

Deming's Profound Knowledge for Leadership

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We Are Still Not “Out of the Crisis”



Human Development &
Leadership Division

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Profound knowledge for the 21st century

For many years managers jumped from one new leadership theory to another. At one time, W. Edwards Deming was preeminent in the field of quality, and in some circles, his principles are still highly regarded. In fact, the Deming Prize is still a major award for service and manufacturing quality in Japan.

However, ask the average manager about W. Edwards Deming and an exceedingly common reply is “Who?” It seems that Deming’s principles and theory of profound knowledge may have gone by the wayside. But should they? Is there still something for leaders to learn from Deming’s theory of Profound Knowledge?

Deming’s theory of Profound Knowledge is a system based upon 4 elements:

1. **Appreciation of a System:** A business is a system. Action in one part of the system will have effects in the other parts. We often call these “unintended consequences.” By learning about systems we can better avoid these unintended consequences and optimize the whole system.
2. **Knowledge of Variation:** One goal of quality is to reduce variation. Managers who do not understand variation frequently increase variation by their actions.
3. **Theory of Knowledge:** There is no knowledge without theory. Understanding the difference between theory and experience prevents shallow change. Theory requires prediction, not just explanation. While you can never prove that a theory is right, there must exist the possibility of proving it wrong by testing its predictions.
4. **Understanding of Psychology:** To understand the interaction between work systems and people, leaders must seek to answer questions such as: How do people learn? How do people relate to change? What motivates people?

Why should a leader in today’s complex and competitive environment care about a system of profound knowledge? This primer explores that question by considering each element of a system of profound knowledge and describing the benefit of each for a leader who has succeeded based on their deep understanding and practice of that element. Leadership traits and actions that support that element will also be outlined.

Then, the article extends these concepts to you personally. You will have the opportunity to participate in a survey which will evaluate your leadership style. Then you can utilize the survey results to gauge your readiness to lead using the system of profound knowledge in your own work.

Appreciation of a system

What is a system?

Deming defined a system as a network of components that work together to accomplish the aim of the system (Deming, 1994). A car is a system designed to transport you. A business is a system designed to create profitable customers. Even quality can be defined as a system: the interaction between the product, the user, their expectations and the service user receives in case the product fails or requires maintenance.

In a system, the focus is on the process not on the outcome. The better the process is understood, the better the outcome. What is most important is how the parts work together. Consider trying to make a car using the best engine, perhaps from Ferrari; the best transmission, possibly from Audi; the best chassis, probably from Lotus; etc. Of course it would not work. The parts have to be designed to work together. All-star teams often perform poorly. Just because the players are great, does not mean they have learned to work as a team.

Traits of a leader: Systems thinking

A leader understands how the work of his group fits into the aims of the company.

A leader focuses on the customer, external and internal.

Traits of a leader

A leader understands how the work of his group fits into the aims of the company. This

could be translated to any frame of reference. For example, for a President of the United States to be an effective leader, he or she must understand how the

work of the executive branch fits into the aims of the American people. This is not trivial. Simply doing what polls suggest the voters want will not necessarily produce the results the electorate wants, any more than surveying customers will be sufficient to provide a company with all the information it needs to be competitive. Dr. Deming loved to point out that the customers cannot always tell you what they want. They did not ask for pneumatic tires. Surveys showed they wanted to buy the Edsel, a car produced by Ford in the 1950's that turned out to be a dismal failure. Market studies showed that the Sony Walkman would fail. This is not to say that surveys are not useful. They are critically important. However, they often do not provide a complete picture, and they are very often misinterpreted.

The efforts of a President might produce increased employment, reduced poverty, rapid economic growth, and a substantial rise in the Dow Jones Industrial Average. This would not get her reelected if the American people felt that the country was moving in

the wrong direction. Great leaders are able to understand and meet the aims of their community at a very deep level, and are able to help the community move in the direction of those aims.

