

*Creating the container for workplace excellence...*

# Could participative design be the answer for us?

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*There is little argument anymore that our organizations must change to meet the challenges presented by rapid changes in our social, economic and political systems.*

Improvements in technology have helped us keep pace, but have also unintentionally caused some new problems. There seems to be no getting around the biggest challenge we face: “How can we work and organize work differently in a manner that enhances the quality of our work, the quality of how we experience work and our ability to adapt to new challenges?” Let’s look at two ways to restructure or reorganize our work:

*Scenario A...* A design team (a small group of people from all levels of the organization) works diligently (away from their customary workplaces) for many months to flowchart and analyze their organization’s work processes. They need to come up with a budget reduction of at least 20 percent. They are being led through this effort by a re-engineering consultant while co-workers cover for them. They know that this re-engineering process will result in the loss of some jobs. They are also aware of the need to justify their downsizing and reorganizing decisions to others who are not in the room.

*Scenario B...* All workers in this same unit gather together for two days to decide how the organization can be improved in order to reduce costs by 20 percent while also satisfying their own work needs. They present ideas, listen, question one another’s perspectives, and, using broad guidelines set by management, ultimately come to agreement about a chosen work structure which may result in the loss of some of their jobs.

How would you rate these two alternatives against the following questions:

Which one of these is likely to encounter more resistance to change? A or B

Which takes longer? A or B

Which costs more? A or B

Which begins a process which continues to make adaptations to meet constantly changing needs of external environment? A or B

Which maximizes the use of worker expertise about their own work processes? A or B

Which will need to be sold to others who are affected? A or B

Which one is most likely to increase productivity by 364%? A or B

The answers, we have found through practical experience, are: A, A, A, B, B, A and B.

The second scenario illustrates some of the fundamental and core advantages of the participative design process which:

- Reduces resistance to change and minimizes need for selling the change...
- Focuses on the people who do the work by using their expertise and desire to succeed...
- Takes a relatively short amount of time...
- Dramatically reduces costs.

## What is participative design?

Participative design is an approach that calls for people to participate in planning and restructuring their own workplace toward self-management and multi-skilling. It is a systems change process producing a dramatically improved organization.

*Participative design is not for everyone...*

Participative design is for organizations which believe in workers' capacity for positive activity toward pre-defined goals and also are prepared to engage in a culture change that will irreversibly alter and improve their internal process and external results. The underlying shift which occurs in participative design is the movement from a bureaucratic structure to a democratic one, where people are responsible for their day-to-day work.

*It is different from other work improvement methods...* Whereas the practice of total quality management (TQM) emphasizes tools, and business process re-engineering (BPR) emphasizes process analysis, participative design adds another dimension.

*Participative design focuses on giving people the task of using their own social and technical information to design their most desirable and productive workplace within minimum critical specifications designed by management.*

Recognizing that the success or failure of workplace improvement ultimately rests with the people who will put change into action, participative design produces a self-managing work structure in which people who care about their jobs are invested in the success of their joint endeavor. And because they view themselves as co-owners of the process, they willingly contribute their expertise, knowledge, and initiative.

Participative design is flexible enough to be used with teams of nine people as well as in factories as large as 450 people. It can be the core approach endorsed by top management for organizational renewal. It can also be initiated by smaller units within the organization as a way to improve their performance.

On-the-ground experience is demonstrating that once participative design is introduced into an organization, workers readily find ways to continue to analyze their work processes and apply quality tools.

## Comparing democratic and bureaucratic work structures

Organizations that choose to use participative design first explore the differences, implications, and results of bureaucratic and democratic structures. While both structures strive to make organizations flexible and adaptive by eliminating their unnecessary dependency on any single person, they differ dramatically in how they achieve that goal:

- *Bureaucratic structures:* Bureaucracy is characterized by narrow, specifically focused, and segmented jobs normally performed by one person and coordinated by higher-level supervisors.

