

DEMING'S APPROACH TO MANAGEMENT

Alyakrinskaya A.I., Tikhonova E.V.

Scientific supervisor-senior lecturer Tikhonova E.V.

Siberian federal university

The concept of quality is at the core of many of our ideas about effective management and leadership, and programs like Total Quality Management have been at the heart of many companies' success. Although quality and quality management does not have a formal definition, most agree that it is an integration of all functions of a business to achieve high quality of products through continuous improvement efforts of all employees. Quality management is not derived from a single idea or person. It is a collection of ideas, and has been called by various names and acronyms: TQM, total quality management; CQU, continuous quality improvement; SQC, statistical quality control; TQC, total quality control, etc. However each of these ideas encompasses the underlying idea of productivity initiatives that increase profit by improving the product. Achieving high quality is an ever changing, or continuous, process therefore quality management emphasizes the ideas of working constantly toward improved quality. It involves every aspect of the company: processes, environment and people.

During the past 10 years, the inclusion of the word “quality” in descriptions of production methods, management approaches, educational systems, service system changes, and so forth, has grown exponentially. It appears that no new approach to any problem is likely to be given much consideration today without overt acknowledgment that some improvement in quality must be the outcome. The origins of the importance of quality are primarily rooted in the awakening recognition of the influence of W. Edwards Deming in the post-World War II restoration of Japanese industry. The management systems philosophy of Dr. W. Edwards Deming, an American physicist and statistician who taught in Japan during the decades following World War II, is already familiar to nearly all Japanese adults and to many Americans. Japan's most valued quality award, the Deming Prize, is named for him.

As a statistician born in 1900, Deming's early works were studies in how to gauge production efficiencies: how to survey worker and management opinions; how to correlate those surveys to gaps in manufacturing efficiency. Deming argued that ultimate success in any endeavor is rooted in basic concepts of human behavior, such as trusting your fellow man and living by the Golden Rule. Everything starts from the importance of the human being and moves on from there, he said. The function of management, Deming said, was to optimize the opportunities for the workforce to improve quality, and this meant eliminating slogans and quotas and learning to work as a team, with everyone interested in the improvement of each individual, the product, and the company.

Here are Deming's formulas:

- Quality is everything. It is the basis for the joy of work. It is the reason anyone wants your product. It will keep you in business, which is your objective.
- Where there is a lack of quality there is a failure to understand variation. Everything varies. Statistics help us to predict how much of which things are going to vary. It is a company's responsibility to know whether problems in excessive variation are in the design of its system or in the behavior of the people. Both can be improved.
- The most effective way to improve quality or value is to reduce the variation in the processes whereby products are manufactured or services delivered.
- Teamwork should be based on knowledge, design, redesign and redesign. Constant improvement is everyone's responsibility. Most causes of low quality and productivity are system design problems.

– Create teams that develop an esprit. Make personal self-improvement a company goal.

Deming's "new climate for organizational culture" consists of three elements:

Joy in Work, Innovation, and Cooperation. He coined the "win-win" strategy, as opposed to the "I win: you lose" attitude engendered by competitive attitudes of the past. The best thing that can happen to a company, Deming said, is a strong competitor. Weak competition is invariably disastrous for quality improvements. Faced with strong competition, a company must move to innovate and recreate its market, not necessarily in competition with its rivals, but looking for opportunities to cooperate in providing the optimal satisfaction for customers. Deming developed the chain reaction: as quality improves, costs go down and productivity goes up; this leads to more jobs, greater market share, and long-term survival. The Japanese were an attentive audience and utilized Deming's ideas readily. They found him charming and considerate and listened to his ideas. His concept of employees working toward quality fit well into their personal ideas. His philosophy went beyond statistical quality control and encouraged building quality into the product at all stages. After applying Deming's techniques, Japanese businesses like Toyota, Fuji, and Sony saw great success. Soon, many leading American and international businesses, including Ford Motor Co., Xerox and Proctor & Gamble adopted the Deming quality approach. Their quality was far superior to that of their global competitors, and their costs were lower. The demand for Japanese products soared – and by the 1970s, many of these companies dominated the global market.

So the business world developed a new appreciation for the effect of quality on production and price. Although Deming didn't create the name Total Quality Management, he's credited with starting the movement. He didn't receive much recognition for his work until 1982, when he wrote the book now titled "Out of the Crisis." This book summarized his famous 14-point management philosophy. These points are both timeless and applicable to all organizations, of every size and type. They work - like a virtual "secret weapon" – vastly increasing your odds of achieving lasting success. The essence of the Deming Quality System is surprisingly simple. Yet, like any great truth, it requires time, patience, and commitment to realize its full impact.

There's much to learn from these 14 points. Study after study of highly successful companies shows that following the philosophy leads to significant improvements. That's why these 14 points have become a standard reference for quality transformation.

The 14 Points:

1) Create a constant purpose toward improvement.

- Plan for quality in the long term.
- Resist reacting with short-term solutions.
- Don't just do the same things better – find better things to do.
- Predict and prepare for future challenges, and always have the goal of getting better.

2) Adopt the new philosophy.