A leader focuses on the customer, external and internal. Brooks once had a very interesting experience at a conference of senior military safety managers. He raised the question of who their customer was. Very quickly the group mentioned the senior commanding officers of their respective services. The troops were also prominently mentioned. As one of two non-military personnel in a group of about 50, Brooks waited with frustration, and finally pointed out that the taxpayers should be considered a customer since we were paying for the services. This provided a gut level understanding of one of the fundamental problems of our government: the customer who pays the bills, namely the taxpayer, is often left out of the equation.

Deming said the first technology that he taught the Japanese in 1950 was the customer survey. While customers may not be able to tell you what new products to introduce, they can certainly tell you how they feel about what you are providing now. The customer is the ultimate judge of quality.

How does a leader leverage system thinking when no one else does?

When other people don't recognize a system, its components come into competition. As Deming points out "A system must be managed. It will not manage itself." To do this, the leader must seek to understand the system he or she is attempting to manage. Without this understanding the system cannot be managed or improved. Optimization of the parts does not optimize the whole. System optimization requires coordination and cooperation of the parts, which requires leadership. One of Deming's frequent jokes was about the "inefficiency" of the typical orchestra. "Look at all the people who are not playing at any given time," he would say. Of course, the point was that, to work

<i>Actions to increase systems thinking</i>
<ol style="list-style-type: none">1. Give the systems view of your group by Mapping out your system, including Suppliers, Process and Customers, external and/or internal.2. Understand and communicate to your staff where your group fits in your company's larger system and how your group's influence impacts the rest of the organization.

as a proper system, players would have to be silent from time to time. The object of the orchestra system is to make music. If the object were to make noise, everyone should play all the time. Managers who understand how the enterprise is a system are effective.

Inspirational leader

If a leader can understand systems thinking and apply it to how their business works, they can more easily identify the system's leverage points, that is, the points in which action on the system will achieve the greatest benefit. A great business success story that illustrates this is the establishment of Nucor steel. Nucor's legendary leader F. Kenneth Iverson's radical insight into the leverage point was that employees, even hourly clock-punchers, will make an extraordinary effort if you reward them richly, treat them with respect, and give them real power. This was done at a time when the great steel manufacturers of the United States were laying off thousands of workers and falling upon very hard times.

Nucor was peculiar in that there were no executive perks

([http://en.wikipedia.org/wiki/F. Kenneth Iverson](http://en.wikipedia.org/wiki/F._Kenneth_Iverson)). The modest corporate offices were in a strip mall in Charlotte, North Carolina. Iverson, although he was the CEO of a multi-billion dollar company, traveled in tourist class saying, "What would my steelworkers think if they saw me getting out of the plane in first class?" What Iverson had done was to understand that in his business the steelworkers were extremely important. To lavish perks on the executives would be an example of what we call sub optimization. It would be diminishing the importance of the steel workers. Certainly, his workers were among the most productive in the world and drove the success of the company.

The failing steel companies all had lavish offices, legions of vice presidents, and a long list of perks. In fact, by coincidence, one of Brooks' college friends had an uncle who was a VP at US Steel. The company maintained a spacious and elegant apartment in the Park Lane Hotel in New York, across the street from the Waldorf Astoria. The uncle made the apartment available to his nephew, who was Brooks' friend and classmate, and Brooks actually stayed in it in the early 1960's. If Nucor needed to maintain a New York apartment, it certainly would not have been in the Park Lane Hotel.

Respecting and viewing Nucor's employees as being as important as the executives became a very powerful leverage point for Iverson and Nucor steel.

Knowledge of Variation

Any measure will have variation. If there is no variation, then your measuring device is not sufficiently sensitive, or someone is fudging the data. The ability to distinguish between common and special cause variation has far-reaching implications for a leader. Common cause variation may be defined as the random variation of a stable process. Special cause variation may be defined as variation due to a change in the process. It is important to understand and distinguish between the two. In safety, the accident rate of a plant will vary month to month. If this variation stays within control limits, the manager should not try to intervene after a month with a high rate. This would be

called “tampering” and would likely increase the variation in the system. However, if the accident rate exceeds control limits, then it is important that the manager intervene to find out what has caused the change.

