

PARTICIPATIVE MANAGEMENT
OF THE
PERFORMANCE SYSTEM

- WHITE PAPER -

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May 1982

INDEX

	PAGE
- PURPOSE	1
- OVERVIEW	2
- MOTOROLA'S PMP - REVISITED	3
- CONCEPTS OF PARTICIPATION	4
- PUSH/PULL MODELS OF MANAGEMENT STYLE	5
- STATISTICAL QUALITY TOOLS	7

- PERFORMANCE SYSTEM TECHNOLOGIES	8
- PHILOSOPHICAL INTERFACE OF PERFORMANCE SYSTEMS AND PARTICIPATIVE MANAGEMENT	10
- INTEGRATION OF THE COMPONENTS	11
- SUMMARY	21

PURPOSE

The purpose of this paper is to present a strategy and rationale for integration of:

- Participative Management
- P.M.P. Committee Structure
- Performance Systems Technology
- Statistical Quality Techniques
- Push/Pull Behavior Models

The goal of this integration is to leverage the effectiveness of Motorola's P.M.P. committee structure through better utilization of the concepts and practices of a participative style of management along with the techniques and tools of both 1) Statistical Analysis for Quality Control and improvement and 2) Performance Systems Analysis Methodologies.

OVERVIEW

Motorola's Participative Management Program - PMP - is struggling to gain acceptance and show positive results at a level sufficient to convince some within management that a participative approach has value.

This struggle is due to many factors. Implementation has been difficult because our businesses are "so" different; it was begun at the lower levels where authority and control are lacking for the interventions necessary to solve problems; training has concentrated mainly on an "announcement-awareness creating" programs with few "skill" training programs available for all levels of the organization. (Skill Training is necessary to support and maintain not only the "Interpersonal Skill" side of PMP, but the "Process Skills" needed to manage the team and committee structure.)

This white paper proposes the use of a "Performance Systems" approach within the P.M.P. Structure as an overall framework within which to create a common language for communication of performance problems and solutions. This overall framework allows for the systematic and appropriate use of specific, narrow tools and approaches (i.e.: statistical problem solving, cost/benefits analysis) as we further identify and define our Performance System and the deficiencies within that system.

This holistic approach affords us an opportunity to view the big picture of both Quality and Productivity prior to narrowing in on component/process quality problems. This approach allows for a rationale decision making process (by management) for the competing requests (from the lower level PMP structure committees) for our limited resources. Managements decisions can be based on the projected return and impact to the "units" mission (in support of the higher organization's mission and goals).

MOTOROLA'S PMP - REVISITED

Motorola's desire is to instill a participative culture and structure within its business operations to positively impact Productivity and Quality at all levels and across all functions. A formal organization structure (the PMP committee structure) has been designed to allow for upward and downward communications of goals, strategies, plans (down) and input on suggestions for interventions (up). An incentive was provided for by establishing a bonus plan to allow for the sharing of the profits to be gained from improved productivity and quality levels. Training programs were designed and implemented to support these efforts.

The author wholeheartedly agrees and approves of the concepts and goals of participative management - but from observations and discussions with various levels of management and labor at various facilities (while performing analysis work for training program design in the manufacturing/materials area) concludes that implementation of PMP -culturally and structurally- has not been totally successful to date.

Misconceptions abound regarding Participative Management. Management fears the democratic vote usurping their authority, workers feel their valid inputs are ignored (I Recommend), working committees feel stifled in their attempts to improve quality when the "end-of-the-month-rush" is on.

PMP seems to have eroded into nothing more than a bonus plan. And here manipulation of goals and production data have become the game to play to impact one's bonus.

CONCEPTS OF PARTICIPATION

The concepts of Participative Management stem from the belief that employees at all levels want to be productive at their jobs, and have both the knowledge and ability to improve their job performance by 1) implementing self-designed interventions of their work flow/procedures (environmental systems improvements); and 2) identification and use of appropriate or improved tools in their work performance. In short, employees given the responsibility and authority can find better ways of doing their jobs.

