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# CONCEPTS OF STRATEGIC PLANNING IN THE ORGANIZATION OF THE FUTURE



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## INTRODUCTION

The management and operation of business, industry, and government in the United States is being challenged to a degree unprecedented in any other time. It has been suggested that the nation has entered a climacteric, a critical turning point in its economic history (Grayson and O'Dell 1988, 106-107). The management choices made today will determine whether the economy will be revitalized or go into steady decline. Books and articles abound offering a variety of prescriptions to deal with the phenomena of continually shrinking markets and a rapidly diminishing competitive position. There is little to fault in such prescriptions as total quality management, gain sharing, quality circles, quality of life improvements, just-in-time inventories, and some of the other interventions to manage change and organizational cultures. Still, too frequently, these seemingly viable interventions have resulted in failure or less than expected gains.

The most likely cause of the problem is not the efficacy of the prescriptions, but rather the absence of a catalyst, an activating mechanism, to enhance or accelerate the impact of the interventions. Many management writers and researchers have pointed to the need of a strategic vision as a prerequisite to continuous performance improvement, adaptive change, and effective management of the organizational culture. By focusing on the macroeconomic problem, they tend to be vague in articulating a means to facilitate establishing and reinforcing that vision, particularly at levels where production occurs. They talk of leadership, managing cultures, promoting change, and other equally sound concepts. What is missing is, "How do you do it?"

This paper addresses the specific application and adaptation at the Naval Ordnance Station, Indian Head, MD of a strategic planning concept that has evolved over the past three decades. The concept has been refined by the Virginia Productivity Center (VPC) into a disciplined, structured strategic planning process. The process does not provide a cure for the nation's economic ills, but it does provide a tested tool that has proven effective in helping an organization articulate, reinforce, and institutionalize its strategic vision. The uniqueness of the process lies in its emphasis in the use of planning as a mechanism for performance improvement.

## OBSTACLES TO PERFORMANCE IMPROVEMENT

Over thirty years of productivity and quality conferences, books, articles, and programs have left many skeptics and comparatively few skilled, pragmatic changemasters (Kanter 1983). Top level executives in many organizations continue to view themselves as external boundary spanners, market strategists, or acquisitioners divorced from the internal culture of the organization. Paradoxically, as Schein writes, "...there is a possibility—underemphasized in leadership research—that the *only thing of real importance that leaders do is create and manage culture*" (Schein's emphasis) (Schein 1985). Frequently, even those executives who have been receptive to some of the more innovative management interventions have tended to avoid any direct involvement. Responsibility for quality circles may have been given to human resources, just-in-time to manufacturing or production control, automation to the computer center or manufacturing engineering department, and gain sharing to personnel or the compensation function. As a result, these initiatives competed for resources instead of complementing each other. Case studies show that in the absence of an overall strategy for organizational performance improvement, these types of interventions may, from the beginning, be doomed to fail completely or result in less than optimum gains.

The cultures and management practices in most American organizations promote maintaining the status quo, and realizing the goal of continuous performance improvement means, in part, ensuring collective involvement in improvement initiatives. Lawler proposes in his recent book, *High Involvement Management*, that organizations share power, knowledge, information, and rewards downward. He suggests that participative systems, containing these four elements, are essential to an organization's ability to manage change and foster entrepreneurship (Lawler 1986). Unfortunately, organizational members at all levels tend to view their roles narrowly. Simplistically, employees spend their time doing three kinds of things: (1) administering the business/doing the job; (2) reacting to crises; and (3) building the business/improving group and individual performance (Harold A. Kurstedt, Virginia Polytechnic and State University, interviews). As Figure 1(a) suggests, to the detriment of performance improvement efforts, American organizations have created a perception on the part of employees that the most important part of their job is to "do" the job in an atmosphere of continuing crisis.

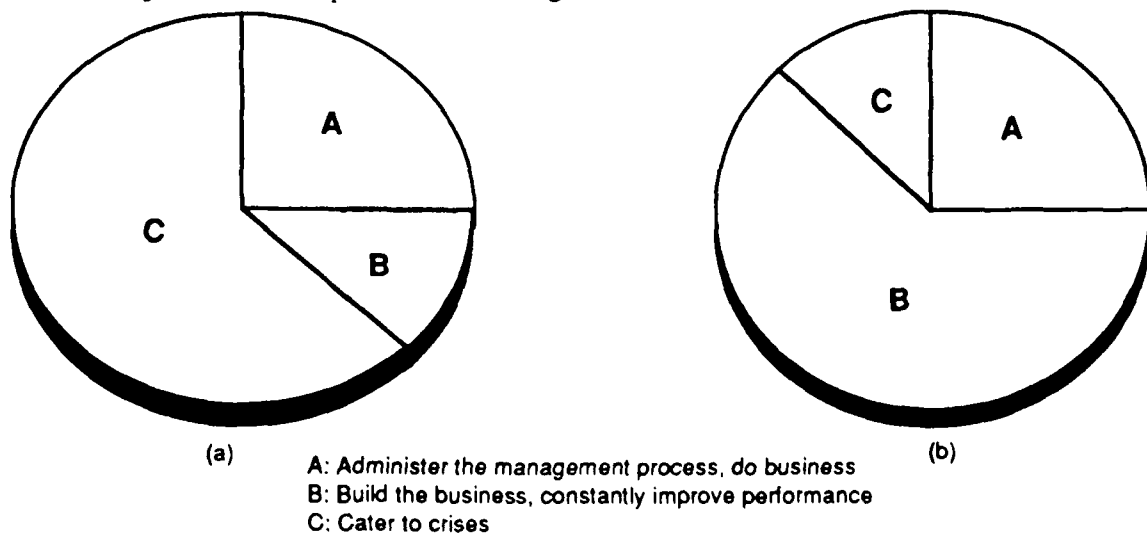


FIGURE 1. MANAGERS SPEND ALL OF THEIR TIME DOING THREE THINGS (KURSTEDT, 1988)