Traits of a leader

<i>Traits of a leader: Knowledge of variation</i>
A leader understands variation. A leader works to improve the system and processes within which the group works.

The leader understands variation. The leader is in a position to make judgments, and, based on those judgments, to deploy human and financial resources. If data are available to guide those decisions, the interpretation of the data requires an understanding of

variation. The manager who holds a special meeting when there is a one-month increase in accidents is wasting time and hindering progress, unless that increase represents an excursion beyond statistical control limits. A large proportion of the daily activities of most managers would be discontinued at once if those managers had a fundamental grasp of the laws of variation.

Early in his business career Brooks served for several months as a sales manager. Initially, he did what he was taught to do. Each morning he would review the sales figures. Some sales people would have had a good day or a good week, and he would call them with encouragement. Some would have done less well, and he would call them and very politely inquire about what might be wrong. Often the first group did not do so well the next day and the second group did better. Whatever happened, there was plenty of work for the sales manager. Of course, this work was counterproductive, and a waste of time. The laws of variation make it clear that sales will vary from day to day, and that treating this random variation as though we could determine the cause will actually impair performance. Plus, the law of “regression to the mean” (Kahneman, 2011) tells you that high scores are likely to move lower and low scores are likely to move higher. Brooks became more effective as a sales manager, meaning the sales team sold more, when he stopped bothering the sales force, and began to do things that made selling easier for all of them, meaning improving the system.

The leader works to improve the system and processes within which the group works.

There are two important points here. First, that the focus of the improvement effort is on the system, not the people, and second, that the leader is a part of the system and not separate from the system. In the sales manager’s story, working on the system could include getting better leads, better pricing, developing a stronger pitch, finding more attractive products, or developing an advertising program to support the sales

effort. Sales training is another approach to system improvement, although a lot of sales training is a motivational program disguised as training. Motivation should flow from an effective sales process, not from cheerleading by a motivational speaker.

Inspirational leader

John Wooden was undoubtedly the greatest basketball coach of all time and a man of great character as well. He won 10 national championships. (Brooks was on the UCLA faculty for the last 7.) No other coach in men's college basketball has won more than

Actions to increase knowledge of variation

Understand the most important variables to your group's outcomes. Is your process dominated by suppliers, equipment and/or operators?

Understand how your most important variables perform. How should they perform? Are they stable? Are they capable?

four. In college, players graduate or leave, so Wooden did this with at least four distinct groups of players. I do not know if Wooden had scholarly knowledge of the laws of variation, but his intuitive knowledge was outstanding. Many coaches are manic during the ebb and flow of a game, trying to correct mistakes

(tampering) and exhorting their players to do better (more tampering). Wooden was relatively calm during the game, asserting correctly that the important coaching had already been done, and somehow understanding that the activities of correcting and exhorting were counterproductive.

Theory of Knowledge

Organizations learn only when the people in them learn. Deming told us that without theory there is not knowledge. Knowledge, in Deming's terms, means the ability to make predictions. One of the most powerful, yet often flawed models for learning is the attribution of a cause and effect relationship when one event closely precedes another. However, the temporal interval between is sometimes a matter of chance - there is no relationship. But there is still a powerful tendency to ascribe a causal relationship. Daniel Kahneman, the Nobel Prize winning psychologist, describes a non-verbal system that intuitively makes decisions for us, sometimes based on such misinterpreted experience, and is often completely insensitive to strong evidence that argues for a different decision.

Traits of a leader

A leader understands the difference between a tested theory and intuition. A manager who makes decisions by intuition or experience can get in trouble when that leader's experience or intuition is limited or doesn't apply to the problem at hand.

Copying best practices (aka benchmarking) or shooting from the hip to solve a process problem rather than using scientific method or Plan-Do-Study-Act (PDSA) cycle to develop and test solutions may quickly solve a problem in the short term, but can actually end up hurting the process quality over the long term.

Marilyn has personally been involved in many process improvement projects that revealed the legacy of this approach – processes with complicated procedures, multiple

Traits of a leader: Theory of knowledge

A leader understands the difference between a tested theory and intuition.