- Embrace quality throughout the organization.
- Put your customers' needs first, rather than react to competitive pressure – and design products and services to meet those needs.
- Be prepared for a major change in the way business is done. It's about leading, not simply managing.
- Create your quality vision, and implement it.

3) Stop depending on inspections.

- Inspections are costly and unreliable – and they don't improve quality, they merely find a lack of quality.
- Build quality into the process from start to finish.
- Don't just find what you did wrong – eliminate the "wrongs" altogether.
- Use statistical control methods – not physical inspections alone – to prove that the process is working.

4) Use a single supplier for any one item.

– Quality relies on consistency – the less variation you have in the input, the less variation you'll have in the output.

– Look at suppliers as your partners in quality. Encourage them to spend time improving their own quality – they shouldn't compete for your business based on price alone.

– Analyze the total cost to you, not just the initial cost of the product.

– Use quality statistics to ensure that suppliers meet your quality standards.

5) Improve constantly and forever.

– Continuously improve your systems and processes. Deming promoted the Plan-Do-Check-Act approach to process analysis and improvement.

– Emphasize training and education so everyone can do their jobs better.

– Use kaizen as a model to reduce waste and to improve productivity, effectiveness, and safety.

6) Use training on the job.

– Train for consistency to help reduce variation.

– Build a foundation of common knowledge.

– Allow workers to understand their roles in the "big picture."

– Encourage staff to learn from one another, and provide a culture and environment for effective teamwork.

7) Implement leadership.

– Expect your supervisors and managers to understand their workers and the processes they use.

– Don't simply supervise – provide support and resources so that each staff member can do his or her best. Be a coach instead of a policeman.

– Figure out what each person actually needs to do his or her best.

– Emphasize the importance of participative management and transformational leadership.

– Find ways to reach full potential, and don't just focus on meeting targets and quotas.

8) Eliminate fear.

– Allow people to perform at their best by ensuring that they're not afraid to express ideas or concerns.

– Let everyone know that the goal is to achieve high quality by doing more things right – and that you're not interested in blaming people when mistakes happen.

– Make workers feel valued, and encourage them to look for better ways to do things.

– Ensure that your leaders are approachable and that they work with teams to act in the company's best interests.

– Use open and honest communication to remove fear from the organization.

9) Break down barriers between departments.

– Build the "internal customer" concept – recognize that each department or function serves other departments that use their output.

– Build a shared vision.

– Use cross-functional teamwork to build understanding and reduce adversarial relationships.

– Focus on collaboration and consensus instead of compromise.

10) Get rid of unclear slogans.

– Let people know exactly what you want – don't make them guess. "Excellence in service" is short and memorable, but what does it mean? How is it achieved? The message is clearer in a slogan like "You can do better if you try."

– Don't let words and nice-sounding phrases replace effective leadership. Outline your expectations, and then praise people face-to-face for doing good work.

11) Eliminate management by objectives.

- Look at how the process is carried out, not just numerical targets. Deming said that production targets encourage high output and low quality.
- Provide support and resources so that production levels and quality are high and achievable.
- Measure the process rather than the people behind the process.

12) Remove barriers to pride of workmanship.

- Allow everyone to take pride in their work without being rated or compared.
- Treat workers the same, and don't make them compete with other workers for monetary or other rewards. Over time, the quality system will naturally raise the level of everyone's work to an equally high level.

13) Implement education and self-improvement.

- Improve the current skills of workers.
- Encourage people to learn new skills to prepare for future changes and challenges.
- Build skills to make your workforce more adaptable to change, and better able to find and achieve improvements.

14) Make "transformation" everyone's job.

- Improve your overall organization by having each person take a step toward quality.
- Analyze each small step, and understand how it fits into the larger picture.
- Use effective change management principles to introduce the new philosophy and ideas in Deming's 14 points.

Besides the fourteen points, Deming is known for the Deming Cycle. It involves five steps: consumer research and planning of the product (plan), producing the product (do), checking the product (check), marketing the product (act), and analyzing how the product is received (analyze.)

Putting Deming's philosophy into effect makes many jobs harder, not easier. The saving grace is that the work is much more interesting and more enjoyable; everyone may have begun working harder, but they will tend to be less tired. Deming's 14 points have had far-reaching effects on the business world. Taken as a whole, the 14 points are a guide to the importance of building customer awareness, reducing variation, and fostering constant continuous change and improvement throughout organizations.

Bear in mind, the Deming Method is not an instant cookie-cutter approach. It takes time, commitment, focus and work. Yet the results are huge, and multiply exponentially over time. Competent coaching can definitely accelerate the process, as it is nearly impossible to work effectively on any system while working in the system. This is especially true in the beginning stages.

Regardless of what quality path you may choose to improve your organization, be prepared for one of the most challenging yet rewarding experiences in business. The Deming Quality Method provides a proven, holistic formula for maximum success. It will transform the quality of your business, life, and results. In the Deming system of profound knowledge, psychology is important because it provides a theoretical framework for understanding the differences between people, and provides guidance in the proper ways to motivate them.

"We have learned to live in a world of mistakes and defective products as if they were necessary to life. It is time to adopt a new philosophy...."

W. Edwards Deming