other groups and sometimes at their expense.
- When measurable controls are unattainable or impractical, individuals and groups tend to fabricate conformance. They "play the game" because not to do so would risk looking bad. The twice-per-year depletion of inventories is a movie-set approach to conformance. Behind the appearance, there is no substance. But it looks like controls are in effect.
- This charade of conformance fosters guarded communications, minor – and even major – dishonesty. The greater the stress on reaching unattainable goals, especially when someone's career is on the line, the more likely it is that the figures will be juggled.
- The inevitable contradictions between the controls of different departments lead to finger pointing, blame games and an endless series of excuses – like "if it weren't for them... ."
- Related to the blame-it-on-them mentality is a cover-your-rear mentality: play it safe, don't trust anyone and make sure that when the system breaks down, someone else is at the switch. In times of stress, circle the wagons. Don't help others, especially if they're under fire.
- Behind the worst shortcomings of Management by Results is fear. Fear is the prime motivator in a Management by Results system. And the more rigid and unrealistic the controls are, the deeper is the fear.
- Management by Results encourages an organization to look inward at its own structures rather than outward at the world in which the customer operates. Rather than delight in providing a product or service that works and satisfies the customer, the sense of accomplishment comes from meeting the controls. It becomes a self-reinforcing cycle. A manager or supervisor has a goal imposed on him or her. The manager works to meet that measure, however much distortion might occur at some other time or place in the organization. Meeting the short-term measurable goal is an indicator of the success of the individual and the success of the system of controls. Thus, there is fostered a Titanic-like complaisance about the invulnerability of the operation. When there finally is some awareness that the indicators of control may be focused on the wrong measurements, it's too late. The ship is going down and "Nearer My God to Thee" is heard from the afterdeck.

It is interesting to note that Management by Results is widely used in the Soviet Union. Typical is this story: Several years ago there was a surplus of large nails and a shortage of small ones. Why? Managers were held accountable for the tons of nails produced. Later the control was changed to the number of nails produced. This led to a shortage of large nails, since smaller nails gave higher counts.

### **III. TOTAL QUALITY LEADERSHIP**

Managers often say, "I agree, there are serious problems with Management by Results, but what is a better alternative?"

The alternative, we believe, is Total Quality Leadership.

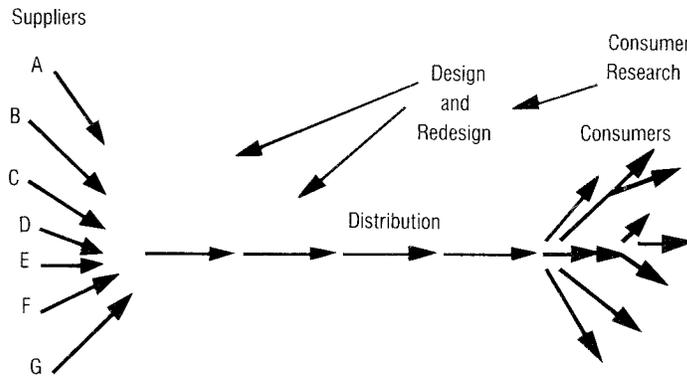
Simply put, Total Quality Leadership is an approach to management which focuses on giving top value to customers by building excellence into every aspect of the organization. This is done by creating an environment which allows and encourages everyone to contribute to the organization and by developing the skills which enable them to scientifically study and constantly improve every process by which work is accomplished.

In all organizations there are processes by which things get done. There are processes of production, of sales and of distribution. There are also processes to find out about customer needs and problems. There are processes that couple market information with information on new technologies. These in turn generate ideas for new products and services. Other processes create and test these new products and services and move them into routine production. Still other processes study costs and value added throughout the organization. There are literally thousands and thousands of processes, the overall health of which determines the future of the enterprise.

In Total Quality Leadership the emphasis is on studying these processes (Figure 2) and, on executing them better and better to provide customers with products and services of ever increasing value at ever lower costs.