A leader understands that management is prediction.

A leader provides clear operational definitions.

inspection points and poor quality outcomes. These quick fixes stay with the process long after their usefulness expires. In fact, they can become so imbedded that process operators think this is how the process was originally designed to work! Talk about killing joy in work!

Leaders should understand that experience and intuition, without the frame of the current underlying system, is just raw data that can be misinterpreted against a flawed theory of reality. Deming warns, “The world is drowning in information but is slow in acquisition of knowledge.” There is no substitute for knowledge.

A leader understands that management is prediction. In order to predict, a manager must be able to test the theory that is being used to make a prediction. The use of the PDSA cycle can provide the structure to test if a theory is viable. If the theory does not bear out, you will need to change the theory. But at least you will have learned something valuable.

It is commonly thought, for example, that sales commissions drive sales people to sell more. What is the theory behind this? How can you test it? The results might surprise you. Jim McIngvale (aka Mattress Mack) did just that in his company, Houston-based Gallery Furniture. While the company was very successful, Mack had never been able to move his closing rate above 50%, meaning the fewer than half the people who came to the store ended up purchasing something.

By attending a Deming seminar, he learned that commissions can interfere with taking care of the customer, by encouraging the sales person to sell the customer something she doesn’t need, and by creating competition among sales people, as each sales person tries to make sure that she gets the commission, not one of her colleagues. As a result of what he learned from Dr. Deming, Mack took his sales force off commission and put them onto salary, paying each sales person as much as she made under commission. Some of the highest producing (in the old system) sales people left, but for those that stayed, competition among sales people was replaced by cooperation. Before, when a

problem happened it was scapegoating – who’s to blame? In the new model, when a problem happens they try to improve the system so they could work that problem out of the system forever. Before it was, get the commission. Now it is please the customer, because in the new model, the boss is the customer. The result was a steady increase in sales with a closing rate moving above 60%, a more satisfied workforce, and a strong increase in customer satisfaction.

Another vehicle for prediction, based on established statistical theory, is the control chart. If a control chart of sales is stable, you can predict the rate of sales into the near future, until and unless there are fundamental changes to the sales system. Deming told a funny story about a client who called and said he was having “too many fires” in his plant. Deming plotted the fires on a control chart and found a stable process. He told the client, “No, you are having just the right amount of fires,” and then explained what he meant.

A leader provides clear operational definitions. An operational definition allows different people to have the same working understanding of a concept or measure. Saying that a customer is satisfied, for example, can have many possible meanings. What if one person defined customer satisfaction as on time delivery and another as defect free operation (whatever that means)? Each could claim customer satisfaction had been achieved and be both wrong and right at the same time! Unless there is an operational definition, i.e., a procedure agreed upon for translation of the concept of customer satisfaction into a measurement that all understand and agree upon, there will be confusion as to whether customer satisfaction had been achieved.

Actions to improve theory of knowledge

Discover the focus of your own learning strategy. Is it focused on better understanding of how your system works best so you can more accurately predict its results?

Define and clarify the underlying assumptions and operational definitions for your strategic and process goals. Does your team understand where you are leading and how they can help?

Understand the veracity of your data. Do you question and try to validate your measures and measurement systems where it makes sense?

Most companies now use customer surveys, but that still does not erase the problem of knowing whether their customers are satisfied. For example, some companies treat customer satisfaction as an all or none matter. If the customer marks *satisfied* or *very satisfied* on a survey, then they are categorized as satisfied. We prefer to treat this result as a continuous measure, by computing the percent of the possible maximum

score. In our experience 70% is average, 80% will allow you to retain most customers, and 90% will allow you to attract customers from competitors who have lower customer satisfaction.