If management clearly defines their goals and expectations, employees can work with management participatively to ensure achievement. This concept embodies a win/win approach where employees have a say in not "what" they are to perform, but "how". Management's authority is never usurped on the "what" to perform (goals), most certainly are never left to a democratic voting process. But management's responsibility is to communicate goals, strategies and plans that employees can work toward (the common "mission"). Inputs received from employees provides management with more and better data from which to make better informed/more intelligent decisions. In addition, these decisions that approve or reject employee inputs must be provided back to the employees along with the rationale management has used to base their decision upon. (Lower level employees will never have all the information that higher levels of management have, but this mysterious rationale needs to be appropriately clarified to establish long-term employee trust.)

To formalize (and therefore make part of the organizational culture) this two-way communication must be structured, routinely provided, reinforced by higher levels of management, and available to all.

THE PUSH/PULL MODELS OF MANAGEMENT STYLES

Behavioral research done by Huthwaite Research Group, Sheffield England, has documented two distinct styles of effective management behavior. One follows a clearly "participative" style, the other, a more traditional "autocratic" style. Huthwaite labels these two styles "Push" and "Pull".

The "Push" style (autocratic) involves management behaviors of:

High - ● Giving Information

● Proposing

● Shutting Out

Low - ● Seeking Information

● Testing Understanding

● Building

The "Pull" style (participative) involves management behaviors of:

- High -
- Seeking Information
 - Building
 - Testing Understanding

- Low -
- Proposing
 - Giving Information
 - Shutting Out

What is important to recognize is that neither one is "the right style", both clearly have their place as successful, effective managerial styles. The appropriateness of one over the other is situationally based. Depending on the circumstances (Huthwaite has established guidelines for situational evaluation) one style has greater potential for effectiveness of the managerial - subordinate interface (leading toward performance).

To paraphrase John Carlisle, (one Huthwaite principal) "this does not limit managers to one behavioral pattern only, but increases options, which when available to managers, increases their effectiveness".

Motorola's desire to instill a participative culture, should be viewed as an attempt to provide such options to managers. When confronted with a situation (opportunity), managers can maximize the potential outcome by appropriate use of either "Push" or "Pull" styles to determine the "hows" of accomplishing the given "whats".

The use of the Huthwaite behavior models can be found in two (MTEC developed)

Motorola training programs: 1. IPS - Interpersonal Skills

...and...

2. Sales Call Dimension

(And Also in development: "Negotiations".)

Other programs in use at Motorola using the Huthwaite Research based behavioral models include:

I.M. - Interaction Management

...and...

Influence Management.

Other corporations using Huthwaite behavioral models to develop training programs include:

_____ Xerox

STATISTICAL QUALITY TOOLS

The author does not presume great knowledge of statistical analysis tools for Quality Control/Improvement, but is alarmed at the growing oversimplification and utopian view of "statistical quality tools" as the answer to our prayers. Indoctrination of simple statistical analysis approaches at the lower levels of the organization can be beneficial when used as appropriate - as tools to analyze problems and systems symptoms that have been correctly pre-identified as having value to the organization.

A simplified analogy: An owner of a poor performing car pulls into the service station and says "the car isn't running right". The mechanics begin by checking the air pressure of the tires, the radiator coolant level, the oil level, etc.

Obviously the wrong approach, but we have trained non-exempt and lower exempt level employees to use simple statistical tools, but have not provided them with guidance or training to determine when and where it is best to apply them.

Statistical analysis of "minute" problem symptoms will present opportunities to apply many small bandaids to the numerous wounds that are in total, allowing the body to bleed to death. What is needed for successful use of such statistical tools is an overall framework within which these tools may be applied to the significant problems deserving of our attention and resources.

It is this author's understanding that Juran provides for such a "diagnostic journey" allowing for problem identification (of hopefully significant problems); symptom identification; cause analysis; and solution design, test and implementation.

This approach may prove extremely useful in product problem solving in a manufacturing production setting, but may have limited utility in quality improvement for other areas (i.e.: Sales, Personnel, Finance, Maintenance, Engineering, etc.) What is needed is an overall Quality and Productivity framework for analysis purposes that may serve us in all functional areas.

