The integration of issues management into the institutional strategic planning process at Pennsylvania State University is discussed. The significance of issues management as an organizational process is also considered. Stages of the issues management process are: (1) scanning the external environment to identify strategic issues; (2) analyzing these issues for likely impact and probability of occurrence; and (3) developing suitable responses for managing the issues. The usefulness of issues management stems from its potential to act as an early detector of significant external trends, and to provide the mechanisms for developing effective strategies to respond. In addition to planning by the traditional organizational structure, issues management permits cross-unit planning. An early aspect of the strategic management process at Pennsylvania State University was the initiation of a macro-level external assessment. Six assessment committees were appointed: population trends, economic trends, federal and state policies, societal, technological and scientific trends, graduate and research markets, and changing higher education structure and competition. Later annual planning will require unit level scanning and micro-level external assessments by lower-level planning units. (SW)
Issues Management

and the Role of Strategic Planning

G. Gregory Lozier
Executive Director

Kumar Chittipeddi
Research Assistant

Office of Planning and Analysis
The Pennsylvania State University
University Park, PA 16802

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Elizabeth F. Fox, Chair
Forum Publications Editorial Advisory Committee
ISSUES MANAGEMENT AND THE ROLE OF STRATEGIC PLANNING

C. Gregory Lozier  
Kumar Chittipeddi  
The Pennsylvania State University

Abstract

The concept of issues management is gaining the increasing attention of both researchers and practitioners in the field of strategic planning. Issues management—which is concerned with the identification, analysis, probability, and timing of a developing issue, and organizational response—can spell the difference between success and failure of the planning effort. This paper delineates the attempt of a major public university to integrate issues management into the institutional strategic planning process. The intent is to make issues management an ongoing and systematic organizational exercise.

The authors have been actively involved in the development and implementation of a strategic planning process for The Pennsylvania State University. Although the early formulation of the specific process did not utilize the issues management rubric, we have concluded that strategic planning is better defined and understood when considered in the context of issues management concepts. Our purpose in this paper is to offer some insights on the significance of issues management as an organizational process, and on its relationship to the more comprehensive notion of strategic planning, and to discuss the preliminary methodology adopted at our university for incorporating issues management into the strategic planning process.

Definition

We begin with a working definition of issues management—a synthesis of the major ideas found in the literature:
Issues management is an ongoing organizational process concerned with the identification of issues that might impact upon the strategic directions of the organization, the analysis of these issues to establish their relevance to the organization and the likelihood of their occurrence, and the development of appropriate organizational responses to these issues. Furthermore, issues management process is one component of the strategic planning process.

This definition implies that there are several stages in the issues management process: 1) scanning the external environment to identify strategic issues; 2) analyzing these issues for likely impact and probability of occurrence; and 3) developing suitable responses for managing the issues.

As with most organizational science concepts (e.g., leadership, power, and authority), there is not unanimity among issues management proponents about its definition. One point of difference relates to the scope of issues to be subsumed under the issues management mantle, i.e., whether the range of issues should be global or comprehensive in nature, or should be restricted to those issues deemed strategic to an organization. We have adopted the latter point of view. Ashley (1983) offers the following definition of a strategic issue:

An external development which could impact the organization's performance; To which the organization must respond in an orderly fashion; Over which the organization may reasonably expect to exert some influence (p. 11).

There are two major reasons for adopting this "limited scope" position. The first reason stems from the major premise underlying strategic planning, that the effectiveness of the organization is contingent upon the degree to which it is attuned to its external environment. We see issues management as being a pivotal element in this attunement process. As Freeman (1984) has pointed out: "The key to success for issue management ... must be its ability to surface and track real issues that affect the strategic direction of the corporation or business unit . . ." (p. 221).
The second reason is based upon the recognition of cognitive and motivational limitations to human and organizational information processing capabilities (March and Simon, 1958; Cyert and March, 1963). Theories on individual decision making have revealed the biases that are inherent in human information processing, and the relationship between information overload and the distortions in decision making heuristics (Tversky and Kahneman, 1980). Issues management must, therefore, deal with a narrower spectrum of issues so as to minimize the negative consequences of information overload and the idiosyncrasies of human decision making.