Inspirational leader

Harry Truman is viewed by presidential scholars as the best president of the 12 who have served since Franklin Roosevelt. Truman understood the difference between evidence and what a friend of mine aptly called “vivid assertions.” Following the end of World War II, Truman, as Commander-in-Chief, decided to integrate the Armed Forces by executive order in 1948. The resistance of the brass was loud and strong. But Truman knew that the dire predictions were not based on any evidence. Truman proceeded with his plan, and of course the dire predictions proved to be untrue. In 1949, the Navy admitted that only 5 of its 45,000 officers were African American. As of this writing, there are 18 African American Flag Officers (Admirals). On the other hand only one Naval officer and one Army officer have reached four star rank, so there is still progress to be made. Interestingly, the same vivid assertions were made when women were integrated into combat service and when gays were allowed to serve. (Corddry, 1993)

Understanding of Psychology

A leader should make an effort to understand people and how they best work in the organization’s systems. Certainly removing waste and making a process easier to work with will improve the motivation of process workers. However, a leader should leverage knowledge of psychology to better understand what motivates each individual on the team – what motivates one, may not motivate the other. In his final years, Deming focused on the “psychology of change.” He recognized that it was exceedingly difficult to transform a company to operate by the principles he taught. In fact, he instituted a new practice at his four-day seminars, an evening session on the psychology of change, hosted by a psychologist. Dr. Deming would participate, but as a member of the audience. While Deming felt he had a lot to learn about psychology, his insights set him above many professionals. He understood the power of the intrinsic motivation that flows from “pride of workmanship” and he also understood the limitation of incentives.

Traits of a leader

The leader is coach and counsel, not a judge. This flies in the face of the simple management formula that sets targets and holds subordinates accountable. What is added by the leader under this formula; the willingness to discipline or fire a subordinate who fails? This might suggest that less sympathetic persons would be the best managers. In our experience, this is not the case. Is the manager’s contribution the ability to set targets? That could be done by any employee.

Traits of a leader: Knowledge of psychology

A leader is coach and counsel, not a judge.

A leader removes obstacles to joy in work.

A leader creates trust.

A leader forgives a mistake.

The test of a leader is her ability to help subordinates do a better job than they would be able to do if the leader were not there. That is exactly what a coach must do for an athlete or a team.

The leader removes obstacles to joy in work.

Deming argued, correctly in our opinion, that the most

powerful motivation for workers was intrinsic motivation. Intrinsic motivation is inherent in the activity of doing rather than in rewards and incentives that may come when the doing is successful. A key source of intrinsic motivation is the satisfaction of doing a job well. In spite of the fact that this is consistent with a great deal of research in psychology, most managers do not recognize the importance of intrinsic motivation in the workplace. Brooks reflected on a job he had during the summer of 1960 at a Ford plant in Kansas City. The pay was very good, and he never heard a complaint about it. Nevertheless, most hourly workers hated their jobs. This was not because of the monotony of the assembly line, but because the workers believed, correctly, that the cars were very poorly made. Brook's first job was to attach heater cables to the firewall under the dash. He received about 15 minutes of training. On many cars, he was only able to get the screws in part way, leading eventually to a customer who suddenly was unable to operate her heater.

Many of the workers talked about working at other plants, Fisher Body being one example, where they recalled that the quality was very good. The workers felt bad about the work they were doing, and they believed that management did not care. We believe that management did care but are certain that management was out of touch and ineffective. Ford got pretty close to going bankrupt before they brought in Deming in the early 80's and transformed their company.

In today's corporation, there are many obstacles to what Deming called "joy in the workplace." For example: 1) Tasks are often broken up into such fragments that many workers never get the satisfaction of seeing their contribution to the finished product; 2) Workers are often so hurried that it is very difficult to do a job as well as they would like; 3) Workers, particularly in customer service, are often so constrained by policies and procedures that they cannot do what makes sense to take care of the customer.

An example is a story told by a customer on a talk show recently. He was a long time season ticket holder of his local NFL football team. He was having guests to his home. He asked to turn in his two season tickets and purchase six seats together. He was told by the supervisor that the firm policy was not to provide refunds, so the team refused.

At the time, there were 9,000 unsold tickets! Is it a surprise that this team has not won any of the 47 Super Bowls that have been played as of this writing?

