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Data-driven strategic plans yield significant returns for institutions. The author gives an overview of strategic planning and useful techniques that yield meaningful results.

Institutional Research's Role in Strategic Planning

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Higher education literature is replete with articles and book chapters urging institutions to plan strategically. Escalating demands from higher education boards of trustees and state boards of higher education for institutions to demonstrate their effectiveness are an impetus for institutions to carry out strategic planning. One need not be particularly well informed to have heard calls from Congress, state legislatures, the U.S. Department of Education, and regional and professional accreditation bodies for data-driven evidence to demonstrate that institutions and programs are assessing their outcomes. Still another, and perhaps more compelling, reason for institutions to engage in strategic planning is its promise to help predict and manage the future.

A strategic plan that does not make use of data verges on propaganda. Although customarily appealing in a visual sense, a data-free plan seldom offers a useful framework for gauging an institution's future. In contrast, a strategic plan that focuses on data and uses those data to pose realistic goals and strategies to meet goals portends a significant return for the institution creating it. This pathway is more challenging but infinitely easier to navigate for institutions that have created and maintain an institutional research office.

The Role of Institutional Research

Institutions that have organized and centralized their data enjoy an obvious advantage in grappling with strategic planning and other issues. As the drumbeat for accountability, planning, and demonstrating effectiveness to

internal and external stakeholders intensifies, the stature and importance of institutional research offices on most campuses have grown substantially. The institutional research office is often the first point of contact for faculty and administrators who need data and information to meet internal and external demands. Skillful institutional research personnel enjoy a pivotal role in accessing an institution's data and converting those data into "actionable" information needed for planning.

Developing actionable information intersects with the need that all institutions have to be strategic in their thinking. This chapter seeks to inform campus communities, including faculty and staff, and perhaps also institutional research offices themselves, about the elements of strategic planning that can be combined to create a strategic plan. Together, the techniques that are highlighted here form the basic foundation from which institutions can make rational choices about the future. Most of these techniques emanate from the institutional research office, although they can be executed by other offices or units whose expertise matches the nature of the work.

On many campuses, institutional research exists to generate routine reports required by state, federal, and accreditation agencies. This is a valuable function, especially given the access to institutional data that the institutional research office typically possesses, but if it remains the only function then the institution misses out on significant opportunities. Institutional research offices that spend the majority of their time pursuing excellence in reporting typically have little energy or motivation to look across organizational boundaries to identify new opportunities where their unique skills can benefit the total institution. Examples of extended involvement with the campus can be helpful:

- Basic student outcome research, including retention rate, transfer rate, and graduate employment rate
- More sophisticated student outcome research, including assisting faculty and staff in their efforts to formulate and measure student learning outcomes
- Studies that correlate the institution's curriculum and service offerings with student and employer demands
- Enrollment management research that documents the institution's penetration within key demographic segments
- Focus group research with students and faculty that compare perceptions about the adequacy of institutional services and the teaching-learning equation
- Analysis of competitor institutions located nearby as well as other institutions that compete with the home institution program by program
- Internal program review that informs the institution about why a given program grows, declines, or remains stable

Among these potential projects for institutional research offices can be seen the foundation of a strategic plan. Offices that respond to these challenges

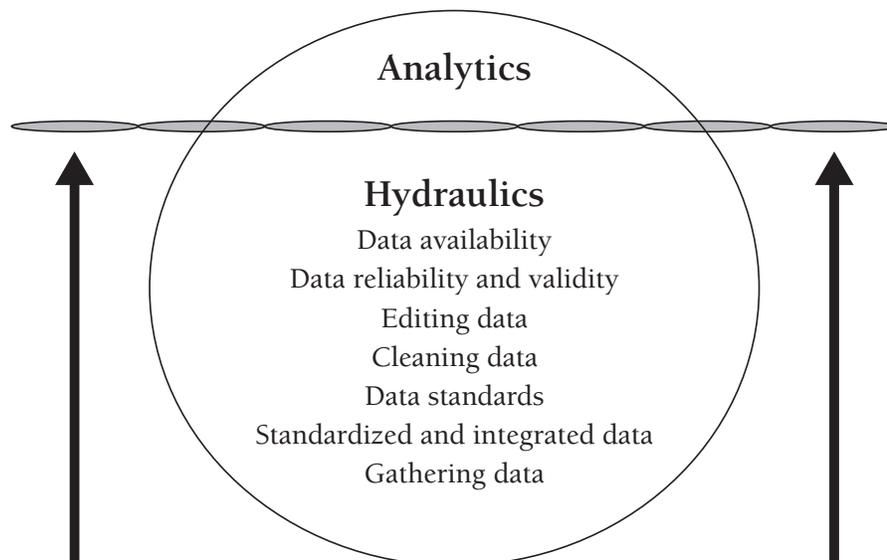
are likely to have already pushed themselves beyond a routine reporting function, toward creation of actionable information on behalf of the institution. Such offices are also likely able to assist faculty and staff in understanding actionable information and the complexities raised by seemingly simple questions. Clarifying those questions in ways that can be addressed by an institution's data systems or by new data generated through primary research is a key element in advancing the institution. Not surprisingly, these functions go a long way in creating a nimble institution that responds well to strategic planning.

