

DEVELOPING "STRATEGIC SUPPORT SYSTEMS" FOR
ELECTRIC UTILITY STRATEGIC PLANNING

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ABSTRACT

The continued development of strategic planning processes in electric utilities is of utmost importance, given their increasingly complex, dynamic markets. Development will be blocked unless electric utilities begin developing and integrating other organization systems within their strategic planning processes to create "strategic support systems". This article describes three dimensions for assessing stage of development, discusses several major support systems, and notes the stage of development in strategic planning recently found within the industry.

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High quality strategic management is at a premium in today's large electric utility. Given the increasingly competitive and dynamic environments utilities now operate within, the need for effective strategic planning processes is clear (1). Diversification efforts are also creating more complex organization designs which will require sophisticated new planning processes not unlike those of large multidivisional firms in other industries (2).

How well developed a strategic planning process becomes greatly depends upon how well the organization's other systems support strategic planning. Even though strategic planning is widely advocated, the value of strategic planning is also now being questioned (3). Utility executives can find their strategic planning processes either failing to take hold or their further development blocked. The planning process can become a formalized ritual in which few key managers actively participate, or planning quality may be very uneven because a single function or management level has captured control of the process. Overall, there may be a distinct feeling that strategic planning is not delivering desired results.

Difficulties encountered in developing a strategic planning process are a primary cause of both poor strategy formulation and implementation. Difficulties are encountered because development efforts require deeper interventions into the life of an organization than executives anticipate. As a consequence, essential systems needed to support an effective planning process may be absent or inadequate. These systems increasingly need to

become "strategic support systems". The capacity of these systems to support effective strategic planning must be developed simultaneously with the planning process itself.

How these systems can play more strategic roles is the focus for much of this article. The state-of-the-art in utility strategic planning is examined, based upon recent interviews with planning staff in several large electric utilities, a survey of industry literature, and discussions with industry association staff and consultants. Strategic planning initiatives vary greatly among utilities, and a framework for comparing the variety of possible planning processes is first offered.

Three Dimensions for Comparing Strategic Planning Processes

The variety of strategic planning models described in the literature and found in practice emphasizes the need for each organization to find a process design that best fits its own unique situation. As Roach and Allen point out, "Strategic planning systems vary as companies vary, and they must evolve as companies evolve."(4) By implication, the systems that interface and support the planning process will also need to evolve.

A planning process can have several developmental stages that may take several years from inception to effective functioning. Figure 1 below summarizes Gluck, Kaufman and Walleck's view about how financial and capital investment planning has evolved toward a more comprehensive, strategic perspective and set of planning activities (5). This natural developmental process has very direct implications for the design of support systems.

-- Insert Figure 1 Here --

From Reactive to Proactive Posture

This model suggests that the posture of the organization shifts over time from one of being reactive to that of being proactive toward its environment. Initially, the organization takes events and conditions within its environment as "givens" to simply be analyzed and factored into a forecast -- in fact, a constraint-oriented conception of what is possible. For planners and executives, the planning task becomes one of best preparing the organization to adapt to these givens.

Technical skills are emphasized, and performance tends to be defined in quantitative terms (e.g., a five per cent decrease in response rate for customer service). Since prediction accuracy directly impacts performance, planning technique tends to be emphasized over less tangible process benefits such as learning and communication. Emphasis upon technique creates a need for specialists, particularly in staff functions. Eventually, planning is done for, not by, line managers.

A proactive planning posture sees the environment as something capable of being shaped and created by the organization. Here, the task of planners and executives is to qualitatively, not just quantitatively, define what that future should be like, and to create the conditions that bring about that future. Creativity is not the strict domain of corporate staff, and line management plays a central role in generating and supporting new ideas.

The lengthening of time horizons, increasing use of qualitative performance measures, and greater emphasis upon spontaneity and creativity may threaten management control and create problems for the utility which begins moving from a reactive to a more proactive posture. A supportive climate is essential.

