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STRATEGIC LEADERSHIP

One of first questions usually posed to candidates for university presidencies concerns their vision for the future of the institution. However, beyond such platitudes as "enhancing the life of the mind" or winning a national championship in a revenue sport, the development of a vision for the future of a university is an extremely difficult task. Universities are notoriously complex institutions whose evolution is strongly influenced by their unique cultures, histories, and traditions. Even those internal candidates possessing intimate familiarity with the institution can find the development of a vision an uphill struggle. Imagine the plight of external candidates, unfamiliar with the institutional saga of the university and given only a brief honeymoon period to propose their vision and plan for the future of the institution.

Yet there have been numerous examples in which visionary university leaders were able to craft both a compelling vision for the future of their institutions and a successful strategy for achieving it. Some notable twentieth-century examples include Clark Kerr, who designed and built the greatest university system in the world in the University of California; Frederick Terman, who transformed Stanford into the scientific and technological powerhouse that created Silicon Valley; Richard Cyert, who led Carnegie Mellon University to a

position of leadership in key areas, such as computer science; Charles Young, who transformed the University of California, Los Angeles, from a city college into a great research university; and Richard Atkinson, who led the young University of California campus in San Diego to become one of the leading research universities in the world in less than two decades. Although many Wolverines would hate to admit it, this list would also include John Hannah, who transformed Michigan Agriculture College into a world-class research university, Michigan State University.

The University of Michigan has been fortunate to have been led by visionary presidents during various periods of its long history. Henry Tappan transformed Michigan into one of the nation's first true universities. James Angell and, much later, Harlan Hatcher presided over periods of extraordinary growth in the university. Harold Shapiro understood the need for Michigan to transform itself into a predominantly privately supported university characterized by high standards if it was to sustain its quality during an extended period of weakened public support.

While there are many examples of visionary leadership in higher education, it is also fair to suggest that it is certainly not the norm. Beyond the challenge of developing a bold vision for a university's future, leading the institution toward such visions can be a hazardous task. It is little wonder that most university presidents tend to polish the status quo rather than proposing new paradigms, content to allow their institution to drift along without rocking the boat, until they disembark for their next leadership assignment.

Yet while the status quo may be the safest course for survival of university presidents, it can pose substantial risks to the institution. Universities that drift along, without a vision or strong leadership, can founder on rocky shoals. Although a university may seem to be doing just fine with benign neglect from the administration building, over a longer period of time a series of short-term tactical decisions will dictate a de facto strategy that may not be in the long-range interests of the university. Leading a university during a time of great social change without some formal planning process is a bit like navigating the Titanic through an iceberg floe in the dead of night. Simply reacting to challenges and opportunities as they arise can eventually sink the ship.

At Michigan, we had encountered a particularly large iceberg during the early 1980s with the loss of much of our state support. Harold Shapiro and his administrative team had done an admirable job at addressing the near-term crisis through a "smaller but better" strategy. But Shapiro realized the need to develop a longer-term planning process capable of not only navigating the treacherous waters ahead but seizing the opportunities presented by an increasingly knowledge-intensive society. This was to be my primary assignment when he lured me from my position as dean of the College of Engineering to become the university's provost in 1985. The two of us were to work closely together, as president and provost, to design and launch just such a planning process, although he would remind me, "Man plans while God laughs!"

Here, we accepted several key assumptions. First, we recognized that the University of Michigan was a very complex system, responding to the cumulative effects of its history as well as to its interactions with the changing external world. Despite this complexity, we believed it critical that the university take responsibility for its own future, rather than having its future determined for it by external forces and pressures. In particular, we sought a far more strategic and opportunistic approach to leadership, rather than simply reacting to the changing world about us. Second, we believed that the University of Michigan would face a period of unusual opportunity, responsibility, and challenge in the 1990s. During this pivotal decade, it could indeed, must—seize control of its own destiny by charting a course to take it into the next century. Finally, we were convinced that the challenges facing higher education in the late twentieth century required a new paradigm for the university in America and that the University of Michigan was in an excellent position to develop this model for the nation, just as it had in earlier times through its trailblazing saga.