Rather than focus on a hierarchy of individual accountability, the Deming Way focuses on the processes by which the work gets done. It has different internal logic: each internal process must work well and interact well with the processes that precede and follow it. Together, all the processes must result in products or services that meet or exceed the customer's expectations. Continuous communication with customers provides the feedback needed to improve the organization's products and services, and the processes by which work gets done. Imposed goals, quotas, and exhortations are recognized as generally harmful. As Dr. Deming says, "A goal that lies beyond the capability of the system cannot be achieved except at the destruction of the other systems in the company." Employees are viewed not as points out of control, but as willing collaborators in an ongoing effort to improve every aspect of the organization's work.

**Figure 2: The Structure Important to Total Quality Leadership**



The focus in Total Quality Leadership is on **QUALITY** – the quality of every product and service and the quality of every process – this emphasis on quality is shown at the apex of the triangle in Figure 3.

To achieve this higher quality, every process, beginning with the most important, is studied using the **SCIENTIFIC APPROACH**. Processes are described with flow charts; problems are identified; the root causes of problems are determined through careful research; and new foolproof systems are developed. Every process is brought under statistical control and variations are further reduced, well beyond specifications.

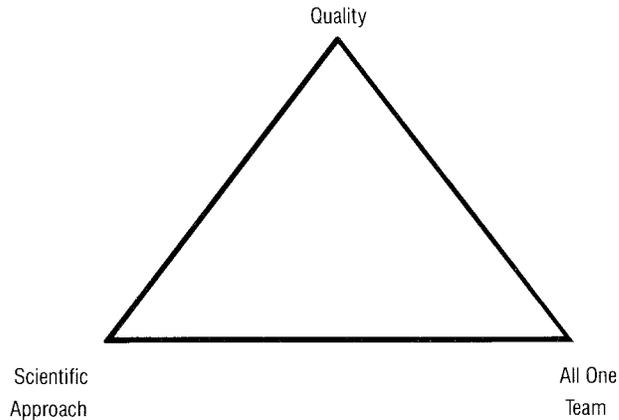
The use of the Scientific Approach, as shown at the bottom left of the triangle in Figure 3, becomes pervasive.

In many cases, the most difficult aspect of Total Quality Leadership is to create an environment of **ALL ONE TEAM**. If a company is to be truly excellent in every activity, everyone throughout the organization must work together to improve processes and to execute them with energy and efficiency. It requires a fundamentally different view of the relationship between employees and the organization. In order for all employees to be committed to the organization, the organization must be committed to its employees. This environment of total teamwork cannot be developed under Management by Results.

Total Quality Leadership is not widely practiced in the United States, but it is not new, nor is it foreign. Its roots go back to the early 1900s and its principal prophet is a Sioux City Iowa, native named W. Edwards Deming. A statistician by training, Deming formed many of his theories during World War II when he taught industries how to use statistical controls to improve the quality of production.

But when the war ended, American industry turned its attention to meeting the huge demand for consumer goods, without the pressure for efficiency or quality that guided it through the war years. And for almost 20 years there was no foreign competition.

**Figure 3 – The Joiner Triangle**



The three fundamental elements of Total Quality Leadership begin with a focus on Quality – that is, a focus on customers. Use the Scientific Approach to study and improve all of the organization's processes. And treat everyone as "All One Team": break down barriers and drive out fear so that everyone can work for the company.

Across the Pacific, however – where "Made in Japan" meant junk – there were people willing to listen. Deming told them to find out what their customers wanted, then to study and to improve their product design and production techniques until the quality of the product was unsurpassed. He taught them the product was "still in the development process when it was in the customer's hands."

His influence began with a dinner meeting in 1950 organized by the Japanese Union of Scientists and Engineers with 45 leading industrialists at the industry club in Tokyo.

He has since recalled that meeting. We will quote his recollections extensively since they are so central to his thesis:

"They thought they could not [compete] because they had such a terrible reputation for quality... . I told them, 'You can produce quality. You have a method for doing it. You've learned what quality is. You must carry out consumer research, look toward the future and produce goods that will have a market years from now and still stay in business...'

"Incoming materials were terrible, off gauge and off-color, nothing right. I urged them to work with the vendors and to work on instrumentation. A lot of what I urged came

naturally to the Japanese, though they were not doing it. I said, 'You don't need to receive the junk that comes in. You can never produce quality with that stuff. But with process controls that your engineers are learning about – consumer research, redesign of products – you can. Don't just make it and try to sell it. But redesign it and then again bring the process under control... with an ever-increasing quality.'