The scant attention given to performance management in the typical organization and the excessive emphasis on "doing the job" and catering to crises ill prepare the organization or the individual employee for achieving the goal of continuous performance improvement as suggested in Figure 1(b). In many, if not most, organizations, the job is a dynamic entity. Job descriptions may have little meaning, lines of responsibility are unclear, and many of the potentially surmountable roadblocks to performance improvement fall outside the domain of any one individual. Many of the problems that need to be solved and opportunities that need to be captured require interactive, participative ventures, frequently involving competing individuals and groups. Most American organizations, with their traditionally segmented structures and absence of strategic vision, are not designed to cope with these kinds of problems or challenges.

### **The Challenge of Continuous Performance Improvement:**

Thirty years of data suggest that the goal of continuous performance improvement cannot be met unless performance management is viewed as an integral part of the organization's strategy. Case studies have shown that, in the absence of a clearly articulated strategic vision, specific participative, performance, quality, reward sharing, and communication interventions reap only short-term benefits to the organization or individual. The challenge, as depicted in Figure 1, is to create a culture that promotes, encourages, measures, and rewards organizational and individual performance improvement. The entire organization must be mobilized towards a vision of the organization of the future. If the following ten conditions cannot be created and managed, then the goal of continual performance improvement in an organization may not be achievable.

- (1) Presence of an appropriate level of top management support, involvement, legitimization, or other "forcing functions"/motives/incentives.
- (2) Presence or development of a critical mass of "masters."
- (3) A well-thought-through "Grand Strategy" that integrates with the organization's planning system.
- (4) A strategic management methodology characterized by quality processes and techniques.
- (5) Existence of mechanisms to offset entropy.
- (6) Balance of patience/impatience, consistence, and persistence of key players.
- (7) Integration, coordination, and communication within the organization.
- (8) Presence of a mechanism to overcome resistance to change.
- (9) Existence or building of an infrastructure capable of supporting the strategic management methodology.
- (10) Key players involved in cooperative, innovative efforts.

## STRATEGIC PLANNING FOR PERFORMANCE IMPROVEMENT

Strategic planning at its best is a shared vision, reinforcing purpose and mission, promoting an environment amenable to change and innovation, and influencing behaviors within the organization. Particularly in turbulent times, it may be the cornerstone for all efforts to improve performance. Unfortunately, strategic planning has not been an integral part of quality and productivity improvement efforts in this country.

Kanter describes the strategic planning process as “the point at which leaders enter” (Kanter 1983, 294). Although many organizations say they do strategic planning, very few have integrated strategic plans that include plans for productivity, performance management, and human resources. Too often, what substitutes for strategic planning is something that is done once a year, along with budgets, or once every five to ten years whether it is needed or not. Or the strategic planning attempt may be something that the top manager of an organizational unit “blue-skys” and then passes on to see if anyone can figure out what he/she might have had in mind. Unfortunately, this type of strategic planning is almost always short-sighted and myopic. The myopia comes from too few people being involved in the strategic planning process — a result of an American management paradigm that suggests that participation and involvement takes too much time. The reality of the eighties and nineties and beyond is that those who must implement the plans must play a role in developing them.

Within the strategic planning literature, there are few operational terms and little consistency in their use. Coleman (1988, 19) presents a “taxonomy” of terms and concepts associated with planning that is helpful in explaining our thesis. Figure 2 depicts this taxonomy. Coleman uses the work of others, particularly Monetta (1981), in this field to clarify operational definitions for the terms planning system, planning methodology, planning process, and planning step. Organizations may find this useful in helping them improve the quality of their planning processes.