By making jobs as simple as possible, the organization ensures that any individual is easily replaced by another, with little training.

Predictability of performance and compliance with formal rules and regulations are the strengths of bureaucracy.

This organization structure is, and has been, especially effective when markets and competition are limited and the business environment is stable.

- *Democratic structures:* In democratic structures, job responsibilities are broad, people are multi-skilled and self-managed workgroups are responsible for controlling and coordinating their own work.

The democratic organization need not depend on any single individual to ensure that all functions and tasks are performed. Instead, people are sufficiently multi-skilled to move to the demands of work. As organizational members increase the number of tasks and skills they are capable of performing, their value to the organization increases.

The strength of a democratic structure is in its ability to respond readily to changes in the business environment because its people are engaged in using their heads as well as their hands.

Democratic structures can be flatter because authority and responsibility are dispersed throughout the organization. It takes full advantage of 'human capital'.

*Has your TQM, or BPR effort peaked or hit a plateau?* Organizations that have reached a plateau with methods such as TQM and business process re-engineering will find participative

design offers a quantum leap in progress. And organizations which have tried neither TQM nor business process re-engineering will find participative design is the most comprehensive approach to workplace excellence. The reason for this is that participative design integrates vision, structure, and culture change with individual and group empowerment and accountability.

### The success features of participative design

In combination, the following features of participative design make it superior to the bureaucratic approach or mixed designs:

- Explicit shift in authority and responsibility needed for a genuine culture change toward empowerment...
- Multi-skilled work groups...
- Built-in mechanisms to decrease resistance to change...
- Shortened time frames for workplace improvement.

#### Explicit shift in authority and responsibility

— How does this shift of responsibility for the control and coordination of the work take place? It is accomplished through search conferences and followed by participative design workshops. Search conferences are two and a half day collaborative, strategic planning events. Participative design workshops are typically one to two day events where the people who do the work gather to analyze and redesign their structure.

*The shift in authority is explicit...* During participative design workshops, the shift of authority and responsibility from traditional supervisors and managers to those doing the work is very explicit. Workers redesign their jobs to encompass the control and coordination of their work. As participants in participative design workshops, supervisors and managers can also reconfigure their own jobs to create value-added, often non-supervisory tasks to complement the democratic structure.

*This shift puts people at the center of the process...* It capitalizes on years of experience by releasing people's innate creativity, wisdom, caring, and goal-seeking nature to produce ideas such as:

- Using fewer materials by changing a process...
- Reducing cycle time through multi-skilling...
- Saving floor space by rearranging the current production layout...
- Streamlining redundant and unnecessary processes...
- Taking more responsibility for the accomplishment of goals...
- Dealing more directly with customers...
- Coordinating with other work groups.

As work groups become more self-reliant, their productivity gains can be very impressive. But what is more noteworthy is the independence and initiative that work groups take to continue to make work improvements. (TQM and business process re-engineering, as normally practiced, do not claim to shift responsibility for control and coordination to work groups nor do they institute a norm toward multi-skilling.)

In Michael Hammer's list of the top ten ways to fail at re-engineering, he states, "the new process must offer some benefit to the people who are, after all, being asked to embrace enormous change, and the transition from the old to the new must be made with great sensitivity to their feelings." Again, there is an underlying assumption that someone, in this case re-engineering consultants are responsible for taking care of the needs of the workers. It acknowledges that the centrality of the people doing the work is missing. Participative design provides this needed focus on workers.

It complements business process re-engineering and TQM by recognizing the competence and capability of workers to assume authority.

**Multi-skilled work groups** — A multi-skilled group takes responsibility for the output of its work unit. Individual workers learn additional skills as a means to adapt to production variances, absences, requests for job enrichment and flexible scheduling.

During a participative design workshop process, workers quickly discover the advantages of a multi-skilled work group and begin to design accordingly. Workers who possess a variety of social, business, and technical skills find increased job satisfaction and the ability to work more productively. Together, they can now solve problems and overcome obstacles on their own initiative.