PERFORMANCE SYSTEMS TECHNOLOGY

The "Performance Systems" approach as developed by Praxis Corporation (and in use at MTEC through the involvement of Geary Rummeler) provides the overall framework with which to analyze Quality and Productivity.

(The author is viewing the Performance System approach in very broad terms.)

"Performance" maybe defined as the sum total of the following measures:

- Quality

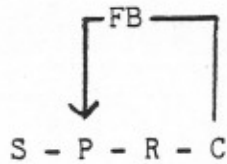
- Quantity

- Cost

(Productivity can be measured by Quantity and all related Costs.)

This broad view of Performance as an overall holistic framework within which to analyze Quality and Productivity, enables an organization to identify the various components of its Performance System and to further identify the deficient areas. These deficient areas can then be further analyzed and compared with "ideal" or desired models of Performance Systems. This allows for the design of various interventions: redesign of the organization; job redesign; acquisition of needed tools/resources; implementation of training or job aids; redesign of consequences (positive and negative); redesign or implementation of feedback/information systems; establishment or revisions of goals, measures and standards of performance.

The Performance System is illustrated as a series of:



S - Situation

P - Performer

R - Response Required

C - Consequence(s) for Response

FB- Feedback on the Response

This view accounts for both the Performer (individual or unit) and the Environment as the two working components of "Performance".

An assumption made is that the Performer is mentally and physically able to perform in a supportive environment.

Much like Demming's claim that 85% of the problem is outside the control of the worker, but resides within the realm of management - the Performance System approach places "task interference" problems in the environment: unclear expectations, standards of performance; a lack of training/tools; few positive consequences for the proper response (or negative consequences for the proper response!); and untimely or irrelevant feedback (or none) on performance.

A "Performance System" analysis paints the Performance picture by building models of both the "real" and "ideal" systems. Deficiencies in the environment are identified for resolution.

PHILOSOPHICAL INTERFACE OF PERFORMANCE SYSTEM
AND PARTICIPATIVE MANAGEMENT

The author feels that there is a similar philosophical base to both "Participative Management" styles and "Performance Systems" methodologies.

- Performer knows "how" to accomplish job best.
- Performer wants to perform.
- Behavior (performance) is influenced by its consequences.
- Performers need a rational working world.
- Expectations and standards (knowing "what" to perform) are necessary as well as feedback on performance.

This similarity is also expressed and expanded upon in an independantly produced report: "Participative Management Research Conclusions and Related Management Training Topics" - Dennis Romig, 1981.

INTEGRATION OF THE COMPONENTS

Components :

- Participative Styles of Management
- PMP Committee Structure
- Performance Systems Technologies
- Statistical Quality Tools
- Huthwaite Behavioral Models
(Push-Pull)

Two "givens" are the commitment of Motorola top management to a participative approach to management and the existing PMP committee structure. The other three components give us a behavioral approach to use for participation (as appropriate to the situation), and analysis tools (both broad and narrow).



Utilization of a Performance Systems analysis approach allows for a global (broad) overview of our working worlds. Each system's various components (S-P-R-C-FB) are analyzed to see if they are in balance. Once this has been accomplished, improper R's (responses) can be analyzed using statistical methods (narrow) to determine reasons for product quality problems that may relate back to the performer's ability, the tools, equipment or materials used.

This broad to narrow analysis helps us to pinpoint problems worthy of our resources. Rather than spending time on nickle and dime quality problems, we should begin our efforts at the top of the "value" pile. It's no wonder that management has jumped figuratively but not literally on the "quality" bandwagon when they are not overly confident on the return of their investment. Lack of their full support dooms any attempt to improve the quality situation.

Performance Analysis done at the upper levels would show (in some cases) that conflicting with our concern for quality is our commitment to end of the month delivery. The consequence to management for shutting down the line to solve a quality problem (and miss delivery schedules) must be severe. And it tends to dilute a full Quality effort the remaining three weeks of the month.

If Top Management wants both Delivery and Quality, it must provide for balanced consequences, which support both delivery and quality levels.