THE APPROACH

As dean, as provost, and then as president, I sought progressive, flexible, and adaptive planning processes, capable of responding to a dynamic environment and an uncertain—indeed, unknowable—future. My goal was to develop flexible strategies that avoided rigid

paths or deep ruts and positioned the university to take advantage of windows of opportunity to pursue well-defined objectives as they arose. In a sense, I utilized an informed dead-reckoning approach, in which one first selected strategic objectives—where we wanted to go-and then followed whichever path seemed appropriate at the time, possibly shifting paths as strategic plans were updated and as additional information and experience dictated. I never assumed that the planning framework was rigid, since what might appear first as constraints could, with skill and cleverness, frequently be transformed into opportunities. When state appropriations were cut, my team used this as an opportunity to convince donors that since they no longer provided as much funding to the university when they paid their taxes on April 15, they should shift to funding us through private giving, much like a private university. When publishers dramatically increased the cost of serials to our libraries, we were able to convince the Big Ten universities that it was time to set aside competition and share library resources, creating, in effect, a gigantic resource with over 78 million volumes.

Another aspect of our planning was the belief that the real creativity, innovation, and wisdom in a university existed at the grassroots level, among faculty, students, and staff. Hence, every planning effort involved numerous planning groups—some formal, some ad hoc—that played a very essential role in guiding our efforts. Many brainstorming sessions at the President's House went late into the evening, challenging assumptions, proposing alternatives, and wondering "what if." I viewed my role as stimulating, harvesting, shaping, and refining the ideas bubbling up from the university community.

As I have stressed throughout this book, long-enduring institutions, such as universities, need to begin with an understanding of their history, tradition, and values—their institutional saga. These form the initial conditions for any planning process. Beyond this, it is important to gain an understanding of possible constraints that might restrict planning options, since these might be challenged and relaxed. In our case, a faltering Michigan economy that was no longer able to support a world-class public research university was clearly a serious concern. But so, too, were an array of demographic issues, such as the need to serve underrepresented minority communities and

to embrace diversity as key to our capacity to serve an increasingly diverse state, nation, and world. Michigan's long history of international activities had sensitized us to the growing trends of globalization, just as the university's leadership in developing and implementing new technologies, such as the Internet, had given us a good perspective of technological change.

Key in the planning effort was the task of developing a vision statement for the university, a task made particularly difficult by the very broad range of activities and roles of the institution. I began by challenging our planning groups to come up with a single word to characterize our future, such as *excellence* or *public* or *diversity*. Next, I asked the groups to combine several of these words into a descriptive phrase, such as "a leading, public, research university." Finally, I asked them to use this exercise to develop, in a phrase (or, rather, a bumper-sticker slogan), a vision for the university's future. Here, there were lots of suggestions (accompanied by lots of discussion): "the nation's leading public university" (but why not simply "the world's leading university"?), "the university of the common man" (or even "the university of the poor"?), "America's university" (but was this not rather impolitic for a "state" university?), and so on.

Soon our planning efforts began to converge on a vision stressing two important themes: leadership and excellence. Looking back over the history of the university, we realized that quality by itself was never quite enough for Michigan. Here, the aspiration of going beyond excellence to achieve true leadership clearly reflected our understanding of the university's history as a trailblazer. This process eventually led to the following planning vision for the 1990s:

Vision 2000: To position the University of Michigan to become a leading university of the twentieth century, through the quality and leadership of its programs, and through the achievements of its students, faculty, and staff.

Such a leadership vision required a comprehensive strategy based on improving and optimizing the key characteristics of the university: quality, capacity (size), and breadth (comprehensiveness). Yet even at this early stage of visioning, the campus community became both

engaged and energized in exercises to determine the university's future.

THE ACTION PLAN

Of course, vision statements are empty without follow-through, actions, and results. To shift the institution into action mode, my administrative team set out several general challenges—which I termed "the challenges of excellence"—for the next phase of the planning exercise. First, we asked for a rededication to the achievement of excellence. It was time for Michigan to pick up the pace, by building a level of intensity and expectation that compelled us to settle for nothing less than the best in the performance of faculty, students, and programs. We encouraged the university to strive for even higher quality, since it would be the achievement of excellence that would set us apart and provide us with the visibility to attract the elements so essential to the enterprise—human and financial resources, outstanding students and faculty, and support from the public and private sectors.