None of these obstacles to joy in the workplace is necessary, and all create problems for the organization. While specialization is necessary, leadership can and should provide everyone with a sense of the mission and accomplishments of the entire group. This should be done on an ongoing basis, not just during annual review carried out at arm's length by senior management. The accomplishments of a working group are occasions for celebration, not for the issuance of a memo.

A great amount of organizational hurrying is the result of management's failure to clearly define priorities. This is not an argument that work should be carried out at a leisurely pace, but rather that one task should be brought to completion before several others are initiated. Steven Covey's (1994) *First Things First* addresses this issue with eloquence. He points out that there is a difference between urgency and importance, and that what is important is seldom urgent. To the extent that urgent things crowd out important things, our work and the work of our group will be less successful.

To provide an example of the urgent crowding out the important, consider a group of plant managers with whom Brooks worked over a period of months in a planning process. The group acknowledged that the single most important management action was conducting informal discussions with hourly employees on the factory floor. This would give them information on how things were going that could not be found in written reports or in communications from direct subordinates. However, the managers spent little or no time doing this. It was crowded out by more urgent but less important functions like responding to information requests from various corporate staff units.

The leader creates trust. If trust cannot be established, the work of the leader is greatly impaired. Trust is evidenced by the willingness of employees to undertake actions that they cannot be certain will lead to the desired outcome, based on the advice of a person or group that is trusted. If the outcome is certain, trust is not required. Basically, then, trust is the condition under which learning and innovation can take place. Without trust, workers will attempt to stay with the tried and predictable.

Trust is also the glue that holds a group or team together. For a team to optimize its outcome, each individual member of the team is required to make some sacrifices. If every member of the team tries to optimize his/her personal outcome, the team will not play its best. In a basketball game, trust is required to pass the ball. The passer has to trust that when the circumstances are appropriate, that the other player will pass it back.

Trust is easy to destroy, and after it has been destroyed, it is very difficult to reestablish. If people conclude that someone has deceived them, then all subsequent communications are viewed skeptically. A leader who is in this position now has a nearly impossible task. Any error that he/she makes in communication is likely to be

viewed as another occasion in which the leader is attempting to deceive. Even very infrequent errors will be sufficient to maintain the lack of trust.

Trust is built slowly. A fundamental building block is telling the truth. Just as important is the ability to listen and to identify with the point of view of subordinates. This does not necessarily mean agreeing with that point of view, but it does mean that the views of subordinates cannot be summarily dismissed.

The leader forgives a mistake. The unforgiving leader has some real problems, unless that leader is certain that he will not make any errors. Since the leader is likely to make mistakes, and since those mistakes are likely to be more costly than the mistakes of

Actions to utilize knowledge of psychology

Make sure that each member of your team knows when they have been successful and that they understand what they have accomplished.

Think about how you are rewarding your team. Ask them what motivates them. Are you providing recognition? How?

subordinates, there is a great risk of the unforgiving leader alienating his subordinates.

Probably more important is the impact of fear on the behavior of subordinates. Relatively speaking, those who engage problems and make decisions are more likely to make mistakes than workers who duck responsibility. In

organizational cultures that are intolerant of errors, we see an ever increasing proportion of employees and managers who duck responsibility. This is a fundamental characteristic of bureaucracies, which are created when the penalty for error is greater than the incentive for successful risk-taking. In this circumstance, the low-risk, low-responsibility path is the one taken. The customer service supervisor who refused the ticket exchange described earlier was probably neither mean nor stupid. Rather, he worked in a bureaucracy established by inept managers, and he was doing what he needed to do to survive.

Based on what we know about psychology and on our experiences as managers, what Deming offers makes a great deal of sense. It is important to note that nothing is said here about incentives. Deming felt that incentives did not deserve the emphasis that most managers place on them. Do most managers really know what motivates their employees?

Inspirational leader

When Paul O'Neil, who served as Treasury Secretary during George W. Bush's first term, took over the floundering Aluminum Co. of America (Alcoa) in October 1987, he shocked attendees at an introductory news conference by proclaiming that his focus would not be on expanding sales or improving profitability. Rather, he said, his emphasis would be

on improving employee safety. Investors at the conference thought he was crazy and rushed from the room to tell their clients to sell Alcoa stock immediately. "It was literally the worst piece of advice I gave in my entire career," one of the investors later said.