Increased trust and group cohesiveness can be anticipated in multi-skilled work groups as interdependence is fostered. Compensation increases may result, and are typically absorbed rapidly by gains in productivity.

**A built-in mechanism to reduce resistance to change** — Participative design lessens resistance to change caused by fear of:

- Making design mistakes...
- The unknown...
- The imposition of change from above.

Participative design does not, however, overcome the resistance to change which can arise from a person's fear that she/he may not possess the skills or competence necessary to succeed in the redesigned work situation.

*Reducing the fear of design mistakes...*

When employees with little previous experience at goal setting and decision making at work are asked to redesign their part of the organization, some may fear they are not up to the task.

Our experience indicates that when people begin working together in the participative design workshop and find that they can continually update their design, the fear of making a design mistake begins to dissipate — people understand that the design of work is a dynamic rather than static process. This fear of design failure is reduced again as workers proceed through the various analysis tasks of the workshop. Designing against pre-set minimum critical specifications also decreases the fear — they don't have to reinvent all of the aspects of their work.

*Reducing generalized fear of the unknown...* The workshop process turns some of the unknown into the known because it is process congruent, that is, the participative method of redesigning their work is consistent with the end result of participative management.

When making significant decisions during the design process, workers become more comfortable with their future role of decision making in the new design. As they speak openly, listen actively, and make decisions as a group, this fear begins to dissipate. When people understand the rationale and impact of the new structure, they realize that they can contribute to making the change positive for themselves and the organization.

### Improvements can flow from a PD workshop...

Following a recent PD workshop, a work group quickly focused on identifying what it could do to avoid product backlogs. By using its years of experience, collected data, and basic quality tools, the group developed a plan to change the flow of work to prevent backlogs. Everyone was pleased with the progress made. However, the real dividend for shifting process ownership to the workers was yet to come.

Within two weeks of its participative design workshop, the same group initiated another change to its work. Facing a floorspace problem, the group spontaneously called a meeting and decided on a new floor plan that not only eliminated the immediate problem but resulted in a reduction of 350 sq. ft. at a very significant cost-savings. The group implemented its new design with the support and appreciation of affected others as well as management. Members of the team were very proud of what they accomplished and they emphasized that they had initiated the change themselves.

This type of breakthrough improvement and team initiative is a typical output of participative design workshops. Sometimes the improvements made are ones the group members had discussed among themselves but had been powerless to implement until the participative design workshop.

Other improvements are a direct result of the participative design workshop process of analysis and design.

When there is process congruence, between what the organization is trying to achieve and how they go about achieving it, an essential and powerful match between words and actions becomes evident.

Workers notice and put meaning around this consistency which distinguishes participative design from other methods. For instance, following the portion of a pre-briefing for a participative design workshop where democratic principles and methods of participative design workshop are described, a member of the Federal agency involved asked in disbelief, "don't you mean we will be recommending several organization designs to management for their decision?" When assured that their design would be used, subject only to the previously discussed minimum critical specifications, participants earnestly struggled to choose the design they believed would best meet their technical requirements and personal needs.

*Reducing fear of change imposed from the top...* Top-down imposed change creates resistance for a number of reasons:

- Workers do not believe that management knows or understands the work and its realities.
- Workers also doubt that their interests will be known and accurately represented in the change effort. They have seen previously unsuccessful

improvement efforts and are reluctant to put themselves into yet another *program-of-the-month*.

- When the change efforts are about empowerment, people are especially skeptical because they do not trust nor believe that management will actually let go of control.

Resistance to top down change is decreased during participative design because people from all levels of the organization struggle together to redesign the way they will work to meet the organization's goals and their own needs for intrinsically satisfying and valuable work. Because people have an active role in the redesign process, they have firsthand experience with the considerations and processes which produced their future work structure.