Second, if we were to achieve excellence, we needed to commit ourselves to focusing resources. In decades past, regular increases in public support had allowed the university to attempt to do a great many things with a great many people and to attempt to do them all very well. However, in the future of constrained resources that we faced, we could no longer afford to be all things to all people. Quality had to take priority over the breadth and capacity of our programs and become our primary objective.

Third, as we focused our resources to achieve excellence, we needed to keep in mind that our highest priority was academic excellence—outstanding teaching, research, and scholarship. The University of Michigan's reputation would not be built on the football field. It would be based on the quality of its activities in scholarship and learning.

Fourth, the university needed to be responsive to changing intellectual currents. Academic leadership demanded pursuing the paths of discovery that influence the evolution of intellectual disciplines. We were increasingly finding that the most exciting work was occurring not within traditional disciplines but, rather, at the interfaces between

traditional disciplines, where there was a collision of ideas that could lead to new knowledge. At Michigan, we wanted to stimulate a transition to a change-oriented culture in which creativity, initiative, and innovation were valued. We needed to do more than simply respond grudgingly to change; we needed to relish and stimulate it.

Fifth, the university faced the challenge of diversity and pluralism. Our ability to achieve excellence in teaching, scholarship, and service would be determined over time by the diversity of our campus community. We accepted our responsibility to reach out to and increase the participation of those racial, ethnic, and cultural groups not adequately represented among our students, faculty, and staff. Beyond this, we faced the challenge of building an environment of mutual understanding and respect that not only tolerated diversity but sought out and embraced it as an essential objective of the university. Here, we were clearly sowing the seeds that would later grow into the Michigan Mandate and the Michigan Agenda for Women.

Finally, to achieve the objective of leadership, we proposed to focus wherever possible on exciting, bold initiatives, consistent with the Michigan saga as a trailblazer. We aimed to stimulate, encourage, and support more high-risk activities. As steps in this direction, we began to reallocate each year a portion of the university's academic base budget into a Strategic Initiative Fund designed to support a competitive grants program addressing key university priorities, such as undergraduate education, diversity, and interdisciplinary scholarship. This fund was augmented by private support. Once again, the fish foodball theory of university behavior (see chapter 6) came into play, as highly creative proposals and initiatives began to bubble up from faculty, students, and staff to address each of our priorities.

Some of our initiatives were obvious, if challenging. We set a goal of building private support for the university to levels comparable to our annual state appropriation, which not only led to the first \$1 billion fund-raising campaign for a public university but also stimulated a far more aggressive strategy for investing the university's assets, including its growing endowment. We developed new strategies for rebuilding the university's campuses with internal funding and private support, rather than waiting for the next round of state support for capital facilities. We provided deans and directors with strong

authority, along with accountability, in the control of their own revenues and expenditures, essentially completing the decentralization of the university's financial management begun under Harold Shapiro.

We were prepared to make major investments in high-risk intellectual activities, but only in those areas where we had established strength. Some of these investments achieved spectacular success. For example, our investment in the management of NSFnet resulted in the creation of the Internet. Other investments failed, such as the major (but premature) effort to build the nation's first clinical programs in human gene therapy. But even in failure we learned valuable lessons. To create even more of a spirit of innovation, we sprinkled several "skunk works" activities about the campus (analogous to the famous Lockheed Skunk Works), some in existing academic units, such as the transformation of our School of Library Science into a School of Information, and some in new multidisciplinary facilities, such as the Media Union (see chapter 6).

Finally, we set a series of stretch goals, including becoming the national leader in such areas as campus diversity, sponsored research activity, faculty salaries, clinical operations, and the global outreach of our academic programs. As we began to make progress on our strategic goals, we fell into a pattern of raising the bar, compressing the timetable, and upping the ante. By the early 1990s, we began to realize something very surprising: we were not only achieving our objectives, but in most cases, we were going far beyond the goals we had originally set. The strategic goals associated with Vision 2000 were essentially achieved by 1993, seven years ahead of schedule. Hence, we soon began to wonder what to do for an encore.