O'Neill instituted wide-ranging programs to improve safety in what was previously a dangerous industry, empowering employees to offer suggestions and ensuring that accidents were immediately brought to the attention of executives. As the accident rate declined — ultimately to about 5% of the national average — something funny happened. Communication among employees increased, line workers offered other suggestions to improve efficiency, and the company underwent a renaissance. Within a year, Alcoa's profits reached a record level. By the time O'Neill retired in 2000, the company's stock was worth five times as much as when he started. His rationale was simple. He knew that to turn the company around, he had to have the cooperation of the workers. To get that, the workers had to believe the company cared about them. For them to believe that, the company *did* have to care about them, hence a focus on safety.

Hear it straight from Dr. Deming

Take a look at the master in action. A two hour lecture at Western Connecticut State University in February of 1990 was edited to show 8 minutes of Deming at his funniest and most profound. And if you look carefully you will see a young Marilyn assisting him on the stage. I always stood next to Dr. Deming (at 90, his hearing was declining) and repeated the audience comments and questions so he could respond to them - as only Dr. Deming could.

The Humor of W. Edwards Deming

<http://www.youtube.com/watch?v=mCkTy-RUNbw>

Where do you stand?

Leadership inventory

Taking Action to improve leadership

If this primer causes you to focus on deficiencies in leadership, in yourself or in your company, there is still some good news. The ability to lead effectively is a skill that can be learned. It is a difficult skill that may require you to make some changes in the ways you have become used to doing your job over many years. Use the theory of profound knowledge to guide you. Our own experience is that progress can be made and the results are worth the effort. Below is a "leadership inventory." It is a series of questions to help you reflect on the leadership capabilities of yourself and your organization.

This is not a validated survey, and the objective is not to see how your score compares to those of other leaders. Rather, it is a way to see where your strengths lie, and to discover areas of opportunity for improvement.

You may take the survey on line by following the link below. The survey is anonymous. We suggest you take the survey on-line, so you can contribute to the analysis of survey results. In addition, we have printed it here for your future reference. It should take about 10-20 minutes to complete. At the end you will be able to print out a copy of your survey responses.

Link to Leadership survey:

https://asq.az1.qualtrics.com/SE/?SID=SV_5sZOIWxIBX17uEI

Leadership Inventory Survey

Scale is: Strongly Disagree, Disagree, Somewhat Disagree, Somewhat Agree, Agree, Strongly Agree.

Vision

1. I have a clear vision for where our organization should go.
2. I am enthusiastic about my vision for our organization.
3. My vision is shared by my colleagues

Values

4. I look in the mirror to find who is responsible for our setbacks.
5. I look out the window to find who is responsible for our wins.
6. I am focused on our customers.

Company

7. Our company rewards long term contributions more than short term.
8. In our company, employees' fear of making mistakes stifles initiative and creativity.
9. Our company strives to continuously improve every process, practice and procedure.
10. The leaders of this company are constantly seeking new knowledge.

Communication

11. My subordinates and colleagues have clear understanding of my vision.
12. My subordinates feel that I hear and understand what they are saying, even when I disagree with them.
13. My colleagues feel that I hear and understand what they are saying, even when I disagree with them.
14. I have a good understanding of the joys and frustrations that front-line employees experience in doing their jobs.

Demonstration

Personal

15. I am willing to risk disagreement in order to properly represent my vision.

16. My actions are always consistent with my statements.
17. My subordinates and colleagues would say that my actions are consistent with my statements.
18. My superiors in the company trust me.
19. My peers in the company trust me.
20. My subordinates in the company trust me.

Company

21. People who do their best for the company feel adequately recognized by management.
22. Management responds promptly to problems that employees discover.

Impact

Personal

23. I am effective at mobilizing people in our company to confront difficult problems.
24. I have high standards for those who report to me.
25. I persevere and do not bow to obstacles in attempting to achieve our vision.
26. My subordinates see me as a coach rather than as a judge.