Design teams were thought to be a positive innovation several years ago. We now know that design teams are still required to *sell* their new designs. Our experience is that people are as resistant to designs that come from their colleagues as they are to designs from management. It is common to hear that months have been consumed in education and *selling* efforts without great acceptance of the design.

*Resistance to participative design...*

Participative design has its own brand of resistance. It occurs when people realize the demands which will result from the redesign. A person who had been hired to be an assembler may, in a democratic structure, be expected to:

- Learn many sub-assemblies...
- Confront team members directly about performance or ways of doing the work...
- Chair a meeting...
- Take minutes...
- Lead an improvement process analysis.

All of this can trigger fears of incompetence and resistance. Individuals respond to such fears differently: some may leave the organization while others passively resist the changes. But many will thrive on the excitement of learning.

**Shortened time frames** — Organizations may lose interest in the change if its requirements exceed the *organizational attention span*. That is perhaps why the most seductive element about participative design is also the one that elicits the most disbelief — the very short amount of time

required. (For this discussion, the redesign time frame begins after pre-work and ends when a design is ready to be implemented.) Unlike traditional redesign activities, single participative design workshops are performed in one to two days encompassing analysis, design, and implementation planning.

Participative design workshops have three characteristics that contribute to this remarkable time compression:

1. Work proceeds only after readiness to work in democratic structures is evident...
2. Design teams separate or apart from the unit are not used...
3. Time is not an excuse.

*Redesign proceeds only after the process and plan is understood and generally accepted...* Management understands that it will no longer be responsible for daily decision making and supervision; that the organization will be flatter; that compensation, performance appraisal, and other organizational systems must change to accommodate self-management.

*A design team or the unit as designer...*

The time differential between using design teams and conducting participative design workshops may be best illustrated by the following example. We have worked with one large high tech organization that began workplace redesign about five years ago. A design team took eighteen months to recommend its design to colleagues and management. The latest effort with a comparable sized factory in the same organization using participative design workshops was completed up to implementation in five months.

## How participative design workshops work

Participative design workshops have three phases:

- Pre-work...
- Participative design workshops...
- Implementation.

**Pre-work** — During pre-work, management explores the implications of participative design, including the potential impact on their current roles, and makes a *go/no-go* decision. If they decide to proceed, they next develop a set of minimum critical specifications for the redesigned units or work groups.

### These specifications typically include:

- Budget...
- Cycle time...
- Quality requirements...
- Expectations for team-based management and multi-skilling.

### Other pre-work could include:

- Visiting with and learning from other organizations that have redesigned in the same or similar manner...
- Collecting information from clients, customers, suppliers and top management...  
Training for skills required for self-management.

The workforce is then educated about the foundation and results of participative design.

**The workshop** — An actual participative design workshop consists of a group of 24–30 people working in small groups of 6–7. The workshop normally takes one and a half to two days during which participants:

1. Assess the current structure of their work against six criteria that are significant determinants of their ability to engage in productive work. The results of assessment are part of the information used in redesigning the structure. The criteria are:
  - a) Adequate elbow room (discretion in decision making)...
  - b) Opportunity to learn on the job and keep on learning...
  - c) Variety...
  - d) Mutual support and respect...
  - e) Meaningfulness...
  - f) A desirable future.
2. Assess the skills possessed by each individual against those required to do the entire process for which their group is responsible.
3. Analyze how their work is currently structured through mapping the work flow and the formal organization chart.
4. Redesign their work in such a way as to:
  - a) Locate responsibility for control over effort and quality of work and for interpersonal coordination with the people who do the work...
  - b) Increase the degree to which everyone's six criteria are satisfied...
  - c) Create multi-skilling...