LESSONS LEARNED AND THE GROWING CONCERN

There are many lessons, both good and bad, to be learned from Michigan's comprehensive planning effort during the 1980s and early 1990s, particularly when it turns out to be remarkably successful. Beyond the obvious challenges (to build on the institutional saga; to keep your eyes on the goals; to be candid, demanding, and evidence-based in your appraisal of progress and generous in your praise of achievement), other challenges arose from both the nature and the

particular history of the university. I had recognized early in my provost role how important it was to shift the university away from a reactive, crisis mode to a more strategic focus after the trauma of state budget cuts and difficult reallocation decisions during the 1980s. Yet this was very difficult for some of our academic units. Not surprisingly, long-range planning was difficult for such a large and diverse academic unit as our College of Literature, Sciences, and the Arts, with almost 1,000 faculty, 20,000 students, and 45 departments. But, to our surprise, it was equally difficult for some of our professional schools, such as our School of Business, which had difficulty understanding the planning process or accepting any vision other than "We want to be better than Harvard!"

After the hard financial times of the 1980s, it was similarly difficult to re-create the risk-taking culture that had been such an important part of the Michigan institutional saga as a trailblazer. Institutions all too frequently choose a timid course of incremental, reactive change because they view a more strategically driven transformation process as too risky. They are worried about making a mistake, about heading in the wrong direction or failing. While they are aware that this incremental approach can occasionally miss an opportunity, many mature organizations would prefer the risk of missed opportunity to the danger of heading into the unknown.¹

Yet in the end, through considerable effort by the administration in engaging the university community (and perhaps a certain tolerance for the planning inclinations of an engineer as president—actually, of two engineers for a time, as the provost position was filled first by Chuck Vest and then by Gil Whitaker, a former dean of the School of Business), the planning process was successful in achieving essentially all of our original goals. The Vision 2000 strategy, designed to move the university toward both the leadership vision and the strategic intent of transformation, succeeded beyond our wildest expectations. But this very success turned out to be one of our most formidable challenges.

With each step we took, with every project we launched, with each objective we achieved, I became increasingly uneasy. The closer the university approached its vision for the future, the more distant and uncertain it appeared to me, and the less confident I became that we

were headed in the right direction. It became increasingly clear that the forces driving change in our society were far stronger and more profound that we had first thought. Furthermore, many of the social, economic, and technological forces driving change in higher education were disruptive in nature, leading to quite unpredictable futures. The future was becoming less certain as the range of possibilities expanded to include more radical alternatives.

Put another way, I became convinced that the Vision 2000 effort, while bold and challenging, was in reality only a positioning strategy, designed to achieve excellence and leadership, but within the current paradigm of the university in twentieth-century America. To be sure, this effort accomplished many of the tasks necessary to prepare the university for the new century, such as financial restructuring, diversifying our campuses, and rebuilding our physical environment for teaching and research. But the real challenge lay ahead: to transform the university so that it could better serve a rapidly changing society. We had now positioned the university for leadership. The next task was to determine where it would lead. By the early 1990s, it had become apparent that we needed to shift from our Vision 2000 plan, based on a series of small wins with an occasional opportunistic surge, to a bolder agenda based on blockbuster goals. Put another way, we needed to shift from positioning the university as a leading twentiethcentury institution to transforming it into a twenty-first-century university designed to serve a profoundly different world.

INSTITUTIONAL TRANSFORMATION

So how does an institution as large, complex, and bound by tradition as the University of Michigan go about the process of transformation? Sometimes, one can stimulate change simply by buying it with additional resources. More frequently, transformational change involves first laboriously building a consensus necessary for grassroots support. But there are also times when change requires a more Machiavellian approach, using finesse—perhaps even by stealth of night—to disguise as small wins actions that were in reality aimed at blockbuster goals. And I must confess that there were times when, weary of the endless meetings with group after group (including, at times, our own

governing board) to build consensus, we decided instead to take the Nike approach and "just do it," that is, to move ahead with top-down decisions and rapid execution—although in these cases, the president usually bears the burden of blame and hence the responsibility for the necessary apologies.