From Constrained to Comprehensive Scope

Another trend is the movement over time toward greater strategic planning comprehensiveness and scope. This trend does not literally mean that all activities revolve around planning, only that many forms of planning occur, and these planning forms become effectively integrated over time. Planning may take place within a specific function such as Finance, or within a business division, for example. It will gradually and incrementally link up with other types of planning in additional functions and management levels. Ultimately, these planning efforts will be integrated and coordinated, even controlled, via a single overall strategic planning process. How well many different functions, levels, and types of planning can be incrementally linked to form a truly comprehensive and coherent strategic planning process is an important question.

As our understanding of strategic planning has grown, many organizations have tried to leapfrog the incremental building approach by attempting comprehensive interventions that introduce within a short period of time a fully-developed strategic planning process. The major advantage of a comprehensive intervention is that it introduces a single coherent planning process design into the organization at one time, thus building uniformity. On the other hand, a comprehensive intervention can still take a long period of time and may end some entrenched, but effective practices that do not fit the overall new design.

It is very easy to put a fragile, new planning process under premature stress by applying it to very large, pressing situations, or by asking managers to "live or die" with the results of a new planning process. The task is to reward active participation in the planning process, build the comfort and competencies of managers, and selectively apply planning steps and

techniques to manageable situations. Holding managers accountable for goals and strategies should come only after that point.

From Low to High Influence

Finally, the model in Figure 1 also implies that the overall legitimacy and influence of the strategic planning process should grow over time. As it generates increasing benefits and value to those involved in it, it should become an accepted, if not core, process; in other words, it should become institutionalized.

Who wants strategic planning and at what cost are important questions reflected by the level of top management support and the amount of top management time and resources allocated to the process. A process with very high influence would have CEO and top management support that was visibly shown by active involvement in the process, ready access by planning staff and key managers to top management, and sufficient resources to properly execute planning process steps. Top management would actively monitor implementation efforts through periodic performance reviews and assure that performance was closely tied to rewards, particularly compensation and incentives.

The planning process must offer sufficient incentives for active participation in it. When the process is overdesigned and becomes a serious burden on managers, few incentives exist. Excessive time requirements for line managers, for example, will undermine the process. To encourage participation, incentives must be present, such as tying performance appraisals to participation and rewarding managers for excessive time commitments. An element of "selling" is involved in building active participation, and the "sales campaign" needs to be carefully designed.

These three broad dimensions can be used to describe all strategic

planning processes: proactiveness, comprehensiveness, and influence. There are many combinations possible among the three dimensions, as the discussion of utility strategic planning illustrates later.

Creating Strategic Support Systems

Many difficulties can limit development, but no factor is more limiting than weak strategic support systems. These systems must be sufficiently developed themselves and be designed to reinforce effective strategic planning. Several major systems can be placed within three categories: (a) human resource systems, (b) control systems, and (c) structural systems. Each of these is considered below in terms of their role in supporting strategic planning process development. Figure 2 illustrates the relationship of these systems and their major components to the planning process.

-- Insert Figure 2 Here --

Human Resource Systems

Four human resource-based support systems play critical roles that are only recently being recognized. These are: (a) rewards and incentives, (b) career and management succession planning, (c) management development programs, and (d) professional networks.

Rewards and incentives -- The inability to buffer top managers from the constant and extreme pressures of day-to-day operations inevitably limits the ability of these managers to do good strategic thinking. Organizations also tend to motivate managers to maximize short-run, not long-run, thinking -- the overemphasis upon quarterly performance results being one example. In general, reward systems are not tied to sufficiently long-term performance

criteria.

Recent strategic planning literature has stressed the need to better link incentive systems to managerial performance for strategy implementation (6). However, strategic planning has such fundamental implications for the way an organization functions that many already entrenched rewards and incentives will require major change. Only recently have planners begun to give attention to the behavioral and psychological aspects of planning, and their close cooperation with compensation and human resource units is still emerging. The growing interest in human resource strategic planning is evidence that their cooperation is having an impact (7).

These same researchers also acknowledge how difficult it is to change reward and incentive systems to support strategic planning. For example, the prevailing top management value system can be extremely difficult to change. Strong control-oriented, centralized decision making will prevent lower management risk taking, even though compensation systems may attempt to encourage risk taking. Pay-for-performance plans can also be hampered by strong group norms which make it difficult for a supervisor to discriminate among employees and compensate them differentially. Even when top management is willing to change some norms and practices, constraints like external pressure from investors and creditors can also prevent an emphasis upon long-run performance. Regulatory agencies can also severely limit the use of incentive compensation schemes and "perks".