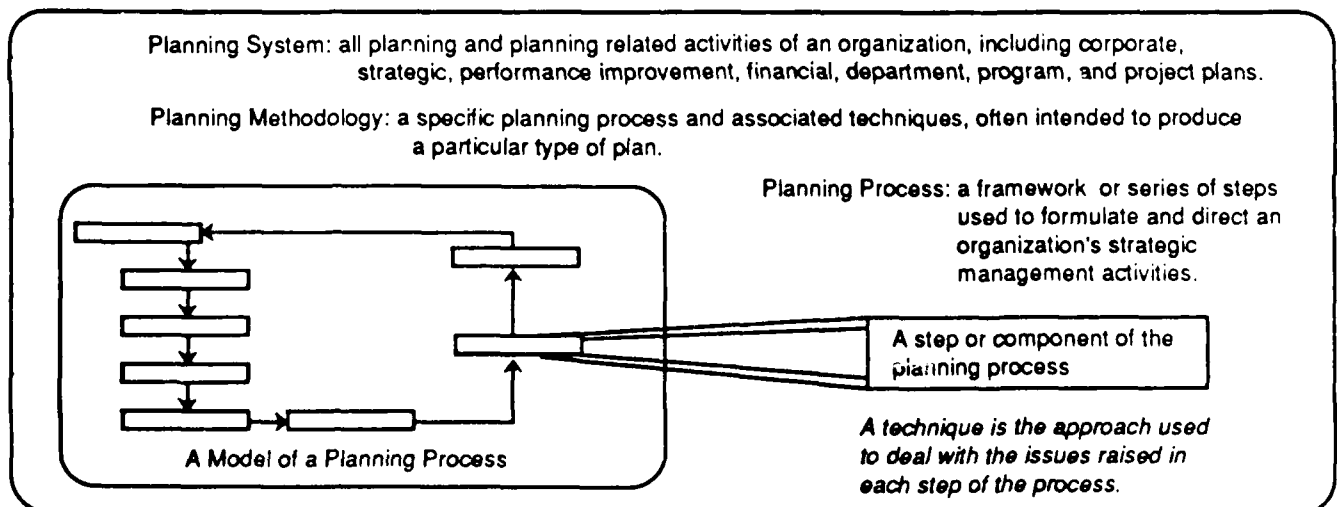


FIGURE 2. A GRAPHIC REPRESENTATION OF SOME COMMON PLANNING TERMS [adapted from Husey (1985), Bandrowski (1985), Naylor (1980), Pearce (1981), and Nutt (1982)]

### Improving the Quality of Strategic Planning:

Figure 3 depicts what Kurstedt (interviews) calls a management system model. A management system has three components: (1) a management team, (2) the organization, and (3) tools for managing. A management system also has three interfaces: (1) the decision to action interface, (2) the measurement to data interface, and (3) the information portrayal to information perception interface. The decision to action interface was discussed earlier in the context of how employees see their jobs. In a sense, this interface has three kinds of actions — those taken to: (1) do the job, (2) cater to crises, and (3) build the business, improve performance. As illustrated earlier in Figure 1, many employees and managers see this interface as containing only two kinds of actions (do the job and cater to crises), not three.

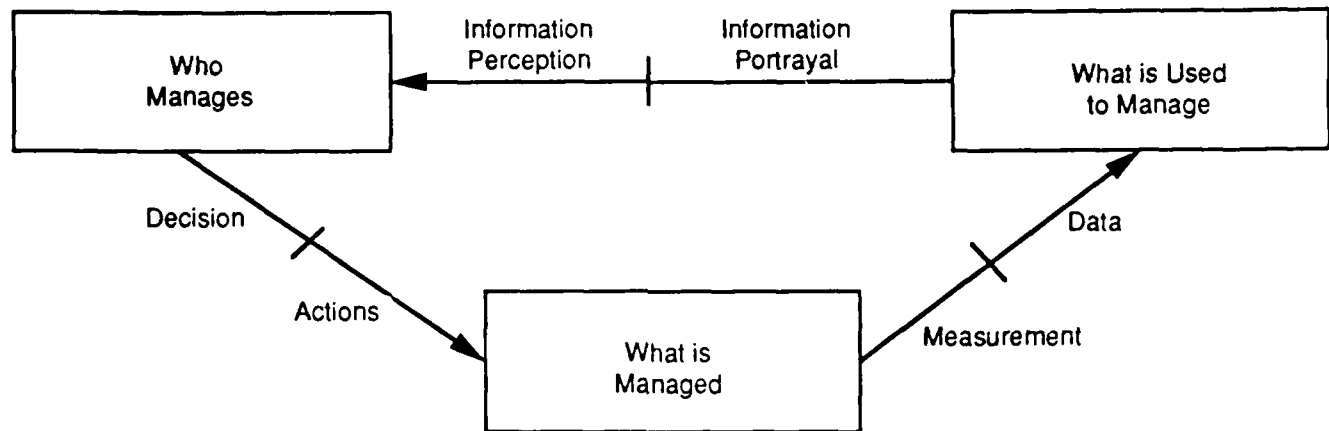


FIGURE 3. MANAGEMENT SYSTEM MODEL

How can organizations begin systematically to improve the quality of their planning systems? How do they address the challenges they have faced and will continue to face? How does an organization develop to the point where all employees are constantly attempting to improve performance at the individual, group, and organizational levels? It begins with engaging the management team of the target organization in a strategy session that focuses on performance improvement. The top management team holds the key to success. The role of the consultant is to assist executives and top-level managers to become, as Barnard (1968, chap. 5) first suggested in 1938, managers of the organization's culture or "shapers of shared values." The actual form of the intervention and the interpersonal and intergroup actions and reactions will vary from organization to organization. What follows is a description of the application and adaptation of the tools and instruments used and the process steps.