There exists a persistent myth among many that institutional data are, or should be, "computerized" and therefore instantly available to those who simply know the right keys to press or the correct click of a mouse. In reality, considerable effort must be expended by the institutional research office to gather, clean, edit, and organize data so as to produce correct results. My experience in analyzing these issues for higher education organizations is that unless considerable time and effort have been expended in basic data gathering functions, the amount of work that is purely analytical in nature is proportionally smaller than the "hydraulics" necessary to ensure data quality. Figure 7.1 depicts this relationship.

Elements of Strategic Planning

Stated simply, strategic planning is a process of anticipating change, identifying new opportunities, and executing strategy. Strategic planning can also be described as idea management in which new ideas are developed (or brainstormed), categorized, processed, and implemented. It is a journey that begins best when appropriate data, drawn from multiple sources and using

Figure 7.1.



multiple techniques, are transformed into actionable information. Contrasted to “pedestrian information,” actionable information makes obvious the next steps an institution should consider. For example, on most campuses understanding that an institution’s enrollment is increasing or decreasing is usually conventional wisdom. Understanding which market segments within the overall enrollment are growing and the institution’s penetration rate of those segments helps with understanding what actions may be needed to manage growth and should create an appetite for more actionable information.

A successful model for strategic planning incorporates both quantitative and qualitative data collection symbiotically. Tashakkori and Teddlie (2003) suggest three temporal sequences for combining quantitative and qualitative data: (1) concurrently, where two types of data are collected and analyzed in parallel; (2) sequentially, in which one type constitutes a basis for collection of another type; and (3) conversion, where the data are “qualitized” or “quantitized” and analyzed again. Involving faculty and staff in this process is very important if the goal is to ensure that information is valid and translatable to those who will use it. Here we illustrate the blending of qualitative and quantitative techniques in the basic elements of most strategic plans.

In addition to traditional elements commonly found in a strategic plan, I draw on my experiences as a strategic planning facilitator for institutions of higher education to highlight several unique elements that can influence institutional strategy.

Environmental Scan. Virtually every strategic plan features an environmental scan of those external factors and trends that influence an institution’s future. An environmental scan requires a volume of information but is helpful only if one knows what within the volume is critical to the development of strategy for that institution. Data for environmental scanning are abundant and grow more so every day on the Internet. Much of these data, however, fall short of criteria for an environmental scan because they lack an actionable connection to the institution. Knowledge of the institution’s current operations is required and is most frequently generated by the institutional research office’s continuous dialog with key faculty and staff.

Interviewing Key Stakeholders. The need for careful information gathering is illustrated further by skill in interviewing key informants. These interviews can yield helpful qualitative information. A necessary first ingredient is to establish rapport with the interviewee. In general, the more the interviewer prepares for these interviews and the deeper she or he understands basic institutional data, the better the information yielded. Although quantitative data indicate the extent to which outcomes are being met, qualitative interviews speak more to how participants feel about what is happening within an institution. Because mobilizing participants is critical to future actions, deep understanding of their perceptions advances the strategic planning agenda.

Focus Groups. The term *focus group* has taken on multiple meanings as a technique such that it is frequently maligned. The term has been used variously to describe casual conversation with more than several people in a random setting—a clear misuse of the concept (Fern, 2001). More appropriately, a focus group is a deliberate event planned to gather specific information. It has a structure that is understood by the facilitator and the participants. Well-planned and executed, focus groups are a qualitative exercise involving a protocol of questions designed to elicit communication while simultaneously not circumscribing meaningful dialog.