The other aspect of the argument on the issues management definition hinges on the comprehensiveness of the process, i.e., whether the issues management process should be defined to include identification, diagnosis, relevance to organization, and development of appropriate responses, or whether it refers solely to the issue resolution aspects of the process. Our position on this debate is consistent with that of Ashley (1983) who has suggested that the process encompasses all aspects of identification, analysis, and control.

Significance

The usefulness of the issues management process stems from its potential to act as an early detector of significant external trends, and to provide the mechanisms for developing effective strategies to respond to those trends. According to Dutton, Fahey, and Narayanan (1983), issues management, or what they have labeled as strategic issue diagnosis (SID), "affects both the process and content of subsequent phases of strategic decision making" (p. 308). The issues management process must, therefore, be linked to the more comprehensive strategic planning process in order to be effective.
Linkage with Strategic Planning/Management

While some researchers make a distinction between the terms strategic planning and strategic management (e.g., Hofer, et al., 1980; pp. 1-7), our own preference is to view these terms interchangeably. According to Schendel and Hofer (1979), there are six major components in the strategic planning/management process: (1) goal formulation; (2) environmental analysis; (3) strategy formulation; (4) strategy evaluation; (5) strategy implementation; and (6) strategic control (p. 14). Our conceptualization of the linkage between issues management and strategic management is presented in Figure 1.

As Figure 1 indicates, issues management describes the integration of the environmental analysis into the organization's strategic thinking process. The effectiveness with which the organization is able to identify, monitor, and assess critical external issues will impact upon the information that goes into development of alternative strategies, the evaluation of each alternative, the selection of a strategy, and its implementation. What issues management really does relative to the strategic planning process is to support it with updated and organized information on relevant external issues.

A second way in which one might view the link between strategic planning and issues management is to consider issues management as an alternative to the process of planning by formal organizational structure. In many ways, issues management objectives are similar to those of the matrix
Figure 1. Linkage between Issues Management and Strategic Management (Adapted from Schendel and Hofer, 1979; p. 15).
planning structure or the strategic business unit (SBU). The criteria for creating matrix structures or strategic business units usually resides in external factors. For example, the SBU planning structure "is an attempt to segment a large and diverse business structure into planning units that have control over most of the factors that affect the business strategy— for example, marketing, manufacturing, or technology" (Gluck, et al., 1980; p. 16).

Traditional organizational structures based upon functional or product classifications lead to administrative problems when faced with rapid environmental and technological change, and product-market diversity. This has created the need for new planning structures that can cut across traditional organizational boundaries and permit more systematic and flexible organizational response. (For a comprehensive examination of the role of structure and process in strategic planning, see Galbraith and Nathanson, 1978.)

The issues management process' real strength lies in its ability to get at issues that transcend traditional organizational boundaries, or issues that necessitate cross-unit strategies. It is our belief that planning by traditional organizational structure is necessary but can be supplemented by the cross-unit planning which the issues management process permits. This is particularly true when one is dealing with universities. Most of the basic research occurs in disciplinary units, and degrees are typically awarded by disciplines. Thus the technology, the products, and the traditions of universities make it necessary to preserve the disciplinary structure, with very limited recourse for reorganization.
The issues management process is a good means of preserving the traditional structure of universities while imbuing it with the advantages of cross-organizational or cross-unit planning.

There is a third aspect to the link between issues management and strategic planning. Much of human understanding is believed to occur through symbolic processes (Morgan, 1980). The relationship of symbolism in the strategic planning process becomes evident if one combines Chaffee's (1985) premise about strategy making being a sense-making exercise with the observations of others that sense making and understanding occur primarily through the use of symbols (Pondy, et al., 1983). Issues management conveys to the members of the organization a clear message that they should be attentive to these strategic issues, and that these issues reflect the values and the direction of the organization. The issues management process also has implication for the political dynamics within the organization. According to Pfeffer (1981), "Moving of formerly ignored issues into the decision agenda permits the possible development of coalitions and political bargaining within groups that might be interested in the new issues" (p. 147).