## THE STRATEGIC PERFORMANCE IMPROVEMENT PLANNING PROCESS IN ACTION

Our case focuses on the Naval Ordnance Station in Indian Head, MD, normally referred to simply as Indian Head or the station. The reader may find it of particular interest that the organization is a Federal Government activity. Strategic planning in a government facility is a special challenge, as one might imagine. There are constraints that are not present in the private sector. But it is possible to plan strategically and do it well. Indian Head does have the advantage of being industrially funded. Basically that means the organization receives sponsor funding to produce and sell products and services not unlike a commercial enterprise. There are many parallels in the challenges confronting the private sector of the United States economy and those confronting Indian Head (Monetta and Holmes, 1989).

The station has been simultaneously developing and implementing a rigorous and systematic planning system for the past three years. Planning and budgeting have taken place at the station over its 99-year history, including a short-lived experiment in strategic planning in the late 1960s (Rositol, 1974). The recent initiatives are attempts not only to improve the quality of planning efforts, but to institutionalize strategic planning as an integral part of the station's ethos.

### 100 Years of Propulsion Technology Excellence:

Indian Head has a rich history of technological achievement and innovation. Founded in 1890 by Ensign Robert Brooke Dashiell, it was established originally as a proving ground for naval guns. Though gun-proofing remained its major activity until 1921, it was the research and manufacture of smokeless powder at the turn of the century that laid the organization's cornerstone in technological history. During World War II, Indian Head underwent major expansion, and by 1940, fundamental research in rocketry and rocket propellant grains had begun. Time and again the organization was awarded the Navy's "E" for excellence. After the war, major technological changes continued. A chemical pilot plant was built in 1949 for research and development of solid propellants for new rockets and guided missiles.

During the Korean conflict four additional manufacturing plants were constructed. One of the highlights of the 1950s was the important production and testing work that was done at Indian Head for the propulsion system of the Polaris missile.

During the 1960s, Indian Head's first technical director, Joe L. Browning, redirected the station's efforts away from production towards engineering and development. By the early 1960s, Indian Head developed a new liquid monopropellant for torpedoes and installed the first on-line computer facility for ballistic evaluation.

Today the Naval Ordnance Station is the only facility, at least in the United States, able to synthesize propellants and explosives from test tube to full-scale production. It serves as the technological authority for measuring the quality of commercially manufactured propulsion products and has also developed unique technical expertise in the areas of electronic missile simulators and aircrew escape propulsion systems.

### Getting Started:

In November 1986, a new top management team was installed at Indian Head. The major management objectives were to create an integrated and comprehensive system of planning and to establish and institutionalize continuous performance improvement as an integral part of the station's value system. In March 1987, management executed a major reorganization. Part of that reorganization included forming a Corporate Planning Division, a new group that included the coordinator for the mandated Naval Industrial Improvement Program. Thus performance management and strategic planning were organizationally married.

The planning effort got a serendipitous nudge from a senior management conference on productivity that had been facilitated by VPC in February 1987. The conference took place prior to the earlier mentioned March reorganization and barely three months after the change in the station's top management. It became a time of opportunity. The theme of productivity joined with planning was born.

Once the March reorganization had been implemented, Indian Head was ready to take its first steps. Top management decided that the best way to get started was simply to start. The establishment of a conceptual base, development of general rules, and design of a process began simultaneously. At the very outset the decision was made to take a comprehensive view of all planning-related activities rather than just develop a strategic plan.

### The System Approach to Planning:

The overall approach to the total planning effort consisted of four steps: (1) identify all internal and external requirements; (2) integrate all requirements according to function, due dates, and informational flow relationships; (3) develop and document a schedule of all activities necessary to produce the internally and externally required products (the schedule for internal requirements was designed to be compatible with the external schedule); and (4) implement the officially designated Corporate Planning System on an annual cycle.

### Defining Terms and Roles:

The Corporate Planning Division was assigned the responsibility to develop a structure and set of rules, and once these were agreed to by the top management team, to act as guardians of the process. A simple set of definitions was selected and agreed upon. The only imperatives in term-selection were consistency, understanding, and agreement.

Three planning horizons and three planning levels were defined: (1) *corporate*, extending out to 20 years, (2) *strategic*, extending out to 7 years, and (3) *tactical*, extending out to 2 years. The three planning levels are: (1) *station*, which includes planning for the entire activity; (2) *programmatic*, which is planning for each of the 19 major program or business units; and (3) *departmental*, which involves planning conducted for each of the station's 20 departments. Strategic and tactical planning are conducted at all three levels. Corporate planning is done at station level only. Thus Indian Head has corporate, strategic, and tactical objectives. Figure 4 illustrates the station planning interfaces and relationships.