Michigan's own history provides many examples of both the payoffs and the risks of institutional transformation. Tappan's effort in the 1850s to transform a small frontier college into a true university was certainly important in the history of American higher education, although it cost him his job in the end. Little's effort in the 1920s to restore the collegiate model was also a transformative effort, but it failed to align with Michigan's history and tradition. During a period of relative prosperity, Hatcher had the capacity to launch numerous transformative initiatives important for the university—for example, the Residential College, the Pilot Program, and the Center for Research on Learning and Teaching. But during the 1960s, this transformation effort went unstable, as the university was overtaken by political activism that sought not to transform but, rather, to destroy the establishment. This illustrates the danger that arises when a change process becomes entangled with ideology and special interest agendas that divert it from the original goals. In the best scenario, the values and traditions of the institution will provide important limits on the process of change, so that the transformation process does not lead to a destructive outcome.

Of course, I was no stranger to transformation efforts, some highly successful—for example, the rebuilding of the University's College of Engineering, the Michigan Mandate and Michigan Agenda for Women, and the transformation of the university's research environment. But there had also been failures—for instance, the effort to better align auxiliary activities, such as the Athletic Department and the Medical Center, with the core academic values of the university; the attempt to shift the regents' perception of their roles from that of political governors to loyal trustees of the institution; and the effort to build stronger coalitions of universities, such as the Big Ten Conference, to work together on common goals. Through these efforts (both the successful and the unsuccessful) and from the experience of other organizations in both the private and public sector, it was clear that

the more ambitious goal of institution-wide transformation—the reinvention of the university itself—would depend heavily on several key factors.

First, I recognized the importance of properly defining the real challenges of the transformation process. The challenge, as is so often the case, was neither financial nor organizational. Rather, it was the degree of cultural change required. We had to transform a set of rigid habits of thought and arrangements that were currently incapable of responding to change either rapidly or radically enough.²

Second, it was important to achieve true faculty participation in the design and implementation of the transformation process. This was true in part because the transformation of faculty culture is generally the biggest challenge of all. I believe that faculty participation should involve its true intellectual leadership rather than the political leadership more common to elected faculty governance.

Third, experience in other sectors suggested that externalities—both groups and events—were not only very helpful but probably necessary to lend credibility to the process and to assist in putting controversial issues (e.g., tenure reform) on the table. Unfortunately, universities—like most organizations in the corporate sector—rarely have been able to achieve major change through the motivation of opportunity and excitement alone. Rather, it takes a crisis to get people to take the transformation effort seriously, and sometimes even this is not sufficient.

Finally, it was clear that the task of leading transformation could not be delegated. Rather, as president, I would need to play a critical role both as a leader and as an educator in designing, implementing, and selling the transformation process, particularly with the faculty. Furthermore, my presidential leadership had to be visible out in front of the troops rather than far behind the front lines.

Hence, in 1993, the university turned toward a bolder vision aimed at providing leadership through institutional transformation. This objective, termed "Vision 2017" in reference to the date of the two-hundredth anniversary of the university's founding, was designed to provide Michigan with the capacity to reinvent its very nature, to transform itself into an institution better capable of serving a new world in a new century. This transformation strategy contrasted

sharply with the earlier, positioning strategy that had guided the university during the 1980s. It sought to build the capacity, the energy, the excitement, and the risk-taking culture necessary for the university to explore entirely new paradigms of teaching, research, and service. It sought to remove the constraints that would prevent the university from responding to the needs of a rapidly changing society—to remove unnecessary processes and administrative structures; to question existing premises and arrangements; and to challenge, excite, and embolden the members of the university community.