"I told them they would capture markets the world over within five years. They beat that prediction. Within four years, buyers all over the world were screaming for Japanese products."

The rest, as they say, is history.

#### **IV. KEY COMPONENTS OF TOTAL QUALITY LEADERSHIP**

Here are some of the key components of Total Quality Leadership:

- It recognizes – as Dr. Joseph Juran has argued since the early 1950s – that at least 85 percent of the failures in any organization are the fault of systems controlled by management. Fewer than 15 percent of the problems are actually worker related. In Total Quality Leadership, the focus is on constantly and rigorously improving every system.
- It asserts that work is not haphazard. It can be and must be studied, analyzed and scientifically dissected.
- It insists that processes must be standardized and that standardized procedures must be followed. Variation must be reduced in output and in the way things are done, yet the opportunity must be provided for everyone to contribute to improving the processes and to eliminating problems.
- It has a customer focus, an obsession with quality.
- It recognizes that there are both external customers and internal customers – other employees who depend on your work to be able to perform their jobs properly.
- It demands improved relations with suppliers, a true working partnership, which in most cases will require a single supplier for each item.
- It emphasizes process improvement rather than individual accountability.
- It requires that communication systems be adapted to the needs of the work, not to the needs of the hierarchy.

- It demands constancy of purpose throughout the organization, persistence in accord with a clear and widely understood vision. It is an environment which nurtures total commitment from all employees. Rewards go beyond simple benefits and salary to the belief "we are family" and "we do good work."

Total Quality Leadership is a management philosophy that starts with the customer, not with the bottom line profit and loss statement.

It is very data oriented and calls for monitoring thousands of variables inside and outside the organization. These numerical measures are used to guide the search for better performance, and are recognized as means rather than ends, as guides to deeper truths, rather than items to be controlled.

In Total Quality Leadership there is freedom, yet there is control. There is the freedom to discover new markets, to develop new systems, to gain greater mastery over the processes. And there is the control of a data based approach to improvement.

Many managers have great trouble understanding why they should focus on improving the systems that serve the customer rather than simply on profits. The Deming Chain Reaction in Figure 4 may help.

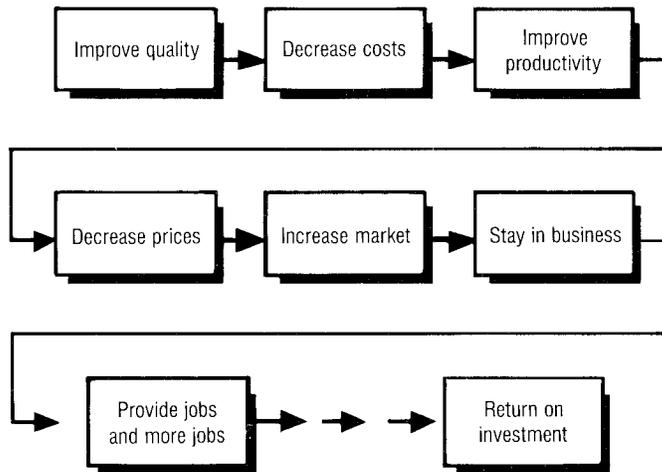
When quality is increased by improving processes (not by expanded inspection), the better quality will lead to better productivity, which will lead to lower costs. Better quality and lower prices mean the company can expand its market, and can stay in business creating jobs and a greater return on investment.

Management by Results, on the other hand, tends to focus only on the end result – the return on investment; it is like wagging the tail to keep a dog healthy.

It is a tough concept to comprehend and it takes a leap of faith to make the fundamental shift from Management by Results to Total Quality Leadership. There is no easy way to make the change. It seems best to use a gradual process of letting go from the old style while embracing the new.

Working in collaboration with a number of people, and receiving considerable advice and counsel from Dr. Deming, we have developed a general model for implementation. Our model is not static as we continue to learn by working with a variety of organizations seeking to make the transformation.