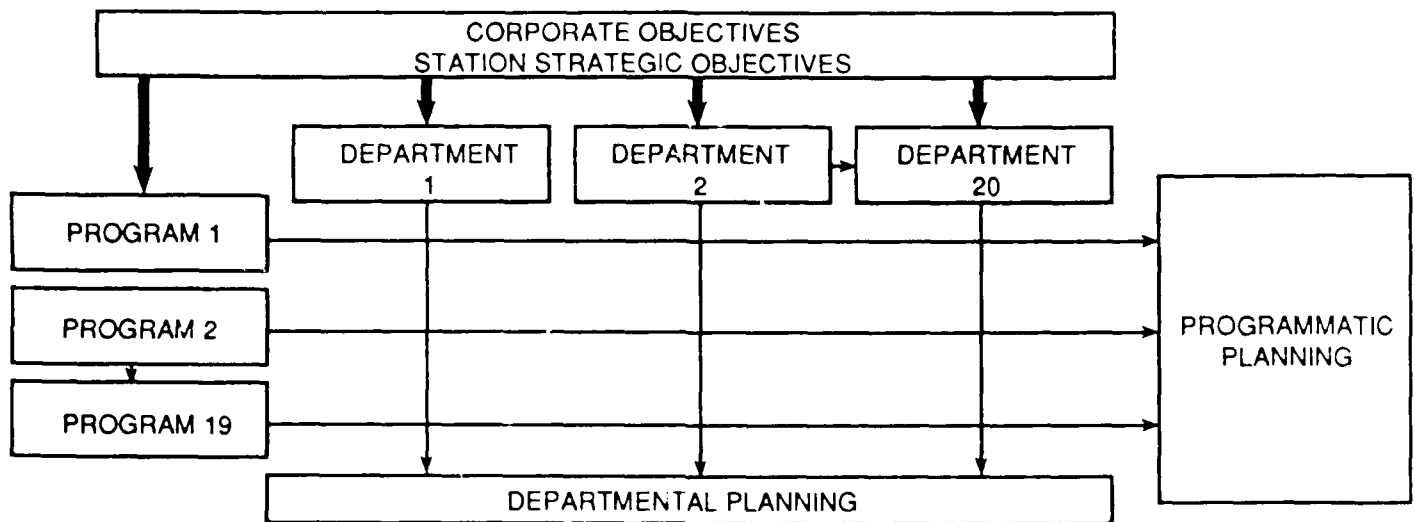


FIGURE 4. PLANNING RELATIONSHIPS

The key participants in the planning process at each horizon and at each level are graphically shown in Figure 5. The principal planning body leading the station-level corporate and strategic planning effort is the Senior Management Board (SMB). The SMB is composed of the Executive Committee and the 20 department heads. The Executive Committee includes the Commanding Officer, Executive Officer, the Technical Director, and three Associate Technical Directors. The SMB is assisted by the commodity managers, who are senior technical specialists focusing on developing business lines in the 7- to 20-year future. Strategic planners are located in each department to coordinate planning activities and support the department head in strategic planning and implementation. These individuals are also cross-trained in performance measurement technology and also serve in the consulting role of measurement master to the department head. The outside facilitators provide expert process facilitation in the structured planning process, concentrating on the development of department strategic and tactical planning and performance improvement.

LEVELS	HORIZON	CORPORATE (20 YEAR)	STRATEGIC (7 YEAR)	TACTICAL (2 YEAR)
	STATION		SENIOR MANAGEMENT BOARD COMMODITY MANAGERS CORPORATE PLANNING DIVISION	
PROGRAMMATIC			PROGRAM MANAGERS STRATEGIC PLANNERS	BRANCH HEADS
DEPARTMENTAL			DEPARTMENT HEADS	DIVISION DIRECTORS STRATEGIC PLANNERS BRANCH HEADS MEASUREMENT MASTERS OUTSIDE FACILITATORS

FIGURE 5. PLANNING ROLES

**Corporate Planning System Products:**

There are nine major output products developed in the planning system. These are listed in time and information flow sequence in Figure 6. The cycle restarts each February and takes 15 months to complete, thus creating a 3-month overlap between cycles.

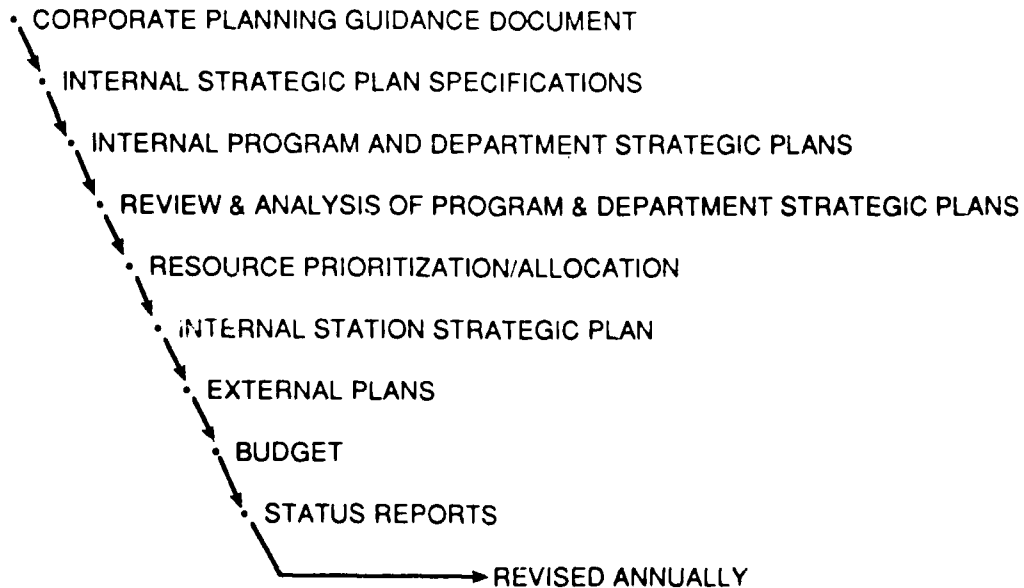


FIGURE 6. PLANNING SYSTEM PRODUCTS

A brief description of the nine output products follows:

*Long-Range Corporate Planning Guidance Document* — This is the first step in the planning process. It articulates the station's 20-year corporate objectives and is prepared and signed by all members of the SMB.

