It is timely that this issue of the Journal for Quality and Participation should focus upon taking stock of what are the key factors in creating and sustaining continuous improvement efforts.

In this connection, I will argue that the contribution of the quality movement in America has been very much a mixed blessing -- a mixture of a very positive impact, and a dysfunctional contribution whose negative effect just about cancels out the positive.

The positive side of continuous improvement efforts -- The very positive contribution has been twofold:

1. To show that the importance of quality had been inadequately recognized in our work organizations.

2. To drive home the importance of controlling process variance, along with the introduction of the statistical and related methods (first applied to peace time industry by Dr. Deming in Japan, for analyzing and controlling process variance).

Where these methods have been applied, they have produced substantial gains not only in improved quality, but also in just-in-time work, reduced costs, ensured continuous improvement, and increased customer satisfaction.

The negative side of continuous improvement efforts -- On the negative side, however, there has been a substantial undermining and weakening of the effectiveness of American managers and management, by the introduction of a clutter of organizational excess baggage based upon an incorrect understanding of what the best Japanese firms have done to achieve their standards of excellence.

This organizational clutter comprises the panoply of ideas of groupthink and group decision making, institutionalized in self-directed and self-managed teams, quality circles, improvement councils, project committees, using managers as facilitators and so on.

I realize that I am here challenging the outlook of many of the readers of this journal. But I believe this outlook needs not only to be challenged but strongly challenged.
Let me outline why, and let me then describe what I think needs to be done, as a matter of urgency, to ensure that the good methods (mentioned above) that have been introduced can be made to spread out and be sustained throughout all of our working institutions, whether large or small, products or services, free enterprise or governmental, industrial or commercial, or health, education or social services.

**The importance of accountability**

I can best illustrate my theme from the work of the two most eminent figures in the quality and continuous improvement field - - the Doctors Deming and Juran.

**Deming and accountability**

Is it not clear that what Dr. Deming introduced into Japanese industry in the late 1940s and early 1950s was statistical process variance control tied to quality, just-in-time inventory working, continuous improvement, cost reduction and customer satisfaction?

But is it not equally clear that he did so by building these processes into the system of managerial accountability and leadership at every level including the shop floor, and not into groups, or free-standing teams or circles or councils?

**Juran and accountability**

Dr. Juran makes just this point about the importance of the managerial system in Japan in two recent articles in this journal. In his excellent July/August, 1991 review of Japanese developments from the 1930s to the 1980s, he shows how the major turn around in quality was achieved and bedded down between 1948 and 1960.

By means of quality circles, teams, et cetera? No. Juran describes how these (quality circles and teams) first began in 1962 and did not become widespread until 1965.

Japan's intact accountable managerial system -- My evidence is that these groups and team processes are peripheral in the excellent Japanese companies. They function mainly at shop floor level, and are, in fact, largely subordinated directly to the accountability of the first-line manager -- not always in the manifest organization chart, but in organizational reality. The fact of the continuing central importance of the intact accountable managerial system in Japan is further supported by Dr. Juran himself.

In his article in this journal's special March issue last year, he reviews what he believes are the main strategies used by what he describes as "the relative few
(companies) who have succeeded" in achieving excellence. One of his main points is:

"Training of all managers to become proficient in the trilogy of processes by which quality is managed: quality planning, quality control, and quality improvement."

The basic importance of this notion of accountability of all managers in the achievement of excellence is then really brought home on page 77 of Dr. Juran's earlier cited article, in which he draws attention to a major difficulty in translating Japanese training materials for American usage.

"The Japanese training materials tend to take for granted the existence of certain conditions which are usually present in major Japanese companies; upper managers in charge of managing for quality; widespread training of managers in how to manage for quality; a revolutionary rate of quality improvement; widespread use of employee participation.

Such events took place in Japan years ago, but they did not take place in the West years ago. As a result, the quality 'climate' in the West differs from that of Japan, and this difference influences the extent to which the Japanese training materials are appropriate for the West."