Implementation

Since 1977, The Pennsylvania State University has had an on-going planning and budgeting process that has reallocated approximately $20 million internally to mandated cost increases and high priority programs (see Lozier and Althouse, 1983). However, by 1983 it was clear that, although the reallocation was considerable and had affected units differentially,
the University continued to make the budgeting adjustments largely at the margins and in the absence of broad institutional direction. Longer-term priorities needed to be established and we looked to strategic management concepts, including, it turns out, issues management, to renew the planning process.

A primary added dimension that strategic management introduces to standard forecast-based financial planning is the greater attention given to the assessment of the external environment. This attention is necessitated by the current diversity, pace, and interconnectedness of change. As Ian Wilson (1983) of SRI International has noted, "changing social values, government regulations, and shifts in the energy and economic growth equations are now also important factors in managerial decision making" (p. 9-2). As noted above, environmental scanning is one aspect of a comprehensive issues management process, a necessary prelude to analysis and action.

In a paper presented as part of this same Forum, Pflaum and Delmont (1985) provided an enlightening and comprehensive look at the scope and methodology of environmental scanning in the corporate, government, and higher education sectors. We have not attempted to duplicate that effort, but hope to supplement that discussion by summarizing Penn State's experience with environmental scanning as a component of issues management.

It seems to us that colleges and universities, especially the large research universities, have a distinct advantage over the corporate sector in that the comprehensive expertise needed to conduct environmental scans resides within the organization. We also recognize the need to differentiate
between strategy levels and the fact that issues percolate up and down the organization. Bourgeois (1980) writes of the general environment issues that impact corporate strategy, and operating environment issues that are more explicitly relevant to a particular business strategy. This distinction for the university translates into institution-wide issues and college or department issues.

Accordingly, an early aspect of the strategic management process developed for Penn State was the initiation of a macro-level external assessment. The objectives of the assessment were two-fold: 1) to examine trends and issues likely to generate new or expanded opportunities or to provide threats or constraints to existing structures, programs and philosophy, and 2) to provide a context and direction for further micro-level external assessments by lower level planning units. Six assessment committees were appointed—population trends; economic trends; federal and state policies; societal, technological and scientific trends; graduate and research markets; and changing higher education structures and competition. Over 60 faculty and staff members consulted and worked for four months to produce a comprehensive report that became part of the University's Strategic Planning Guide issued in the Fall of 1984. Figure 2 shows the matrix schedule that was developed to compile this report.

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Insert Figure 2 about here

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<table>
<thead>
<tr>
<th>Environmental Sector</th>
<th>Factor/Trend</th>
<th>Opportunity or Constraint</th>
<th>Affected Decision Areas</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Clientele</td>
<td>Rapid growth in manufacturing and mining in developing countries</td>
<td>Opportunity and Constraint</td>
<td>Enrollment</td>
<td>Demand for technical training in engineering, mineral sciences and sciences, business and theoretical and applied economics is increasing for international students. Instability of foreign currencies is placing a hardship on nations to send students abroad.</td>
</tr>
<tr>
<td>Governmental Policy</td>
<td>Deregulation and divestiture</td>
<td>Opportunity and Constraint</td>
<td>Institution-wide Research</td>
<td>Higher access and traffic charges will increase the University's costs of education and specific programs, especially research; however, the increased competition may result in an improved long-run cost structure for University users.</td>
</tr>
<tr>
<td>State</td>
<td>Lagging support</td>
<td>Constraint</td>
<td>Institution-wide Research</td>
<td>Reductions in library resources diminish the probability of securing state-of-the-art computing, scientific and engineering equipment.</td>
</tr>
<tr>
<td>Technology</td>
<td>New devices and advancements in communications technologies</td>
<td>Opportunity and Constraint</td>
<td>CES Programs Personnel Budget Research Intercollege and intercampus cooperation</td>
<td>More flexibility for administrative and faculty consultation; savings in travel costs and personnel productivity/hours; requires familiarity with operation by personnel; inadequate reception at times; opportunities for long distance education at the state, national, international level; opportunity for faculty sharing; savings in faculty hours.</td>
</tr>
<tr>
<td>Research Competition</td>
<td>&quot;Isolated,&quot; rural setting of main campus</td>
<td>Constraint</td>
<td>Mix of programs</td>
<td>Less opportunity than some competitors to interact with industry and other universities for joint research projects.</td>
</tr>
</tbody>
</table>