*Internal Plan Specifications* — This provides detailed instructions and requirements for preparing the 19 program and 20 department strategic plans.

*Program Strategic Plans* — These are prepared by each of the program managers, cover a 7-year time horizon, and include an executive summary, program history, current program structure, current sponsor, external planning factors, program mission, strategic objectives, strategy, current and potential workload, and program resources.

*Department Strategic Plans* — These also cover a 7-year time period. They include an executive summary, department history, recent accomplishments, planning environment and assumptions, mission, objectives, strategy, plans of action, organizational structure, information system plans, and personnel, funding, facility, office space, equipment, material, receipt, storage, transportation, training and recruiting requirements.

*Review and Analysis Report* — The Corporate Planning Division reviews all program and department strategic plans for quality and conformance to specification. The results are discussed with the department heads and program managers in one-on-one feedback sessions.

*Resource Prioritization and Allocation Report* — This process involves application of scoring algorithms to force an initial priority for objectives for which insufficient resources exist. Final priority and allocation determinations are made by the SMB.

*Station Strategic Plan* — This is prepared by the Corporate Planning Division under the direction and subject to the approval of the SMB. It contains similar elements to the department and program strategic plans plus workload and funding forecasts and the results of the resource allocations.

*External Plans* — These are prepared in accordance with requirements established by higher authority and are subject to review for timeliness, accuracy, and consistency.

*The Budget* — The system is meant to promote budget consistency with external planning documents.

*Status Reports* — These are planning system products required by up-line headquarter sponsors.

### **Implementation:**

The station was not ready to begin implementing the planning system until July 1987. Given the choice of running a compressed 9-month first cycle or waiting until the following February, management opted for the former, believing the momentum generated by an early start would outweigh the difficulties. They recognized that starting a new system on a short schedule could jeopardize product quality, but it would also provide a valuable learning experience which could carry to future cycles.

Three stages were considered critical for successful implementation. These were: (1) to define the process, (2) to control the variance, i.e., to get uniformity in the specific planning processes, and (3) to shift the mean, i.e., to make continuous improvements in the planning effort.

The compressed first cycle was used as the vehicle to define the process. The results were, as expected, somewhat uneven. A number of the new internal requirements that were being implemented for the first time were not met; however all of the external plans and documents were completed on time and according to specifications. And the organization did learn from its efforts.

The second cycle began in February 1988 and with it the effort to control the variance. Two major process changes were introduced. First, most departments now have a trained strategic planner, and second, each department now uses a trained outside facilitator who uses a standardized format for guiding the planning process. A comprehensive Corporate Planning Guidance Document has been issued. The Strategic Plan Specifications have been significantly improved by clarifying language, eliminating redundancies, and incorporating more automation. The quality and timeliness of department strategic plans have markedly improved.

A major shift in attitude and understanding of the process has occurred in the second cycle. In the first cycle the attempt to introduce a new system was met with some resistance. Change is not comfortable, especially when it is being implemented with dramatic speed.

In the soon-to-begin third cycle, Indian Head intends to focus on shifting the mean — to begin to make continuous improvements in the quality of the individual processes and products, to expand the level of employee participation, to accelerate the acceptance of new values, and to take the first steps towards institutionalizing continuous performance improvement.

The management expects that fully implementing and institutionalizing the objective of planned continuous improvement will take between 4 and 5 years. The desired outcome is a system so well accepted and culturally entrenched that it would be very difficult for the Station to take backward steps. To achieve this requires a vehicle that is flexible, realistic, serves the needs of the organization and the individual, stimulates pride, promotes innovation and change, and easily incorporates improvements. The station's top management expects the Corporate Planning System to be that vehicle. The adoption and adaptation of VPC's eight-step process to develop department and program strategic plans has been a step in catalyzing the institutionalization of continuous performance improvement. Consequently a detailed discussion of this process follows in the next section.

**PERFORMANCE IMPROVEMENT PLANNING PROCESS**

From July 1987 onward, a number of strategic planning workshops were conducted with Indian Head's management, from top executives to middle management and senior staff specialists. The point was made early on with the top management team that they were embarking on a systematic effort to create an awareness that performance improvement is an integral part of everyone's job. This may sound simplistic, and conceptually it is, but in practice, it is a critical and pervasive problem in American organizations. It requires a manager to rethink, if not abandon, institutionalized philosophies and practices. It suggests that high production is a function or by-product of quality rather than an end in itself. It focuses on the element of productivity (combined effectiveness and efficiency) rather than production (efficiency) alone. It asks the manager to look beyond current products, current methods, current levels of production, current quality, and particularly beyond current successes; it asks the manager to be a teacher and mentor not just of techniques and processes but of values.

Strategic planning for performance improvement is a tool that the management team has at its disposal. It is an underdeveloped tool and the initial session with the management team was, in part, an attempt to improve the quality of that tool and improve its role in the organization. The results of the planning process (Figure 7) are a collection of actions (the decision to action interface) that the top management team feels will improve the overall performance of the organization. Different steps of the eight-step performance improvement planning process are designed to address various components of the management systems model. For example, step 7 of the planning process focuses on measurement. Measurement in the management systems model refers to the measurement to data interface, the tools box which represents the collection, storage of, retrieval of, and processing of data, and the information portrayal interface.