These two paragraphs I believe contain not only a statement of the organizational excellence problem in America, but also state its solution. The problem is that we treat effective managerial leadership and accountability as a matter of background "climate" to organizational excellence rather than as the absolutely fundamental basis for it. The solution is to treat the managerial system as basic.

**A false conception of managers and hierarchy**

My argument is that the control and overriding emphasis that has been placed in America upon company quality councils, quality circles, the self-directed work force, self-managing teams, managers as facilitators, group decision making, industrial "democracy," while well intentioned, is nevertheless misguided.

It leads to an inherently unstable and non-accountable system that runs alongside and in parallel with the hierarchical system of managerial leadership and accountability. And that disturbs and undermines the leadership and accountability system.

Hierarchy, accountability and leadership do not create autocratic management -- Unfortunately, and indeed unbelievably, the role of managers, the concept of managerial accountability and managerial leadership, and the managerial
hierarchy itself, have fallen into disrepute these days among the experts and practitioners engaged in the development of organizational excellence through TQM, just-in-time working, management.

The very ideas of managers, the concept of managerial accountability and managerial leadership and the managerial hierarchy have yet again been taken as inevitably tied up with autocratic, restrictive, mechanistic one-way downward control of subordinates. This notion of the inevitability of autocracy in management hierarchy comes and goes regularly like the seven-year itch.

To say that managers have behaved in autocratic ways is true, but it is decidedly not the same as concluding that such behavior is an inevitable accompaniment of hierarchy, and that what is needed is to replace it all by democracy, self-management, councils and so on.

But badly managed hierarchies often can become autocratic -- For as I have argued in detail in the Harvard Business Review ("In Praise of Hierarchy", January, 1990), autocratic behavior is not a consequence of hierarchical management. It is a consequence of badly organized managerial hierarchies -- those with inadequate organization structures with, for example, too many layers, and without any clear or teachable conception of managerial accountability and authority or of managerial leadership. How many American companies can claim to be free of such problems?

The sorely needed accountability perspective -- What is needed is to recognize that our employment work systems are in reality managerial hierarchies, whether we like it or not. They are based upon the simple fact of each and every manager being accountable not only for his or her own work, but also for the work of his or her subordinates. Anyone can deny this reality -- but such denial would be fantasy, not fact.

**True team accountability**

By virtue of this fact of individual managerial accountability, true team accountability is impossible. Only the board of directors can make team or group decisions -- because of its legally established corporate liability.

The FPL case -- Florida Power and Light (FPL) became very aware of these problems. This company had become famous for its widespread use of quality teams and meetings to forward their quality improvement process.

In June 1990, however, the chairman announced the disbanding of the quality teams and quality improvement groups and other special quality improvement processes, and a return to individual employee accountability for quality in the course of their everyday work.
As reported in Training magazine in February, 1991, the employees, including the managers, had come to feel that they had lost sight of their own sense of individual initiative and responsibility in the group-riddled bureaucracy that had been let loose in the company.

We must recognize these simple facts, and instead of trying to force unrealistic and unaccountable councils, circles and self-managed teams and committees on our work organizations, we need to take a 180 degree turn and put our efforts into making our managerial systems work not only effectively, but as Dr. Juran would put it, to work "stunningly." Let me describe how.

**The meaning of requisite managerial leadership**

What is required is the development not of any old managerial organization, but of a requisite organization. By requisite, I mean structures and processes, and methods of human resourcing and growth, that can beget the highest levels of performance and of human satisfaction.

More specifically, I am referring to managerial hierarchies structured with the correct number of layers to provide for positions at the right level of complexity of work so that managers are at the right level of mental complexity above their subordinates.

Requisite managerial leadership of the right level of capability for the work complexity, as well as the training and development of those individuals is needed as well.*

Conditions for a requisite organization -- A company which has achieved a requisite system of managerial leadership from top to bottom, is one which can allocate clear cut accountability, thus ensuring that:

-- At every level quality standards will be adhered to

-- Work will be produced precisely at targeted completion times

-- Continuous improvement work will become a permanent fixture

-- Process variance will be continually reduced, as will costs

-- Resource limits will be adhered to

Where circumstances make it impossible for these conditions to be met, managers must be held accountable for informing their own managers as unanticipated problems arise, so that reasonable adaptive action can be taken.
Two additional conditions for requisite management -- Given such requisite accountability, managers must be held specifically accountable for two other issues:

-- For sustaining a team of immediate subordinates capable of doing the work required

-- For sustaining effective leadership of those subordinates.