Large Group Strategy Sessions. Among the most effective strategic planning techniques in my experience are large group meetings designed to promote an interchange of ideas about strategic issues facing an institution. These sessions are divided between presentation of institutional data, ideally formulated as actionable data, and subsequent discussion by participants. In this way, they differ from focus groups because a strategy session seeks to give everyone a common framework for discussion of institutional strategy.

Properly executed strategy sessions can be an opportunity for key faculty and staff to lend support for the changes that can result from strategic planning. Although the temptation is to label these sessions as focus groups, they are intended to produce two-way learning. In my experience, few stakeholders have been exposed to the concept of actionable data to make meaningful contributions to strategic planning; strategy sessions are a way of educating stakeholders about actionable information and what issues are critical to their institution. Strategy sessions are also a way for the facilitator to learn about what stakeholders see as critical and to capture nuance through deep listening to students, faculty, and administrators and their range of perspectives and opinions.

Geographic Information System (GIS) Maps. Most audiences do not react quickly to presentations of textual or tabular data, especially if the rows and columns are numerous or the font on a PowerPoint presentation obscures easy reading. In these instances, visual information becomes an attractive vehicle for conveying large amounts of data. For example, data drawn from census tracts—small statistical subdivisions of a given county—can illustrate where a given institution should target marketing and recruitment efforts. Geographic information system (GIS) maps offer a quick, visual overview of population changes, including shifts in income, minority subpopulations, age, and housing values, for a strategy session or dissemination across the institution in other ways. Constructing these maps is a quantitative activity, driven by software and technology. Interpreting these maps, on the other hand, is a qualitative activity in which interviewees and strategy session participants offer insight about population shifts that effect the institution.

Competitor Analysis. Few institutions are aware of the range of instructional programs with which they compete for students. The entire institution likely competes for students, but program-by-program competition is

increasingly as important to strategy as overall institutional competition. Knowledge generated from this exercise can be the basis for creating new programs or modifying existing ones. It can also point to programs that might be eliminated. Gathering Web information on the programs offered by competitors within proximity to the institution, or from a wider range of institutions that compete regionally or nationally for given instructional programs, is an exercise in tabulating data. The nomenclature needed to describe programs so that they can be categorized accurately is learned best from interviewing academic staff and faculty. Titles of programs may not match their content; astute institutional planners will want to ensure that programs appearing on the surface to compete with their institution's programs are in fact comparable.

Enrollment Forecasting and Scenario Building. Many institutions create enrollment projections, based on a variety of techniques (see, for example, Brinkman and McIntyre, 1997). I have a preference for projecting future institutional enrollments from two key pieces of information: (1) current enrollments at the institution, and (2) actual and projected population counts for the institution's catchment area. Unduplicated headcount data are obtained for the most recently concluded academic year. Population counts and projections are gathered from the U.S. Census Bureau, or ideally from a state or local agency that predicts disaggregated population growth by race, gender, and age. The more disaggregated these data, the more precisely market shares can be established. Second, an increase in precision is also gained if an institution such as a community college or regional state university draws students from a narrow catchment.

Calculating market shares from external data and summing those shares to account for an institution's current enrollment produces a projection that operates in concert with predicted population growth and shifts within those growth patterns. The maximum number of years that an enrollment projection can be expected to be accurate is perhaps no more than twenty. Though a baseline projection is fundamental to strategic planning, it is premised on two assumptions: (1) the institution's current enrollment management techniques, including recruitment and retention activities, will not change during the projection period; and (2) the population projections on which the enrollment projections are based are accurate and remain the same during the projection period. The first assumption does not require the institution to do anything new and for this reason is termed a "status quo" projection.

Use of market segments allows the effect of deliberate institutional decisions to be modeled. These scenarios are developed to demonstrate the effect of increasing a particular segment by a preselected proportion, most often 2 percent over a five-year period. Other, higher thresholds can be set to match the institution's aspirations and capabilities, but 2 percent presents a goal that is widely perceived as within the range of possibility for most institutions. Decision makers are frequently most interested in modeling these scenarios to include increasing shares of minority students, working-age

students (most typically, those potential students aged twenty-five to forty-four), and younger students in general.