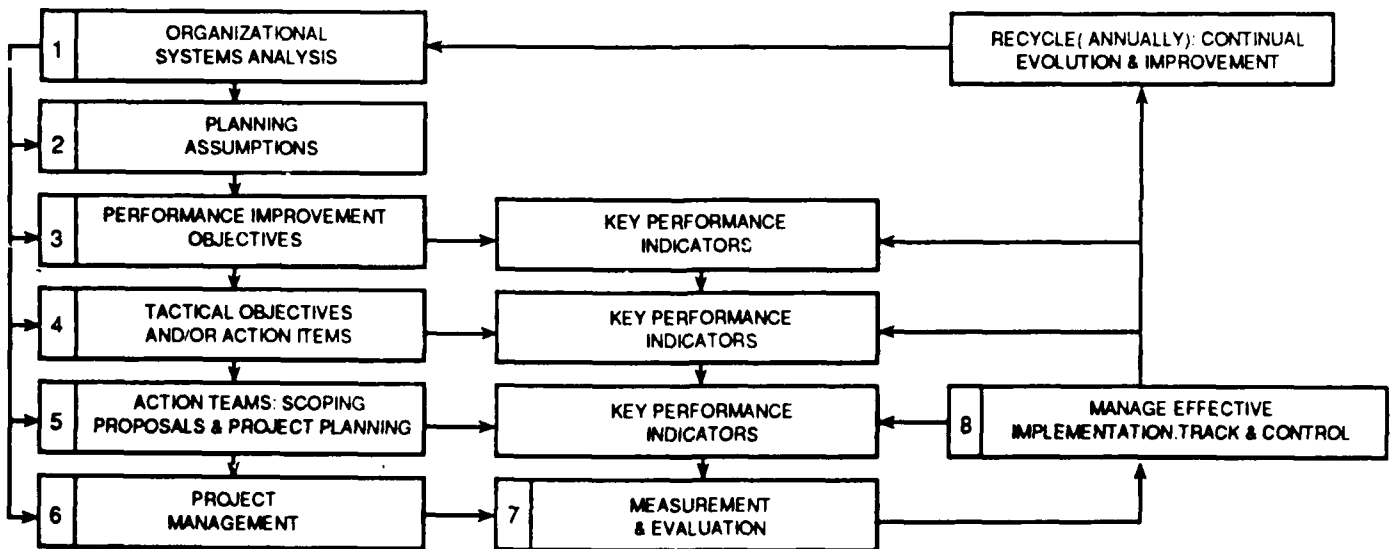


FIGURE 7. PERFORMANCE IMPROVEMENT PLANNING PROCESS

In the eight-step process model, step 1 is called organizational systems analysis (OSA). Its purpose is to prepare the management team to plan for performance improvement. Substeps of OSA are: vision/long-range objectives, guiding principles, mission, input/output analysis, internal strategic analysis, current performance levels, roadblocks to performance improvement, and external strategic analysis (Kurstedt, interviews). OSA should include a review and discussion of up-line or other components of the overall strategic plan. Much of OSA is typically done prior to an actual planning session and then reviewed at the outset of the session. Again, the purpose of this step is to prepare the top management team to do a good job planning for performance improvement. It is a step directly aimed at sharing information and knowledge. If set up properly and facilitated effectively, this step can significantly improve the top management team's overall understanding of the context within which their organization is attempting to operate.

The input/output substep of OSA is worth special mention. It is specifically designed to ensure that the planning team understands and accepts the planning unit of analysis. This may be more difficult than is immediately apparent. Most organizations do not plan as a team; this is part of the problem. As a result, many, if not most, of the top management team see themselves as individual competitors rather than as a basketball or football team. This phenomenon, caused by vertical mobility rather than horizontal mobility, results in local optimums with global suboptimums. The dysfunctional consequence is that the team (organization) does not perform as well as it could or should. Thirty years ago, it did not make as much difference, but today, a basketball team that manages itself as a group of individual competitors is doomed.

Step 2 of the planning process focuses on assumptions. This is the opportunity for members of the management team to scan the future and develop assumptions upon which their plan will be based. Each member of a team silently and individually generates assumptions. One person at a time, assumptions are solicited and posted on flip charts around the room. Assumptions are then analyzed on an importance-certainty grid. This grid provides a mechanism for sorting out among assumptions that are critical and valid, critical but uncertain, critical but invalid as written, etc. This step is specifically designed to share information about members' perceptions of the future. The data become the foundation for contingency plans and for influencing specific objectives developed later in the process in steps 3 and 4. (For more detail on this step, see Sink and Tuttle 1989.)