Following is a rough model of a PMP structure and skills/knowledge/and behaviors needed by the various levels. Paramount to the knowledge and skills is Performance Systems theory and analysis skills.

Once the organization understands and uses this as the framework to work participatively in, product (or service) Quality and Productivity problems can be addressed with a common vertical and lateral understanding through a common language and vantage point.

PMP is a Formalized Two Way Communication Channel.

UP

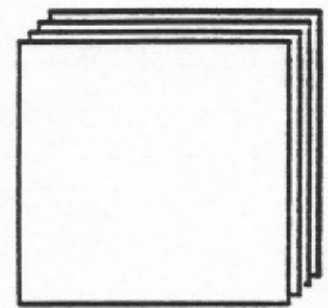
- Inputs, Suggestions for Organizational Interventions
- Feedback

DOWN

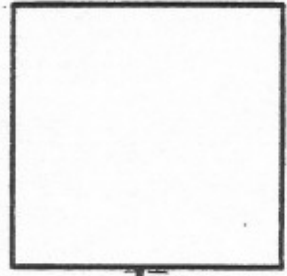
- Goals/Strategies/Plans
- Expectations
- Standards
- Directives/Rationale
- Decisions/Rationale
- Feedback



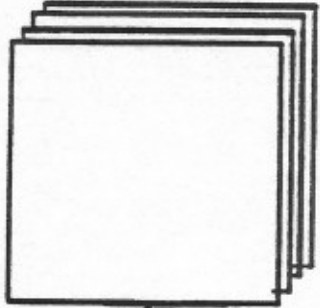
The channels of communication (PMP structure)



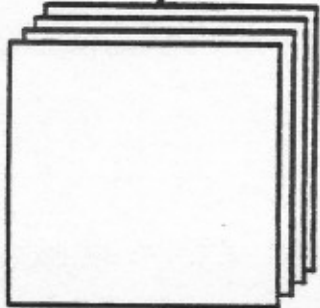
- Group, Sector, Corporate
Management Committees



- Business Center Management
Committee



- Functional, Operational
Steering Committees

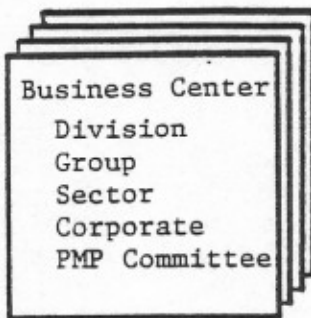


- Working Committees

- Individual Participants



PMP MODELS



Mission

- Communicate Goals, Strategies, Plans
- Provide Resources and Incentives

Accomplishments

- Communicate Business Information
- Provide ~~Directions~~ Directives / DECISIONS
- Provide Resources
- Evaluate/Review Results

Participants

- Upper Management

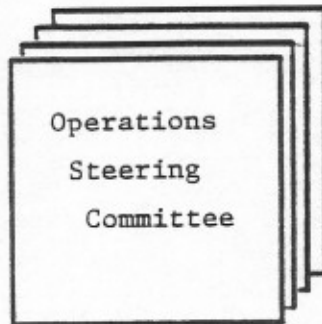
- Representative(s) from next
lower committee(s)

Skill/Knowledge/Behaviors *

- K - Performance Systems Theory
- S - Performance Analysis
 - Statistical Analysis
 - Cost/Benefits Analysis
 - Strategic Planning
 - Goal Setting
 - Communication/Presentations
- B - Interpersonal Skills
 - Chairmanship Skills
 - Participative Management Skills (Push-Pull)

* Need is dependent on individual's role in committee

PMP MODELS



Mission

- Improve Functional Performance
in terms of:
 - Quality
 - Cost
 - Delivery (Quantity)
- Provide Directives, Decisions,
Rationale, Resources and Feedback
to Lower Levels
- Provide Inputs and Feedback to Upper
Management

Accomplishments

- Identify Mission of Function/Task Force
- Analyze Functional Performance System
- Identify Deficiencies
- Determine Value of Deficiency
- Provide Direction/^{IVES DECISIONS}~~Directives~~ to Lower Levels
- Review/React to Inputs from Below
- Provide Inputs to Upper Management
- Communicate Business Information
- Provide Resources
- Evaluate/Review Results

Participants

- Functional Head (V.P.-Director-Manager)
- Functional Managers
- Representatives from Working
Committees/Involvement Teams

Skill/Knowledge/Behavior *

* Need is dependent on individual's role in committee.