Company

27. We have done a good job of removing obstacles to the employees' joy in the workplace.
28. We are aggressively confronting the hard problems that we face as a company.

This inventory can be used by you to examine your own leadership. It can also be shared with a team or leadership group. We have used it with leadership groups, having the participants return the surveys to us anonymously. We look at two things in the compiled data: 1) Where are the strengths and weaknesses in the group?, and 2) Where is there a lot of variation in response. Both analyses then provide a basis for discussion of topics such as:

- ◆ What are the implications of our weaknesses?
- ◆ Why do these weaknesses exist?
- ◆ What can be done to improve?
- ◆ What are the implications of our strengths?
- ◆ How can we best capitalize on them?
- ◆ Why are we in disagreement (high variation) on certain issues?
- ◆ What is this disagreement telling us about our communication and our ability to assess what is happening with ourselves and with the company?

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About the Authors

Brooks Carder, PhD. Brooks is a leader in the application of the disciplines of Quality to the improvement of safety performance. His work focuses on the use of scientific assessment to enable the design and implementation of successful improvement programs. He and his colleague, Patrick Ragan, authored the chapter on “Benchmarking and Performance Measurement” in *The Safety Professional’s Handbook*, and a book, *Measurement Matters; How Effective Assessment Drives Business and Safety Performance*, published by ASQ Quality Press.



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His education includes an AB from Yale University, and a PhD in Experimental Psychology from the University of Pennsylvania.

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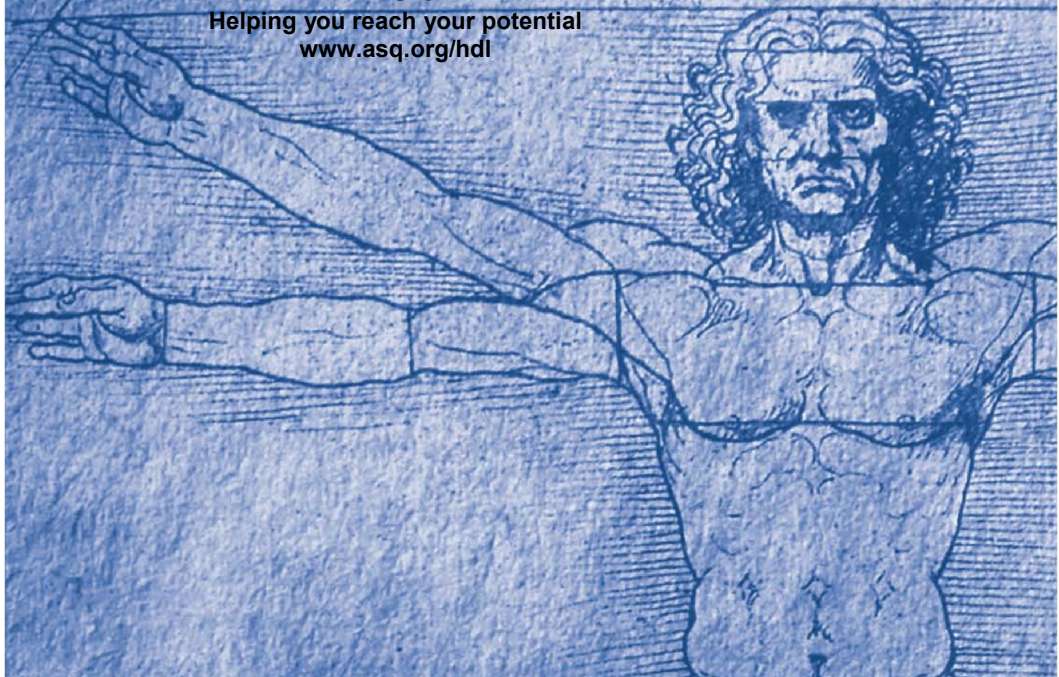
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Handwritten text in Italian, likely a transcription of a speech or a letter, written in a cursive script. The text is partially obscured by the drawing of the Vitruvian Man.

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