Of course, much of the preparation for this transformation had already occurred earlier in my presidency, when several of the major strategic thrusts were launched. A series of planning groups, both formal and ad hoc, had been meeting to consider the future of the university. This effort included the strategic planning teams of the late 1980s, ad hoc meetings of faculty across the university, and numerous joint retreats of executive officers, deans, and faculty leaders. A presidential advisory committee of external advisors had been formed and had been meeting regularly on strategic issues for several years. Extended strategic discussions with the board of regents had been initiated and would continue through the transformation effort.

However, we needed something beyond this, to break our thinking out of the box, expanding our sense of the possible to encompass even highly unlikely alternatives. To this end, we first took advantage of the presence on our business school faculty of C. K. Prahalad, one of the world's most influential corporate strategists, asking him to lead a group of senior administration and faculty leaders through the same strategic process that he had conducted for the executive leadership of many of the major corporations in the world. We followed this by inviting Robert Zemsky, both an important thought leader in higher education and an experienced facilitator of strategic discussions, to lead several sessions of a roundtable group, including junior faculty members as well as senior leadership.

The Vision 2000 strategy required a careful optimization of the interrelated characteristics of institutional quality, size, and breadth. Transformation would require more: tapping the trailblazing spirit of the Michigan saga. It would emphasize risk taking and innovation. It

would demand the bold agenda of reinventing the university for a new era and a new world.

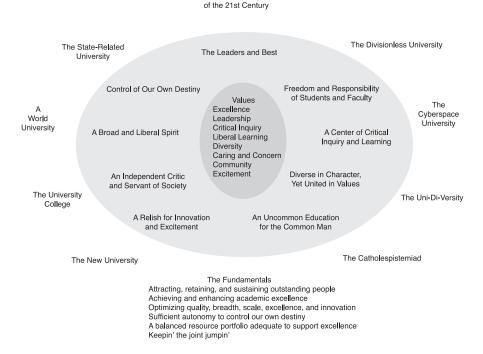
To capture a bolder vision of the university's future, we turned to C. K. Prahalad for his concept of *strategic intent*.³ The traditional approach to strategic planning focuses on the fit between existing resources and current opportunities. Strategic intent is a stretch vision that intentionally creates an extreme misfit between current resources and future objectives and thus requires institutional transformation to build new capabilities. Michigan developed the following strategic intent:

The Strategic Intent (Vision 2017): To provide the university with the capacity to reinvent itself as an institution more capable of serving a changing state, nation, and world.

Vision 2017 depended for its success on sustaining our most cherished values and our hopes for the future: excellence, leadership, critical and rational inquiry, liberal learning, diversity, caring and concern, community, and excitement. In addition, we paid particular attention to those elements of the university's institutional saga that were important to preserve, as well as those values and characteristics that were our fundamental aspirations. The figure that follows summarizes this aspect of our transformation process. Around the core of values and characteristics are arranged a number of possible paradigms of the university. While none of these alone would appropriately describe the university as it entered its third century, each was a possible component of our institution, as seen by various constituents. Put another way, each of these paradigms was a possible pathway toward the university of the twenty-first century. Each was also a pathway we believed should be explored in our effort to better understand our future.

We proposed four simply stated goals to help move the university beyond the leadership positioning of Vision 2000 and toward the paradigm shifting of Vision 2017:

Goal 1: To attract, retain, support, and empower exceptional students, faculty, and staff



The University

Goal 2: To provide these people with the resources, environment, and encouragement to push to the limits of their abilities and their dreams

Goal 3: To build a university culture and spirit that values adventure, excitement, and risk taking; leadership; excellence; diversity; and social values, such as community, caring, and compassion

Goal 4: To develop the flexibility and ability to focus resources necessary to serve a changing society and a changing world

Although simply stated, these four goals were profound in their implications and challenging in their execution. For example, while Michigan had always sought to attract high-quality students and faculty to the university, it tended to recruit those who conformed to more traditional measures of excellence. If we were to go after "paradigm breakers," other criteria—such as creativity, intellectual span, and the ability to lead—would become important. The university

needed to acquire the resources necessary to sustain excellence, a challenge at a time when public support was dwindling. Yet this goal suggested something beyond that: we needed to focus resources on our most creative people and programs. We also needed to acquire the flexibility in resource allocation to respond to new opportunities and initiatives.