Nonetheless, performance assessments must be based upon plan execution, not just the performance of a manager or division relative to other managers or divisions. Rewards and incentives need to be tailored to the different design characteristics of the organization as it implements its plan. That is, different divisions need to be evaluated using different performance criteria,

and these criteria need to be tied to different types of rewards such as incentive compensation. For example, the Personnel unit may need to do more strategic planning to better anticipate the mix of technical skills needed to deal with new technologies like cogeneration. Personnel staff should therefore be evaluated and compensated based upon the amount of time and effort they devote to planning relative to their other activities.

Career & Succession Planning Systems -- Career planning and management succession systems also need to be examined. Talented managers should routinely be offered opportunities to actively participate in the strategic planning process at appropriate points in their careers. Those managers' skills will be broadened and exposure given to other executives as a result. Increased exposure to a broader range of management activities and perspectives encourages strategic thinking.

Another important feature of succession plans is that they can help overcome the shortcomings of semi-annual and annual performance appraisals. A succession plan can track a manager's performance over a longer time period and monitor the long-run impacts of previous job assignments, thus providing a more accurate basis for rewarding long-term job performance.

Management Development Systems -- In too many cases, strategic planning has been introduced without adequate management development. Knowledge of planning tasks, schedules and techniques is not sufficient. Managers also need to know such facts as the history of their organization, the nature of their larger industry and the major issues within it, the roles of other managers and units in the planning process, and the skills necessary for executing a specific strategy. The manager new to strategic planning is being asked to think and act more strategically, and such an orientation needs extensive cultivation.

Many managers will need skill development in areas not directly related to strategic planning. Effective planning requires effective communication, interpersonal relations, conflict resolution, and group leadership skills. Internal training staff will also need to work with any planning groups formed to negotiate roles and help build team effectiveness.

Management development systems are increasingly being tied to strategic planning as a means for improving the performance of corporate strategies (8). In their most sophisticated form, career planning and management development systems are being linked to identified skill deficiencies among key managers. Individualized management development plans are being designed and tailored to fit long-term succession plans, for example. These plans are also being tied to performance appraisal and pay systems to reinforce the use of concepts and skills presented in the training programs.

Professional Networks -- Engaging managers in professional support groups composed of other managers also engaged in strategic planning can be a powerful means for expanding their thinking and facilitating action. Such networks develop skills, provide information and technical assistance, and a source of moral support. Encouraging the participation of managers in these networks and associations, even helping form one if none exist, can be useful for strategic planners.

Control Systems

Strategic control systems support performance against plan by measuring and monitoring critical variables, events, activities, and behaviors, with timely feedback to planners and managers. Of special importance are two control systems: (a) decision support systems, and (b) budgeting systems. Each of these is briefly discussed below.

Decision Support Systems -- Considerable attention has been given to the redesign of management information systems to serve as true decision support systems for management (9). High quality, timely information is obviously essential for effective strategic planning. As the environment becomes more dynamic and complex, however, the need for more global, real-time information is putting considerable pressure on most information systems. The rate of change in information technologies is, in itself, a serious problem. The task for strategic planners is to participate in the design of the decision support system to assure that desired outcomes result. Timely, accurate information must be presented where it is needed and in a form that supports thinking and action.

Budgeting System -- Without doubt, the budgeting system is one of the most critical strategic support systems because it translates plans into operational terms and allocates resources to those responsible for executing those plans. Most utilities have well developed budgeting systems, yet these systems must often be redesigned to integrate annual operating budgets with long-term capital investment programs and forecasts, and business-level strategy execution efforts.

As the planning process develops, a level of sophistication and flexibility will be required in the budgeting system that may be well beyond that of an existing system. For example, the managers most deeply involved in planning for new or problematic businesses will need access to resources beyond the close control of typical line unit operating budgets. Access to a limited pool of uncommitted resources is also an important incentive for managers to do more creative, but riskier planning. A resource pool can contain both funds and access to specialized staff for initial, unplanned studies and research which is too early for formal funding.