Leadership defined

And managerial leadership is here defined as:

*That accountability of a manager to set the context and direction for his or her immediate subordinates, and to get them to move along together with him or her and with each other in that direction with full competence and commitment.*

Given clear articulation of such accountabilities, and an unequivocal company policy that managers will have their feet held to the fire for their clear discharge of these accountabilities, it becomes possible to select and train managers to exercise really effective managerial leadership in terms of:

-- Setting full-scale context

-- Regular discussion with subordinates about their personal effectiveness

-- The permanent sustainment of continuous improvement on a planned basis, within priorities set by the manager's manager

-- The setting up of project teams for whose work the manager is accountable, and which are driven by accountable team leaders appointed by the manager

The lists above set out many of the features of good management often assumed at middle and higher organizational levels. The point to be emphasized, however, is that this kind of behavior, including regular meetings with subordinates, is required from all managers, including first-line managers working with operators and clerical and service staff.
A practical example of requisite management

How this kind of approach can be achieved and permanently established is illustrated by the experience of the Commonwealth Aluminum Company, a producer of rolled aluminum, with offices in Louisville and a plant at Lewisport, Kentucky. The company is a fully owned subsidiary of the Australian mining company CRA Limited, which purchased it in 1985 from Martin Marietta when it employed about 1400 people.

The challenge at Commonwealth Aluminum -- The CEO retired at the end of 1987 and was replaced from Australia by Nicholas Stump, a metallurgist who had become expert in the parent company's systematic approach to organization and managerial leadership.

Commonwealth was in serious trouble. Substantial capital had been put into production process improvement, but had not paid off. Quality and delivery standards were inferior to three quarters of the nation's aluminum producers, and recovery rates were low.

Turn around or sell out

Stump's terms of reference were to turn the company around if it were not to be sold. He decided upon a three-pronged thrust relevant to this article:

1. A requisite organizational development
2. Introduction of statistical process control and continuous improvement at all levels
3. Analysis and improvement of all major systems, including information, finance, and marketing and sales

The parent company had been engaged in a global requisite organizational development over the previous ten years that had led to the establishment of systematic concepts and principles for organizational structuring, managerial accountability and leadership, and human resourcing and talent pool development.

Phase one: creating a requisite structure -- In line with the company's established practice, Stump took as his phase one of a full-scale reorganization driven by a special internal project team of six plus a team leader immediately subordinate to himself, and trained in requisite organization, with a six-month completion target. That target was achieved, with the following result:

-- The company had four managerial layers instead of eight
-- Every managerial role, including the shop floor first-line managers carried full managerial accountability not only for the work of subordinates, but for exercising full-scale managerial leadership, as defined above

**Phase two:** introducing SPC -- Following the establishment of an effective managerial leadership organization, statistical process control was introduced.

**A consultant's proposal**

A consultant specialist was brought in. He came with the full package that has now become so standard; namely, that the CEO has to begin by setting up a continuous improvement council, with subordinate special subject committees, which in turn set up project teams; plus, an equivalent plant level council, of which the plant general manager would be a member; and so on down. This organization proposal was rejected by Stump.

**Stump's plan**

The consultant was asked instead to work from level to level directly down through the managerial hierarchy.

All managers (and many operators) have now had sufficient preliminary training for it to have become possible to hold managers accountable not only for the permanent sustainment of continuous improvement priorities and projects, but also for ensuring that quantitative procedures are used in ferreting out problem causes and priorities.

**Phase three**

The ongoing development was then filled out with the systems improvement.

Results of the requisite organization development -- A 35 percent increase in output is now being regularly produced with 20 percent fewer people. The company has moved to the top third in the nation in quality and delivery and continues rapidly to rise, and customer satisfaction continues to grow. Internal recovery has risen by 7 percent to world class, customer rejects have fallen by 50 percent, and total inventories have been reduced by over 50 percent.