- K - Performance Systems Theory
- S - Performance Analysis
 - Statistical/Quality Concepts
 - Cost/Benefits Analysis
 - Presentations/Communications
 - Goal Setting
 - Strategic Planning
- B - Interpersonal Skills
 - Chairmanship Skills
 - Participative Management (Push-Pull) Skills

PMP MODELS



Mission

- Improve Unit Performance
in Terms of
 - Quality
 - Cost
 - Delivery (Quantity)

Accomplishments

- Identify Mission of Unit
- Analyze Performance System
- Identify Deficiencies (Symptoms)
- Determine Value of Deficiency
- Problem Solve for "Cause Identification"
- Identify Solution Alternatives and ...
 - ROI
 - Impacts
 - Costs/Resources
 - Timeframes
 - Evaluation Measures
 - Solution Components
- Test Solution(s)
 - Evaluate Results
 - Feedback to Management

Participants (Two Types)

Involvement Team - Department/Unit

- Supervisor
- Lead Operators
- Direct Labor

Working Committee - Cross Functional

- Various Levels of Representatives of
all Functions (Task Force)

SKILL/KNOWLEDGE/BEHAVIOR

- * Need is dependent on individual's role in committee/team
and nature of "Project-Problem".

K - Performance System Theory

S - Performance Analysis

- Statistical Analysis

- Cost/Benefits Analysis

- Experimental Test Design

- Presentations/Communications

- Setting Standards

B - Interpersonal Skills

- Chairmanship Skills

- Participative Management (Push-Pull) Skills

PMP MODELS



Mission

- Perform job specific duties to produce "outputs" to standards

Accomplishments

- Perform job specific duties to produce "outputs" to standard
- Provide inputs to various PMP committees
- Implement final solution (intervention)

Skill/Knowledge/Behaviors

- Specific "job" related S/K/B

Terminology

Business Information

- Unit Mission
- Goals, Strategies, Results
- Costs, Profits

RECTIVES
Decisions

-
- Responses to inputs (suggestions, re: solution implementations/alternatives)
 - Directives for action/inaction to performance system intervention

Rationale

- Performance System Impact
- The linkage between decisions/directives and company unit goals

- Specific Data

- Projections of return on investments
- Competing needs for organizational resources and impact on decision

Problem

- Problem Symptom(s)
- Problem Cost(s)
- Problem Cause(s)
- Relation to Performance System

Solution

- Performance System Intervention
- Solution Specifics
 - Components
 - Impacts (projected value of ROI)
 - Costs
 - Evaluation Measures
 - Timeframes/Alternatives

Resources

- Headcount
- Capital Funds
- Support

SUMMARY

Use of Performance Systems methodologies (in the PMP structure) as the overall "framework" for identifying/resolving performance deficiencies (Quality and Productivity) has greater potential for success than Statistical/Quality techniques alone. Statistical/Quality tools used within a "Performance Systems framework" (along with other analysis tools) coupled with a participative approach (involvement and input from all levels) can meet Motorola's desire to increase Quality and Productivity through increased employee participation in running our businesses.

Development of a strategic plan for the implementation of this integration must happen before too many participants (upper and lower) become disenchanted with the participative approach.

We can not manage by setting objectives alone. Or by providing a bonus, or by providing feedback or by implementing training. Performance as measured by Quality and Productivity must be "engineered" by managing the entire "system" and employing our resources appropriately to support that system.

It is time to revisit Motorola's Participative Management Program as a "Performance Analyst" to define the "ideal system" (where we want to go) to set the structure in place and support it with Motorola's expectations, resources (tools, equipment, human resources, training), consequences (a bonus system that ties us together as sub units of the same team - not competitive teams), and feedback/information systems that provide performers with feedback on their performance and provide management with the data needed to make proper business decisions.