Structural Systems

Strategic planning is also supported through careful attention to the structural design of jobs and operating units, particularly their reporting relationships and proximity to each other. The three structural systems examined here are: (a) job designs, (b) workplace design, and (c) planning staff location.

Job Design Systems -- Through careful job design, the long-range planning content of a position can be increased by adding new responsibilities and tasks. The job and position descriptions of all key managers involved in planning need to reflect top management's performance expectations for those positions, particularly since performance appraisals may be based upon those descriptions.

Workplace Design -- Given the critical need for effective communication and interaction between managers in the planning process, physical space design is also a strategic planning issue. Many steps in the planning process, for example, call for events which require space that is conducive to effective group work and close interaction. The design of facilities and the location of key managers must be examined in terms of how these help or hinder needed interaction.

Planning Unit Location -- Ready access to key decision makers is a prerequisite for effective strategic planning, and the isolation of planners from important sources of information will damage the quality of planning. Centralizing planning staff at a corporate level has both advantages and disadvantages; for example, staff can become isolated from line operating managers even though they have ready access to top managers. Decentralizing the planning process is essential to prevent isolation. Strategy teams

composed of managers across functions and levels can, for example, help decentralize planning responsibility. Planners need to actively interact with line managers, but their role should always be that of a facilitator and resource person.

When the planning process is "captured" by a single function, or confined to a single level of management, it is very difficult for the planning process to be as visible and influential as needed. Planning can become, for example, only a top management exercise which never filters down to lower management levels. It may also get captured by a functional department such as Finance or Marketing, and will reflect their bias, as a consequence. The planning process will never become as comprehensive or as influential as needed when it is out of touch with a broad cross-section of management levels and functions.

Electric Utility Strategic Planning

Strategic planning processes within large electric utilities still remain more reactive, constrained, and with less influence than most planning staff and managers would like. This is not to say that very sophisticated, creative forms of planning are not taking place, only that these initiatives have not yet developed to their fullest. The present state of development likely reflects the relatively late start of many utilities in strategic planning. As a consequence, there is a generally limited integration of the support systems discussed above into the planning process. However, the state-of-the-art appears very mixed, and comparisons using the three dimensions discussed above are needed.

Proactiveness

Utilities have historically tended not to take very proactive postures,

although the industry is now beginning to do so. For example, Duke Power helped register voters and clarified potentially damaging issues in a 1984 governor's race. In general, however, sophisticated computer modelling, econometric forecasting, and productivity monitoring systems have tended to emphasize cost management and control. Strong engineering and operating management cultures have developed, which are reflected in the responsibility for strategic planning being typically placed within demand forecasting and corporate performance units. As typical consequences, issues management, marketing, and business diversification functions are often not brought into the strategic planning process. A "predict and prepare" ethic still prevails, although discussions about the most desirable, qualitative characteristics of future growth are beginning within the industry. Interest in issues management is also high, and recent diversification efforts also indicate a greater willingness to experiment with the future.

Comprehensiveness

Even though a variety of forecasting and issues assessment activities may be taking place simultaneously within a firm, too often these are not being effectively integrated within an overall strategic planning process. Planning, in other words, is frequently disjointed and "captured" by specialized, operations-oriented staff functions.

Planning also tends to be confined to one or two management levels or within one division. In one utility, the highest levels of management are actively involved in setting strategic objectives, and have created high-powered strategy teams to monitor implementation. Important functions such as human resources have still not been integrated into this process. As a result, performance reviews and compensation systems do not reinforce

strategy implementation to the extent desired, but changes in other support systems such as management development programs are being considered to better prepare other management levels for strategic planning responsibilities. In still another utility, top management discusses and defines goals and objectives, yet linkages with lower business-level managers are only now being created.

In still another utility, one division has developed a very effective strategic planning process for itself, but other divisions have not yet adopted this model. Top management support for planning has been sporadic in the past, and several important support systems are still not reinforcing the diffusion of planning beyond this one division. The planning function has never been located or staffed to maximize its influence. Here, too, many changes are reportedly underway.