- d) Meet the minimum critical specifications established by management.
5. Review emerging designs with management for conformity to minimum critical specifications
6. Begin a series of implementation tasks for their redesign by developing:
  - a) Comprehensive and measurable goals for the group that include both task (quantity and quality) and human objectives, e.g., occupational health and safety, social responsibility, career path, and individual developmental goals...
  - b) Requirements for training, including who will be trained, in what areas, how and to what levels...
  - c) Arrangements for internal coordination and external relations...
  - d) Career paths for work group members...
  - e) A rationale for the redesign based on its impact on the six criteria for productive work...
  - f) Integration with other organizational systems, such as compensation and performance appraisal.

Because leaders of the business are briefed on the emerging design plans, ensuing discussions can lead directly to implementation planning or may require further work to meet minimum critical specifications. In either event, everyone involved works to frame a final plan which is acceptable to all by the end of the workshop.

### The challenges for participative design

Long-term evaluation of many participative design efforts in the United States has not yet taken place. Our experience to date indicates it is a highly effective and powerful whole system change process. This same practical experience has demonstrated a need for further development in the following areas:

- Integration of participative design with TQM and business process re-engineering...
- Its impact on the supervisors' and managers' job...
- Integration with other organizational systems.

**The challenge to leaders** — Leadership's challenge is to take advantage of the richly diverse methods of participative design, TQM, and business process re-engineering in such a way that they complement each other.

Misguided loyalty by any of us to a single methodology does not serve the needs of our organizations. Those who have invested heavily in TQM and/or business process re-engineering will find that participative design can produce their unrealized but expected results. For those just beginning a change effort, participative design is the right choice as a way to begin.

Leaders must deal with the changes for mid-level managers and supervisors. We have had two kinds of experiences with supervisors and managers. In a case where a manager only gave lip service to self-management, months later the top-management is still coaching that person. The behavior has slowed down the progress of the new work groups. In the other case, the top leader reassigned non-supportive managers to positions outside of the redesigned unit so that self-management could be effected.

**The challenge to supervisors and mid-managers** — Supervisors and managers are clearly in the most vulnerable position in today's work world. Tales are legion of mid-manager layoffs during this downsizing era. Those who remain find themselves in difficult positions.

The three most immediate tasks for this level of management are to:

1. Understand and support a democratically run organization...
2. To move their supervisory skills down to where the work is being done...
3. To reinvent and/or enhance the value they contribute to the organization.

An additional challenge for supervisors and managers is to provide leadership and teaching to create the environment and provide support for work groups to flourish.

One way to accomplish this is for managers to form teams that mirror workers' groups. The managers' team transfers to work groups some of its former functions, such as managing budgets, interfacing with customers, problem solving at a deeper and broader level, handling initial performance issues with co-workers, tracking business information about their industry and competitor, and making decisions about pay, rewards and recognition.

Once self-management is functioning effectively, management must redefine its own jobs to create such value-added tasks as boundary management, futuring, strategic planning, partnering to set up alliances with external and internal forces, and focusing on the big picture.

*Aligning support functions with the new workgroups...* Alignment of other organizational systems, such as compensation, performance appraisal, accounting, purchasing, and information management is necessary in order to support the democratic structure.

One way to address this need is to include people from these systems in the participative design pre-work phase. It is necessary for them to be committed to preparing a pathway in which democratic structures can initially be sustained, and eventually thrive. For example, the compensation system must provide rewards for team based achievements and the performance appraisal system must be ready to accommodate a peer review process.

Participative design can help organizations establish an environment in which workers become more responsible and committed to success. The changed environment will require that both management and workers take on new roles and responsibilities.

**Despite the apparent simplicity of participative design, this is not easy work** — It requires major shifts in beliefs, assumptions, and behavior on the part of everyone in the organization and offers the potential for great rewards. Participative design can enhance TQM and business process re-engineering or can be very effective in and of itself.

Participative design is not for every organization. Could it work in yours? ♦



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Elaine Granata uses participative design in her consulting practice with organizations that understand the power of high participation in creating ownership and excellence. She manages Search Conferences as a part of this process as well as for communities struggling with growth and survival.