

Seeking the new global paradigm for excellence...

Questing for quality

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During the past decade, we have come to recognize the value of the objective aspect of quality improvement: statistical process control (SPC), quality programs and measurement. Less attention has been devoted to the subjective human aspects.

The subjective aspect of quality is elusive. It's hard to define, difficult to talk about, much less plot on a chart. It's more a feeling or gut reaction that generates a meaningful context for quality performance. Commitment to the subjective aspects of quality causes people to give customers the best they have to offer. It's critical to success.

Federal Express recognizes the importance of the subjective aspects of quality. Federal Express uses SPC and measurement. However, they also have a clearly stated organizational purpose, vision and set of values that serve as the glue to bind the members together and direct them to exceptional performance. The subjective side is symbolized by the firm's theme: "When it absolutely has to be there overnight."

Subjective quality — Adding the subjective aspect of quality provides the total context: the environment of the firm. A useful analogy for understanding context is the zoom lens. Imagine looking through the camera with the lens set for close up. The whole picture is a context. This picture might show a machine in a plant or one department in an organization. Next, imagine expanding the field of vision. Notice the image has changed. You see the total plant or division. This is another context.

Now, imagine adjusting the lens to obtain the widest view possible. The picture is very different and the people are constantly changing. You can see how the firm interacts with customers, suppliers and competitors.

This expanded context includes a view of emerging products and ways in which customer wants and needs are constantly changing.

As the subjective aspect of quality is constantly changing, it requires a thoughtful examination of the "big picture" and how changes affect the firm's vision.

The changing contexts of quality

Now, let's explore the context from which quality improvement grew.

Deming, Juran and World War II — The roots of quality improvement are found in the conditions of the 1940s. The purpose inspiring the visionaries of quality improvement, Juran and Deming, was the need to provide mass quantities of arms and supplies for combat forces with existing skilled manufacturing workers, and vast numbers of people unskilled in manufacturing who had been enlisted into the manufacturing war effort.

The assembly line was the primary model for organizing work and the pyramid was the primary organizational structure. The computer was in its embryonic stage.

Postwar period... During this period the Japanese and Europeans were seeking to rebuild their nations and quality improvement was a matter of survival. American industry was focused on providing a largely homogeneous market with basic consumer goods.

This provided the context for the first quality revolution.

The 1990s — Today, we face a vastly different context. We are confronted with the technologies of world class manufacturing, niche and global markets, information and telecommunication technologies, networks, aggressive global competitors, and the need to form strategic alliances/partnerships with stakeholders.

The economy has moved from being dominated by industrial goods production for mass consumption to service and knowledge creation and application. The market is extremely diverse.

The knowledge worker and team member trend... Factory workers of the past are becoming knowledge workers and team members. They are becoming less directly involved with producing goods. Instead, they are improving quality through the application of new technologies and knowledge. Knowledge workers use their minds as well as their hands. They control the technology of production. These workers must coordinate their work with others to improve the effectiveness of the production system.

Looking beyond 40 hours and a pay-check... These new workers seek an environment in which they can be self-directed, experience a sense of achievement and meaning, evolve as human beings and be treated as adults. They can more easily and are more likely to move from organization to organization. They tend to leave firms not providing the kind of environment that supports the use of their full potential and creative talents.

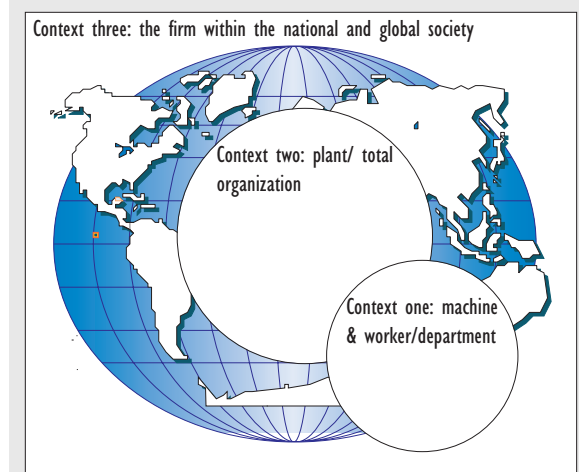
Requirements of the volatile work environment... There is also a growing number of gypsy workers: people forced out of the workforce by the mismatch between their skills and new technologies and markets. These workers point out the need to emphasize human development. This trend requires investing in training and development, collaborative relationships amongst government, business, unions and education institutions and continuous personal learning. Investing in human development will allow gypsy workers to become contributors to the quality of life.

Quality value shifts — We face accelerated change in social values. Customers are changing both the definition of quality and the process of its improvement.

The changing business context from the 1940s to the 1990s...

Roots of quality improvement (1940s)	Present conditions (1990s)
Mass production	Novel, specialty and uniqueness
Assembly line	Self-managing team
National market	Global market
National competition	Global competition
Unskilled and semi-skilled worker	Knowledge worker
Product quality	Innovation and aesthetics
Fitness to standards	Meeting unexpressed needs
Long product cycles	Short product cycles

The three contexts of quality...



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From internally driven to customer driven quality... The first revolution focused on internally-defined process improvement and meeting internal standards of quality. Customers tended not to be involved in these activities. Today, this has changed. Customers are seeking products and services that meet their unique needs.

Custom quality... A Japanese bicycle manufacturer is now able to mass produce its products to fit the specifications and physical size of each individual customer.

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Interest-based quality... For a growing number of customers, quality includes the specific contents of products and how they are produced. An example of the latter is found in the tuna industry. Customers demanded changes in the catching of tuna to safeguard dolphins. They also pushed McDonald's to reduce fat in their hamburgers and package them in more environmentally sound containers.