Perhaps the most comprehensive strategic planning process was found in a utility that was part of a larger holding company system. It operates with great autonomy from parent company strategic planning, yet is able to draw upon the parent's considerable resources when needed. The subsidiary has a strong marketing orientation, but also effectively integrates budgeting and performance monitoring systems because of the unique role played by the planner in all these areas. The process surfaces strategic issues, focuses discussions across functions and levels, and targets resources to the most critical issues. The process is actively managed with established timetables, and staff are closely tied to professional networks, as well.

Comprehensiveness is an important issue within the industry because of the trend toward business diversification. The ability of electric utilities to do effective multidivisional strategic planning is still uncertain. For example, the roles of holding companies relative to their subsidiaries, and

the roles of the subsidiaries to each other, are still being clarified. As a result, there is a corresponding uncertainty about the best design for a strategic planning process able to guide the rapidly-diversifying utility. The implications for strategic planning are still ambiguous, and need to be explored further.

Influence

In terms of the overall influence, results are again mixed. In more than one case in the study strategic planning appears to be an "idea in good currency" -- that is, widely advocated, but not actively supported through allocations of staff, budgets, and lasting top management support. Many utilities have histories of sporadic support due to leadership changes.

The level of support is demonstrated by how the planning function is staffed and who staff report to in the management hierarchy. In more than one case, staff must also do special studies and "fight fires", even though this means that the timetable for their planning process is compromised. To the credit of still other utilities, planning staff are very knowledgeable and well positioned to effectively control a number of strategic activities underway within their organizations. They also have direct reporting lines to senior management, and control slack resources to allocate to special needs as they occur. In the best instances, they have responsibility for financial forecasting and budgets, and stay sensitive to Governmental Affairs and Marketing unit activities and needs.

Next Steps for Electric Utilities

Electric utilities need to actively work to develop the comprehensiveness of their planning initiatives. Additional functions and levels need to be

brought systematically within their planning processes. In general, many of the support systems discussed above are still far from "strategic".

Expanded management development efforts are needed to introduce to several levels and functions strategic planning concepts and skills. Electric utility top managers are frequent participants in strategic planning education programs, but intensive and sustained in-house programs that deepen management involvement and promote a unified planning culture are rare.

Reward and compensation systems will need to be made more flexible to reflect management performance against plan. Examples of creative attempts to link goal accomplishment to compensation can be found. In one utility, for example, annual goals were identified by top management, based upon their sense of the most critical issues confronting the organization. Compensation was tied to goal accomplishment through a complex, but clearly communicated, process that resulted in the organization's matching of employee contributions to the organization's employee stock ownership plan. Nonetheless, the systematic linking of compensation to long-term goal accomplishment is the exception.

Career and succession plans need to be more closely tied to long-term management development strategies. Performance appraisal systems also need changing to reinforce the importance of participation in strategic planning by managers. In terms of job designs, key managers' roles definitely need inspection to assure that a significant percentage of their effort is being devoted to the strategic planning process. It may also be useful to deepen strategic planning experience within utilities by hiring trained staff and managers from other industries.

In many cases, decision support systems are being developed in recognition of the changing role of Management Information Systems in these

organizations. The continuing attempt to develop on-line, real-time reporting of comparative performance measures -- "total factors" reporting -- is a good example of recent trends toward more sophisticated systems. How well these systems can integrate all major functions within them, and build their strategic rather than operational orientations, is not clear.

Very importantly, the role and influence of the strategic planning function needs greater examination. This is not to say that a formalized unit, with lots of staff and large budgets, is advocated. To be effective, however, the person and unit delegated responsibility for the strategic planning process must have the authority and access to the resources needed to do the job. Only top management can provide that, and the rapid development of the strategic planning process needs to be a higher priority for top management than currently found. In most cases, top management support is present. However, this support must now be applied to broader efforts to create the strategic support systems needed to justify their confidence in strategic planning.