**Figure 4: The Deming Chain Reaction**



When you improve quality by improving processes – not by increased inspection – the result is decreased costs. Lower costs mean better productivity. Better quality and lower prices mean increased market and the ability to stay in business and provide jobs and more jobs. All this put together gives shareholders a solid return on their investment. (The last element, "Return on investment," has been added by the authors.)

Key elements of this model include:

- The education and re-education of managers. They must become leaders instead of bosses, coaches instead of enforcers. They must focus on solving problems and constant improvement instead of blaming and controlling. The quality-focused approach to leadership requires continuous feedback from the customer, and constant communications and feedback within and between units of the organization.
- The development and communication of a clear vision of the organization's future. It is a vision which says: here is what we are; here is what we do; here is where we're heading; and here is what is important and unique about us.
- The formation and development of true management teams. They are essential for leading the company in its normal business functions and for leading the implementation of Deming's approaches so that Total Quality Leadership itself becomes a "normal business function." Teams are essential for maintaining "constancy of purpose," for "breaking down barriers" between departments, and for "driving out fear" among the managers themselves.
- Targeted implementation efforts and an overall strategy. A common mistake is for companies to try to involve too many people too soon in the improvement efforts. It is easy to plant a big garden, but very hard to tend it, harvest it, and make good use of the

crops. Don't begin more improvement efforts than you can realistically support and maintain.

- Management-selected projects and project teams using the scientific approach to improve processes. Usually the teams consist of a mixture of professional staff, managers, supervisors, and hourly employees who use scientific methods to study and improve processes.
- Developing or recruiting key resources, including a senior statistician, a senior organization development specialist, and intermediate level resources who are trained in both statistics and organizational development to coach project teams. They play a special role in the transformation by providing help with the scientific investigation of processes and with facilitating the dramatic changes in the organization, its management and its culture.
- Leadership, participation and oversight by managers, beginning at the top. This is an absolute essential. The most frequent cause of failure of any quality improvement effort is the non-involvement or indifference of top and middle management. Passive support is not enough. Total Quality Leadership must involve everyone.
- Developing champions who will help the transformation succeed even during rough periods.

## **V. HOW TO GET STARTED**

For managers who want to contribute to the transformation to Total Quality Leadership, there is much to learn.

If you haven't already done so, we suggest you read the books of Deming, Juran, Ishikawa and the papers by Tribus and Fuller listed below. Attend the four-day seminars by Deming and Juran. Visit Japanese-managed companies here and abroad. Expand your knowledge of statistics and organization development.

Remember, the best way to get others to change is for you yourself to change. Begin with your own work. What can you do to improve the quality of your work and the satisfaction of your "customers"? Listen to your "customers" and to those with whom you work. In whatever decisions you make in your job, begin replacing educated guesswork with reliable data. Strive to eliminate blaming and replace it with problem-solving.

Begin to practice the new approach with others in your department. Work with people to break down barriers and drive out fear. Help them study and improve the systems in which they work. Help them document the best known practices and provide effective supervision so they are conscientiously followed. Then help everyone continue to work and develop still better systems.

Deepen your understanding of Management by Results and come to recognize its limitations. Learn to see it in all its different guises.

Look at your own company. What are the forces that make things work? What dominates your daily work life – fear, or turf battles and constant pressure to meet quotas? Or is there cooperation and planning based on specific facts? Do you feel like a cog in the wheel or like an integral and important part of the process? Does the bottom line rule all? Or are the customer and quality of work the recognized goals of your company?

When you've done all this, you'll be in a better position to come up with some creative ways to think about how to help your organization move from Management by Results to the new way – Total Quality Leadership.

## **VI. ACKNOWLEDGMENTS**

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Tribus, Myron. Author of a series of excellent papers on Deming, quality and management which are available upon request from The Center for Advanced Engineering Study, Massachusetts Institute of Technology, Room 9-213, 105

Massachusetts Avenue, Cambridge, MA 02139. We recommend in particular: "Deming's Redefinition of Management;" "Productivity... Who Is Responsible for Improving It?;" "Managing to Survive in a Competitive World;" and "The Quality Imperative in the New Economic Era."