Innovative and anticipatory quality... Consumers are also beginning to associate quality with innovation and creativity.

Quality has evolved from reliability, to alignment with customer needs, to satisfying unexpressed customer wants. Again, McDonald's illustrates this evolution. McDonald's still produces a quality hamburger and provides reliable service. However, it has also been innovative in providing customers with new food choices. Mazda's Miata is an example of focusing on unexpressed customer wants. Additional examples are the Sony Walkman and Apple's computers.

In each of these cases, customers did not ask for these products. They were created and marketed from the intuition of the inventor who perceived styles and behaviors in a expanded context. By disconnecting from existing products, they created innovations. In fact, Akio Morita, chairman of Sony, faced stiff opposition from his peers because there was not an existing market for the Sony Walkman.

A revolution without end... What we have just described are revolutionary changes that have taken place in the business context since quality improvement first developed. We see the subjective aspect of quality continuing to change.

Looking ahead... Quality will involve developing and producing reliable services and products in alignment with unexpressed wants and needs. Products and services will be more reliable, environmentally sound, aesthetically pleasing and the feel of an establishment will leave the customer with a sense of well being and the desire to return.

Is reliability-based quality enough? The question we need to ask ourselves is whether product and service reliability and zero defect quality improvement leads to a competitive advantage. We think not. The reasons for our conclusion follow.

First of all, we need to recognize that a high quality product or service is now a given. Reliability-based quality, therefore, is a necessity and no longer a sufficient factor for gaining a competitive advantage. Reliability quality improvement is today only a catch up strategy.

Secondly, we also need to recognize top performing firms have a long tradition of quality processes that work. Today, these firms are enhancing their competitive position through uniqueness, innovation, choice, value added service and time.

The Sony example... Sony is an excellent example of this. Sony's competitive advantage is not only in the quality of its products. Product quality is a given. Sony's competitive advantage is in producing innovative products that meet people's unexpressed wants in a diversity of forms. It's also the aesthetic quality of its products and the "Sony Spirit," that underlies the purpose and vision of the firm.

The lesson we can learn from top performing firms — use quality as a springboard to new strategies designed to really provide a competitive advantage. We have experienced dynamic changes in context since the 1940s when Deming and Juran launched the quality improvement revolution. In light of these changes, we need a new paradigm for quality.

Seeking the new quality paradigm

The first place to seek this new paradigm may be to look at Deming and Juran in their larger context. To date, most of us have focused only on their methods. We have also forgotten that their paradigm was strongly influenced by the political, economic, technical and social context of the 1940s and that our present context is very different.

Looking at Deming and Juran in a larger context — When we look at how Deming and Juran created the first revolution and consider the total picture, the emerging paradigm begins to take form. From this perspective, we see that they based the revolution on a common purpose and vision. Both individuals have a guiding purpose: to improve product quality. Each has a vision. Deming's vision involves improving quality through the application of his fourteen points and statistics. Juran's vision also involves following a philosophy and the use of statistics.

The visions of Deming and Juran are achievable and compelling. They also provide a welcome

sense of direction. Each has communicated his vision and people have voluntarily chosen to participate in its creation. For example, Deming did not go to Don Peterson, chairman of Ford, and force him to participate in quality improvement. Peterson watched *If Japan Can, Why Can't We?* (A 1984 NBC television special.) The program communicated how Deming's vision had improved quality in Japan. The next day Peterson contacted Deming.

Long term commitment — Another message these individuals communicate is that quality requires a long term commitment and is a way of life. Both Deming and Juran have been dedicated to reaching their quality improvement vision for more than four decades.

Deming and Juran both had the integrity to recognize when they were on and off target. For example, Deming found little support in the United States in the 1950s. Hungry for new products, Americans were buying everything at a furious pace. The Japanese desperately needed to rebuild their economy and their image. They listened to his vision. The rest is history.

Where we are and where we're going

Our first crack at trying to define the new paradigm is summarized in the figure to the right. On the left, we can see categories, structures and approaches that characterize the existing organizational paradigm. This, when compared with a matching list drawn from observed characteristics (on similar dimensions) of today's quality leaders and trending them forward a bit gives a view of the probable requisite future. It also give us a glimpse of the challenges which today's leaders are already grasping.

The challenge facing us is to embrace the conditions of a new business context. We already know how to improve quality by acting on the first quality revolution created by Deming and Juran. They provided us with an objective starting point.

Old and new paradigms compared

Characteristics of the process directed quality paradigm and the emerging purpose directed quality transformation paradigm

Note: The process directed paradigm of quality reflects what exists today. The purpose directed paradigm illustrates what exists and is emerging.

The process directed quality paradigm	The purpose directed quality paradigm
Quality improvement	Quality transformation
Improve the existing system	Transforming the system
Maintain the culture	Transforming the culture
Problem solving	Creative process
Evolutionary change	Revolutionary change
Left-brain	Whole-brain
Analysis and judgement	Imagination and intuition
Statistics	Common language
Managerial responsibility	Personal responsibility
Mechanistic	Holographic
Reductionist	Holistic
Control-directed	Partnering
Managerial	Leadership
Hard	Soft and hard
Technical focus	Interpersonal and technical focus
Extrinsic motivation	Intrinsic motivation
Science and technology	Human potential for creating and applying technology
Training	Learning
Competition	Collaboration

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Now, we must venture forth and acknowledge a new quality paradigm is emerging. The process is clear:

- Expand the organization's context for quality.
- Continue to improve the objective quality measurements.
- Identify and implement critical subjective quality advantages.
- Ensure the organization's vision and purpose include the quality dimension.

It is this new paradigm that provides the answers in the continuing quest for quality. ♦

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