Finally, the impact of regulatory groups on utility strategic planning needs to be recognized. Obviously, the quality of strategic planning done by regulators directly impacts the quality of the strategic planning possible within the utilities they regulate. Prompt upgrading of strategic planning concepts and skills within these regulatory groups is essential if electric utilities are to communicate effectively with them about strategic issues and goals.

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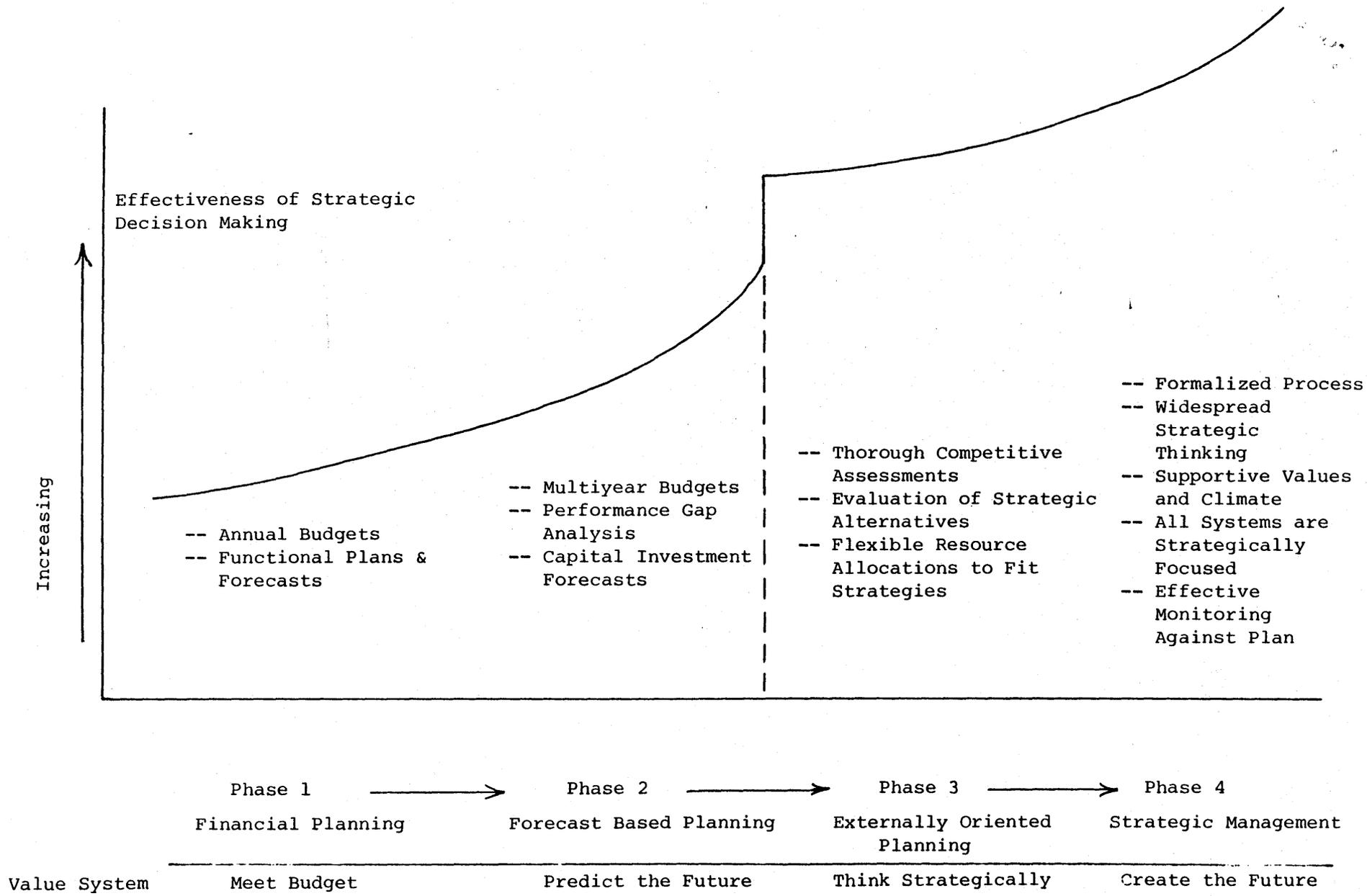


FIGURE 1 -- Gluck, Kaufman, & Walleck's Phases of Strategic Planning Evolution.