Accountable leadership makes real involvement possible -- But these impressive operational gains are not my main point. The main points which could have substantial significance for those engaged in quality and continuous improvement work, are as follows.

-- There is widespread shop floor involvement in improvement work through first-line managerial leadership
-- First-line managers meet regularly in full team meetings with their operators in two-way discussion of issues, just as any senior manager would be expected to meet with his or her subordinates

-- Operators are actively involved as members of first-line managerial, and unit managerial, improvement project teams

-- A state-of-the-art learning center has been built, in which operators are periodically involved in updating work process specifications, and upgrading their own skilled knowledge

-- Shop floor grievances have fallen from 315 being processed one year ago, to 3 at the time of writing

-- Long years of embattled trade union relationships culminating in an 11 week strike in 1989 have been totally transformed into an extraordinarily positive collaboration from the union (United Steelworkers) directly as a response to the new organization and positive managerial leadership of the operators.

I mention these outcomes to illustrate how full-scale shop floor employee involvement can be achieved by direct managerial accountability and leadership, without recourse to teams, councils, circles, committees and groups separate from and outside the accountable managerial hierarchy.

The key to continuous improvement -- Moreover, this project has demonstrated that working within the managerial hierarchy is an effective means, and I would argue, the only means, of ensuring the ongoing sustainment of a company-wide focus upon quality, just-in-time working, and quantitative-analysis based continuous improvement.

Consider again the Commonwealth Aluminum example. Nick Stump was promoted to a corporate executive vice president position in 1990, and was succeeded by Mark Kaminski. Mark Kaminski had been a member of initial organizational development project team, and then as plant general manager played a large part in the bedding down of the new organization and the establishment of the routine use of SPC methods throughout the plant. Now, as company president, Kaminski is continuing these developments, including the systems improvement work, with undiminished force.

Thus it is that every manager has, and will continue to have as a permanent fact of life, his or her priority list of continuous improvement projects to be accomplished within a specific time with agreed upon resources.

As a result there is no need for annual revitalization of the program, or special zero-based events, or razzle dazzle days.
For it is not a program.

It is a system of managerial accountability. And that is a system that functions continuously and forever.

**Concluding thoughts**

My argument, then, is a simple one. A great contribution has been made to American business in quality and continuous improvement by identifying the importance of process variance control and statistical and related methods for getting to a reduction in process variance. But the embedding of these developments into an organizational system of groups, teams, councils, et cetera merely undermines the hierarchical managerial system. And this system was, after all, put into place specifically to be able to deploy accountability not only for getting work done, but also for steadily improving the quality and timeliness of that work, reducing costs, and increasing customer satisfaction.

Work on the requisite organization, not on props or add-ons
-- Let us not, therefore, attempt to replace our managers and managerial systems with organizationally unstable groups, but rather work to establish increasingly requisite managerial organization and higher standards of managerial leadership and development.

It is the companies who can rely upon decisive value-adding managerial leadership right down to the shop and office floor, supported by effective lateral working relationships and by well-positioned talent, which will win the competitive day and make the genuine contribution to competitive, free enterprise democracy.

**About the Author:**
Dr. Elliott Jaques, MD, PhD, is visiting research professor in management science at George Washington University. He has been engaged for the past 45 years in practical studies aimed at the development of concepts, principles and theory for the construction of what he calls requisite organization. His projects have ranged across industry and commerce; in education, health and social services; and from partnerships and universities to the Church of England and the US Army. Jaques’ MD is from Johns Hopkins Medical School and his Ph.D. in social relations is from Harvard University. Jaques has published 16 books; the two most recent are Requisite Organization and Executive Leadership.

Jaques was recently awarded the Joint Staff Citation by General Colin Powell on behalf of the Joint Chiefs of Staff of the US Armed Forces for outstanding contribution in the fields of military leadership theory and instruction

**Note:** For more information on requisite organizations, see Requisite Organization, Jaques, 1989; and Executive Leadership, Jaques and Clement, 1991. Both published by Cason Hall, Arlington, Virginia 22202.
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