Figure 2: Examples of external assessment matrix reporting schedule
As colleges and other units of the University began to develop their own strategic planning assessments, a starting point for many was to review these matrices and identify and refine trends that had more explicit bearing upon their particular units. In some instances, this refinement would demonstrate that the trend either did not apply or even was quite the reverse at the micro-level. The quality of the micro-level external assessment, and its linkage to internal evaluations and unit priorities and goals, then became a significant criterion in the reviews of unit strategic plans. The importance of the external assessment as a strategic planning issue in its own right was emphasized by demonstrating its value through the macro-level assessment.

As part of the entire issues management domain, the external assessment assists in raising the key issues that confront an organization. Often these issues are not unit or-business specific, but cross organizational boundaries. A limitation to a strategic planning process that is bound to structure can be the inability to formulate "tomorrow's concept of the business" (Gluck, et al., 1980 p. 16). Issues management, therefore, provides a planning structure around which strategic thinking about an issue can be encouraged, less constrained by organizational preconceptions of and alternative responses to the issue. At Penn State, the mechanism adopted for dealing with cross-organizational issues was the establishment by the Office of the President of strategic study groups. Identification of what issues should result in the appointment of study groups is the product of matching the more systematic scanning of the formal external environmental assessment and the critical sensing of the President and Executive Vice President/Provost of issues and opportunities that could be derailed or inadequately addressed by formal structural planning in the colleges. The strategic study group becomes a means, therefore, to manage the top priorities of the University's executives.
In contrast to the existing collegiate structure, study groups are "flexible structures that can be adjusted and fine tuned by altering the power distribution of the existing roles" (Galbraith and Nathanson, 1978, p. 711).

To date, strategic planning groups have been appointed in the following areas: (1) materials science; (2) academic computing; (3) mass communications; (4) technology education; (5) management education; (6) biotechnology; (7) enrollment management and (8) telecommunications. Each group has received a specific charge that provides a preliminary assessment of the issue and assigns the group members the responsibility for following basic strategic management stages in the development of alternative strategies and recommendations for the Office of the President.

One study group in particular--engineering technology--demonstrates its relationship to the issues management process. The current administration in Harrisburg has initiated the discussions that could lead to a formal proposal to convert area vocational-technical schools (AVTCs) in low population areas to technical institutes offering associate degrees. Working through the independent Pennsylvania Association for Colleges and Universities, Penn State has taken a leadership role to redirect attempts to establish state policy that would expand post-secondary space and access at a time when the prospective student age group is declining and state support to existing public institutions is already underfunded.

At the same time, Penn State has some in-house problems with its associate degree engineering technology programs. Penn State, through its 17 branch Commonwealth Campuses, is the largest grantor in the country of engineering associate degrees. The engineering technology study group was appointed to reexamine curricular and personnel policy relationships between the campus system and the College of Engineering. A preliminary report of the
study group's findings and recommendations, aimed in part to improve the University's ability to respond to statewide associate degree career demands, was made to the Board of Trustees at a special workshop. Attending the session was the secretary of education, an ex-officio member of the Board and the state administration's point person in the prospective proposal regarding the AVTCs. Although the issue is still pending, a pro-active issues management approach has helped the University monitor and influence the likelihood of legislation before a formal bill is presented to the state legislature.