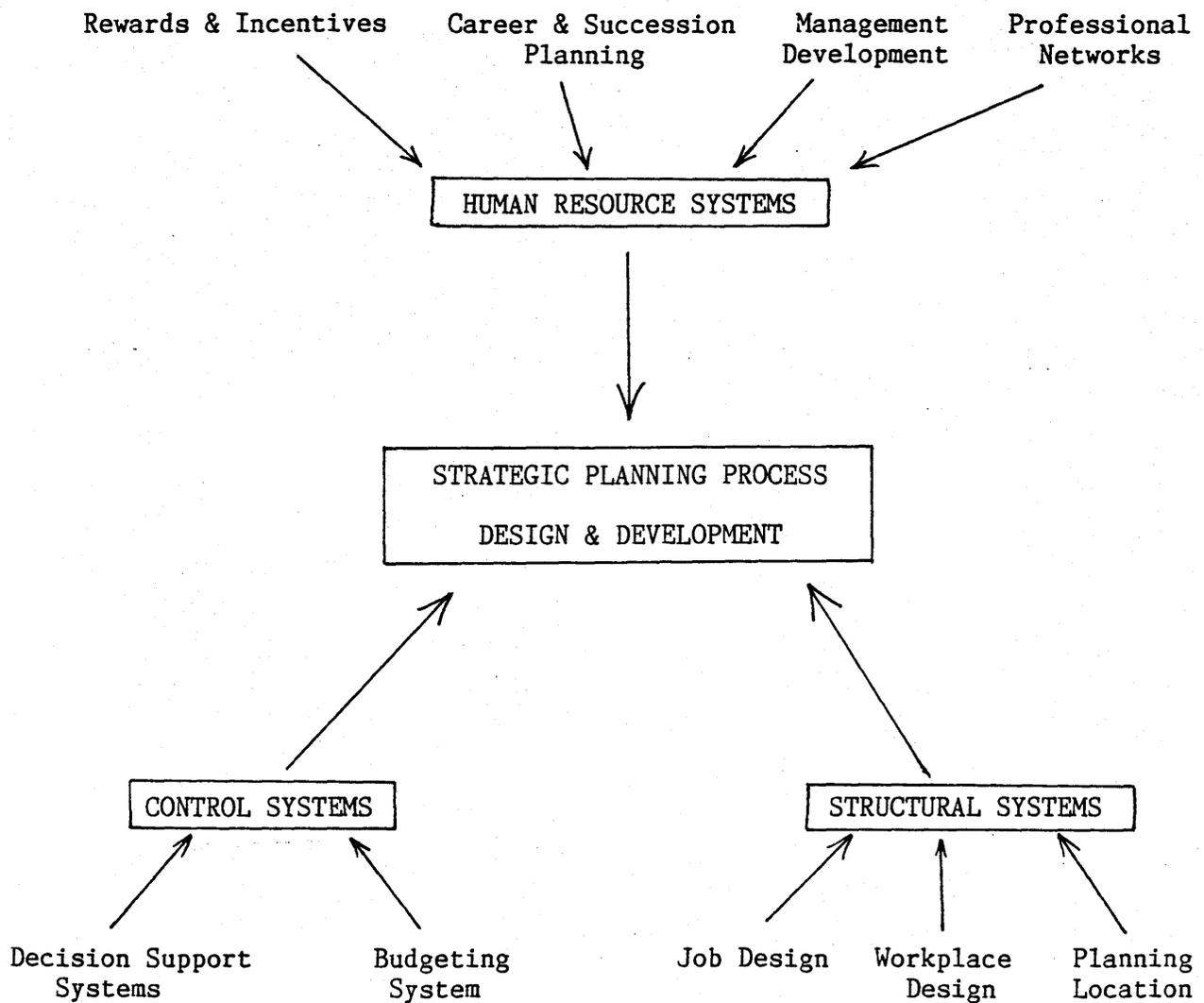


FIGURE 2 -- The Three Major Strategic Support Systems & Their Components