While most people would agree with the values set out in our third goal of cultural change, many would not assign such a high priority to striving for adventure, excitement, and risk taking. However, if the university was to become a leader in defining the nature of higher education in the century ahead, this type of culture was essential. Developing the capacity for change, while an obvious goal, would be both challenging and controversial. We needed to discard the status quo as a viable option (to challenge existing premises, policies, and mind-sets) and to empower our best people to drive the evolution—or revolution—of the university.

The transformation agenda we proposed, like the university itself, was unusually broad and multifaceted. Part of the challenge lay in directing the attention of members of the university community and its multiple constituencies toward those aspects of the agenda most appropriate for their talents. For example, we believed that faculty should focus primarily on the issues of educational and intellectual transformation and the evolving nature of the academy itself. The regents, because of their unusual responsibility for policy and fiscal matters, should play key roles in the financial and organizational restructuring of the university. Faculty and staff with strong entrepreneurial interests and skills should be asked to guide the development of new markets of the knowledge-based services of the university.

It is hard to persuade existing programs within an organization to change to meet changing circumstances. This is particularly the case in a university, in which top-down hierarchical management has limited impact in the face of the creative anarchy of academic culture. One approach is to identify and then support islands of entrepreneurialism, those activities within the university that are already adapting to a rapidly changing environment. Another approach is to launch new or greenfield initiatives that are designed to build in the necessary elements for change. If these initiatives are provided with

adequate resources and incentives, faculty, staff, and students can be drawn into the new activities. Those initiatives that prove successful will grow rapidly and, if designed properly, will pull resources away from existing activities resistant to change. Greenfield approaches create a Darwinian process in which the successful new initiatives devour older, obsolete efforts, while unsuccessful initiatives are unable to compete with ongoing activities capable of sustaining their relevance during a period of rapid change.

Institutional transformation requires a clear and compelling articulation of the need to change and a strong vision of where the change process will lead. While the debate over specific elements of the transformation process should involve broad elements of the university community and its constituents, the vision itself should come—indeed, must come—from the president. My administration made the case for transformation and both short- and long-range visions (Vision 2000 and Vision 2017) in a series of documents intended to serve as the foundation for the effort. Further, these documents summarized the ongoing planning effort, developed a scheme to measure progress toward goals, and sketched a plan for transforming the university.⁴

Beyond this task, I served, as president, not only as the leader of the transformation effort but also as its principal evangelist. In an academic institution, the role of the president is in many ways like that of a teacher, explaining to various campus and external constituencies the need for transformation and setting out an exciting and compelling vision of where the transformation process will lead. In almost every address I gave during my presidency, in every available forum, I stressed two recurring themes: leadership and change. Each of my annual State of the University addresses during my latter years as president focused on different aspects of required change and on the challenges and opportunities these presented to the university—for example, diversity, intellectual change, and renegotiating the social contract between the public university and society. Each of these presentations stressed that the University of Michigan had a long heritage of providing leadership to higher education during periods of change and that it was positioned to do the same in the twenty-first century. As my administrative team's efforts moved into high gear, we

televised roundtable discussions among students and faculty on key strategic issues, such as diversity, undergraduate education, and multidisciplinary scholarship. These discussions, moderated by myself, were videotaped and shown both on the university's internal closed-circuit broadcasting network and on the community-access channels on Ann Arbor's cable television network.

When we launched the transformation effort in 1993, we held dozens of meetings with various groups on campus (much as we had done with the Michigan Mandate), both to explain the importance of the transformation effort and to seek input and engagement. Over the course of the next two years, I managed to meet not only with the faculties of each of our major schools and colleges and larger departments but also with several dozen staff groups in such areas as business, finance, and facilities. The final element of communication and engagement was to launch a series of presidential commissions composed of leading faculty members, to study particular issues and develop recommendations for university actions. These commissions were chaired by several of our most distinguished and influential faculty and populated with change agents. Among the topics included in their studies were the organization of the university; recruiting and retaining the extraordinary (students, faculty); streamlining processes, procedures, and policies; the faculty contract (i.e., tenure); and developing new paradigms for undergraduate education within the environment of a research university. A more complete description and analysis of the UM experience in strategic planning and institutional transformation during the 1990s is provided in the Internet document Positioning the University of Michigan for the New Millennium.5