Caveats and Implications

Penn State's experience with issues management and strategic planning/management is in an early stage of development. Preliminary strategic plans from colleges and various support units were only received in March and a complete tie-in to the University's planning and budgeting process will only occur in the formulation of the 1986-87 and beyond fiscal years. The fruits of the several study groups as reflected in change--organizational, leadership, and/or resource reallocation--are only just emerging in the cases of three of the study groups. Yet, the dynamic aspect of strategic planning requires that we examine and modify the process as we go along. We raise several questions about the directions that certain aspects of the process, in particular with respect to issues management, should take:

Issues management planning vs. organizational planning. As Penn State's strategic planning process was being developed, several proponents of the issues management approach to planning argued that no planning should be done according to existing organizational alignments. They argued that only conventional and not strategic thinking would be the result of this traditional approach to planning. Strategic planning provides, however,
the link between strategy formulation, evaluation, and control on the one hand, and general management functions such as the coordination of functional area activities and the development of operating decisions on the other (see Hofer, et al., 1980). It was determined that a process that was solely issues management oriented would not establish that link to operational concerns. For example, resources are allocated along functional lines and not according to issues. Hence, the process has to link issues management to the on-going organizational strategic planning.

Managing the number of issues. Because issues management crosses unit boundaries, strategy implementation is far more dependent upon top management initiatives. This requires considerable time, energy, and good will on the part of the executive leaders. The number of strategies that can be pursued at this level are limited, suggesting that at any one time the number of study groups, in Penn State’s instance, from which recommendations will be forthcoming should be controlled. It should be acknowledged that prospective strategic study group issues do emerge from the plans of colleges and other units. Also, formal proposals to establish specific study groups have been made to the Office of the President. This reinforces, however, the need to manage the process, including the number of issues.

Centralization vs. decentralization. Should the University institutionalize environmental scanning at the macro-level, or focus central energies on promoting issue identification at the unit level? Having completed an effective macro-level assessment, we are now grappling with the next steps needed to facilitate on-going scanning. The annual planning rounds scheduled through the University’s strategic management process will of necessity require unit level scanning. The trends for research funding and federal policy vary considerably, for example, between the Colleges of Earth and Mineral Sciences and Business Administration. Is a regular or
periodic higher level scanning required? We believe it is and will be working during 1985-86 to build upon the initial macro-level effort.

**Issue legitimization.** Effective leadership often knows well the issues that provide the greatest opportunities and constraints for a university. Earlier in this paper we discussed the role of symbolism in strategic planning and the need for acceptance of a decision agenda. We believe that a formalized issues management program such as Penn State's strategic study groups provides structure for the consultation and legitimization of new directions that are part of the action plan of a college or university chief executive officer.

**Conclusions**

We conclude our discussion with four observations regarding issues management and strategic planning. The first is to reiterate our view that the concept of issues management is best understood in the context of the broader process of strategic planning or management. A practical concern for issues management is in adapting it to the planning processes that are best for a given institution and its leadership.

Second, much of the recent research and writing about higher education organization and administration deals with various aspects of "management science," e.g., strategic management, issues management, and enrollment management. Despite the connotations conveyed by the term management science, strategic planning and decision making are not a science, in which we view planning as something to do right. Rather, we must regard planning as an art, in which the emphasis is on doing the right thing.
Third, as an art, effective planning is highly dependent upon effective leadership. There is a strong relationship in the quality of leadership and the ability to reach decisions regarding priorities and strategies. In the absence of decisions, there is no payoff from strategic planning; without leadership, decisions are not as likely to be forthcoming.

Last, the purpose of strategic planning is to position our institutions for the future. We are less concerned about predicting the future, and more aware of making decisions today so that we may be where we want to be tomorrow.
References