Instructional Program Vitality. Yet another strategic exercise that cannot be based on numbers alone is analysis of program enrollment data. Upward and downward trends in individual programs are a first place to look when analyzing an institution's instructional menu, but the whole story needs to be researched before conclusions are drawn. For example, it may be that enrollments have declined in response to decisions to limit course availability, combining courses across disciplines, faculty retirements, or lack of program marketing. Each potential reason, and perhaps other considerations, should be balanced against other criteria such as shifts in labor markets, expired curriculum that doesn't match current realities, and actions taken (mostly inadvertently) that discourage enrollment. Without knowledge of these factors, gained qualitatively by listening to stakeholders internal and external to the institution, an incomplete picture of program vitality is more than probable.

Internal and External Surveys. One-on-one interviewing and strategy sessions may not substitute for gathering opinions and insights by way of survey research. Data gathered from existing questionnaires and those developed specifically for planning can furnish multiple perspectives about a college and its environment. A survey can be a traditional paper-and-pencil version or, increasingly, Web-based. Interpreting survey responses is usually regarded as a quantitative activity. Crafting responses that lend themselves to unambiguous interpretation is also a quantitative task; creation of individual survey items, however, draws most often on questions developed during the course of qualitative research.

Analyses of Labor Market Information. The Internet has made labor market information more accessible than ever; it is now easy for colleges to map the connection between the outputs of their career and professional programs and the world of work. Ten-year forecasts are available for new jobs that will be created and for jobs that will grow most rapidly by county, region, state, and nationally. At the national level, these forecasts are connected to the most significant source of postsecondary education or training required for entry in each occupation forecast.

Even though employment forecast data are helpful, strategic planners do not expect a perfect fit between job titles and program labels. The best prediction of academic programs requires knowledge not found in external databases. Insights required to accurately estimate the need for programs match closely those insights necessary to gauge program vitality. Qualitative skill in interviewing techniques (including the aforementioned) entails establishing rapport with interviewees as well as guiding the interview, asking appropriate questions about processes, engaging in empathy for the interviewee, and tabulating interview results. These skills are beyond the scope of this chapter, but they are touchstones for ensuring that qualitative techniques can effectively guide strategic planning.

Moving to Operational Planning

A common shortcoming of strategic planning is the failure to connect the dreams and aspirations that arise in strategic planning to specific actions required of operational planning. Many college and university Websites contain visually appealing strategic planning documents, but most do not feature specific actions to support strategy, assignment of responsibility for carrying out those actions, or even more rarely commitment of dollars and human resources to make strategic dreams a reality. There is also a tendency to assign responsibility for action to committees, rather than individuals. Plans of this variety are little more than public relations pieces designed to persuade readers that an institution is carrying out strategy. Mapping the intersection between strategic planning and operational planning requires considerable finesse in blending mixed methodologies.

Action Strategies and Success Factors. As hinted earlier, most strategic plans fall apart because they aren't specific about the actions required to reach goals; nor do they specify a method by which their accomplishment can be measured. To close this gap, faculty and staff should be required to develop specific "action strategies" to support the strategic goals developed during the course of the strategic planning process. This process should be iterative and require both a sense of the possible strategies and success factors that an institution might pursue as well as an estimation of whether they can reasonably be expected to be successful. This is especially the case when the focus is to unite the strategic plan with accountability within the institution for specific results.

Online Planning. Engagement of faculty and staff in strategic planning is related to the transparency of the planning process. To this end, when collecting potential action strategies and success factors across the entire organization an institution should create an online planning Web page. This site can lay out a comprehensive overview of the planning process while seeking new quantitative and qualitative data from all layers of the college to inform—and potentially to collaboratively improve—action strategies and success factors.

Summary and Conclusion

This chapter seeks to give an overview of strategic planning and how institutional research can add value to strategic planning processes for institutions of higher education. It also seeks to enumerate those specific techniques that can be combined to create a meaningful strategic plan. Data and information harvested through these techniques can promote a vision of the institution's future. Certainly, there are other analyses that can be as strategically potent as those suggested here, notably calculating instructional program enrollment trends, matching program outcomes to labor market trends, and understanding one's own institution's instructional productivity.

What has been portrayed here are those techniques that institutions should consider as the basic foundation for strategic planning.

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