Steps 3 and 4 focus on the development of objectives. Since this is a consultative and participatory process involving members of the management team, a structured, small-group process called the Nominal Group Technique (NGT) is employed (Sink and Tuttle 1989). The NGT has been found, over the past 12 years, to be a very effective and efficient technique for these two steps. Use of the NGT for the development of objectives assumes that need for acceptance of the resulting objectives is important, that quality of the objectives is important, that information about which objectives should be worked on is dispersed, that time is not so short that it is a critical parameter, and that the members of the management team are capable (i.e., willing and able to participate in planning). The major difference between steps 3 and 4 is one of horizon. In step 3, the horizon is 7 years; in step 4, it is 0 to 3 years. The issue in step 3 is the identification of objectives the team wants to accomplish on or before the 7-year deadline, while the issue in step 4 is the identification of objectives the team wants to begin working on in the next 0 to 3 years. The objectives identified in step 3 are intended to move the organization in the direction of its visions/long-range objectives. The NGT provides a prioritized list of objectives on an ordinal scale. This is helpful in that it provides a first cut at tough resource allocation decisions. The ranking process, step 4 of the NGT, forces members of the management team to make a group decision on which objectives should have resources allocated to them. All organizations have limited resources to devote to performance improvement, and pragmatic decisions must be made as to which objectives should be implemented. Some objectives may be "must" objectives (they must be done), but many will be "want" objectives (they should/could be done). Scarce discretionary resources will have to be allocated to top priority/consensus performance improvement objectives.

Step 5 of the process focuses on implementation planning. Small groups/teams, subsets of the management team, volunteer to "scope out" proposals for top priority objectives. Scoping proposals focus on expanded definitions for the objectives, definitions of what has to be done, who has to do it, when things have to be done, measures of success, and budgets. Scoping proposals can lead to implementation proposals and implementation, which is managed in step 6 of the process. Step 6 involves implementation and project management.

Step 7, a complex and extremely critical step in this process, focuses on measurement. You will note from Figure 7 that there are four basic measurement boxes depicted in the flow diagram—three Key Performance Indicator (KPI) boxes and the step 7 measurement box. KPIs focus on measures of effectiveness, efficiency, quality, and impact for each of the top priority objectives. They are objective-specific. Step 7 focuses on measuring the performance of the organization itself. Measurement systems exist for all organizations. They may not be well designed or developed, but they do exist. The purpose of step 7 is to improve upon what exists. Much progress has been made in the past 10 years in this area.

Step 8 is designed to enhance the probability of effective implementation. The management team reassembles once a quarter to review progress. Normally the first and third quarter review sessions last for half a day. The mid-year review session is typically scheduled for a full day. The fourth quarter review session is also the recycle of the process and lasts for 2 to 3 days. We have found that without these review sessions it is difficult to maintain momentum and entropy usually sets in. Organizations in their fourth cycle of the process find the process gets easier and they get better each year. Recycles do not represent a zero-based development; rather recycles are incremental improvements to previous plans. The continuous improvement orientation becomes an integral part of this process also.

This brief description of the strategic performance improvement planning process is intended to acquaint the reader with a structured, engineered planning process. The process has been designed and developed to respond to flaws in planning that have been identified by practitioners, researchers/academicians, and consultants. A recent review of planning methodologies found that this process has in fact responded to concerns about strategic planning quality. The process also addresses many of the challenges identified by current authors in the field of organization development, quality management, productivity management, and organizational behavior.

## APPLICATION ISSUES

This highly disciplined process cannot be implemented without visible top management commitment. Consequently advanced preparation is advisable. As a minimum, an initial design session to discuss introduction of any strategic planning process into an existing management system must be held. Key decision makers need to be actively involved to ensure their desired outcomes are understood and incorporated. The more receptive the management team is before introduction, the higher the probability for initial success. Resistance to change is universal in complex organizations. This particular process will confront people with the discomfoting needs of continuous change, new rules, new expectations, and new paradigms.

The establishment of this strategic planning process as a way of planning for top management is only part of the practice of planning in the organization of the future. To accomplish the complete renewal and revitalization of the organization, all organizational subsystems will need to incorporate strategic planning if performance improvement is to become organizational reality.

## REFERENCES

- Barnard, Chester I. 1968. *The functions of the executive*. 30th anniversary ed. Cambridge, MA: Harvard Univ. Press.
- Coleman, Gary D. 1988. A critique of VPC's planning methodology. Master's thesis, Virginia Polytechnic Institute and State Univ.
- Grayson, C. Jackson, Jr. and Carla O'Dell. 1988. *American business: a two-minute warning*. New York: Fred Press.
- Kanter, Rosabeth Moss. 1983. *The change masters* New York: Simm and Schuster.
- Lawler, Edward E., III. 1986. *High involvement management*. San Francisco: Jossey-Bass.
- Monetta, Dominic J. 1981. PAM: A research and development project appraisal methodology. Ph.D. diss., Univ. of Southern California, Los Angeles.
- Monetta, Dominic J. and Myron W. Holmes. 1989. *Performance measurement in the navy industrial fund ordnance community*. Naval Ordnance Station, Indian Head, MD, IHTR 1263, TQM-1.
- Rositol, Lucin P. 1974. *An experiment in strategic planning*. Naval Ordnance Station, Indian Head, MD. IHSP 74-107.
- Schein, Edgar H. 1985. *Organizational culture and leadership*. San Francisco: Jossey-Bass.
- Sink, D. Scott, and Thomas C. Tuttle. 1989. *The practice of planning and measurement in your organization of the future*. Norcross, GA: I.E. Press.

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