EXPERIMENTS AND VENTURES

As the various elements of Michigan's transformation agenda came into place, our philosophy also began to shift. We came to the conclusion that in a world of such rapid and profound change, as we faced a future of such uncertainty, the most realistic near-term approach was to explore possible futures of the university through experimentation and discovery. Rather than continue to contemplate possibilities for the future through abstract study and debate, it

seemed a more productive course to build several prototypes of future learning institutions as working experiments. In this way, the university could actively explore possible paths to the future.

Some experiments had actually been launched during the Vision 2000 positioning phase. One example was our exploration of the possible future of becoming a privately supported but publicly committed university by completely restructuring our financing, raising over \$1.4 billion in a major campaign, increasing tuition levels, dramatically increasing sponsored research support to the highest in the nation, and increasing our endowment tenfold. Another early experiment was exploring the theme of a "diverse university" through such efforts as the Michigan Mandate and the Michigan Agenda for Women.

There were also new experiments. The university established campuses in Europe, Asia, and Latin America, linking them with robust information technology, to understand better the implications of becoming a "world university." Michigan played leadership roles in the building and management of first the Internet and then its successor, Internet2, to explore the "cyberspace university" theme. We also launched the Michigan Virtual University as such an experiment.

Of course, not all of our experiments were successful. Some crashed in flames—in some cases, spectacularly. My administration explored the possibility of spinning off our academic health center, merging it with another large hospital system in Michigan to form an independent health care system. But our regents resisted this strongly, concerned that we would be giving away a valuable asset (even though we would have netted well over \$1 billion in the transaction and avoided an anticipated \$100 million in annual operating losses as managed care swept across Michigan). Although eventually the Michigan Supreme Court ruled that the intrusive nature of the state's sunshine laws interfered with the regents' responsibilities for selecting presidents, we ran into a brick wall when attempting to restructure how our governing board was selected and operated. And the university attempted to confront its own version of Tyrannosaurus Rex by challenging the Athletic Department to better align its athletic activities with academic priorities—for example, by recruiting real students, reshaping competitive schedules, throttling back commercialism, and even appointing a real educator (a former dean) as athletic director. Yet the university is now poised to spend over \$250 million on skyboxes for Michigan Stadium after expanding stadium capacity in the 1990s to over 110,000 and raising ticket prices to over \$150 per game.

Nevertheless, in most of these cases, at least we learned something—if only about our own ineffectiveness in dealing with such cosmic forces as college sports. More specifically, all of these efforts were driven by the grassroots interests, abilities, and enthusiasm of faculty and students. While such an exploratory approach was disconcerting to some and frustrating to others, there were fortunately many on our campus and beyond who viewed this phase as an exciting adventure. All of these initiatives were important in understanding better the possible futures facing our university. All have influenced the evolution of our university.

MORE LESSONS LEARNED: THE CHALLENGES OF TRANSFORMATION

The experience of the University of Michigan during the 1990s suggests the importance of several factors in achieving successful transformation. First, it is important that any transformation effort always begin with the basics, by launching a careful reconsideration of the key roles and values that should be protected and preserved during a period of change. The history of the university in America is that of a social institution created and shaped by public needs, public policy, and public investment to serve a growing nation. Yet in few places within the academy, at the level of governing boards, or in government higher education policy does there appear to be a serious and sustained discussion (at a time when it is so desperately needed) of the fundamental values so necessary to the nature and role of the university. It is the role of the president to stimulate this dialogue by raising the most fundamental issues involving institutional values.

It is critical that the senior leadership of the university buy into the transformation process and fully support it—or else step off the train before it leaves the station. This is required not only of executive officers and deans but of key faculty leaders as well. It is also essential

that the governing board of the university be supportive—or at least not resist—the transformation effort. External advisory bodies are useful to provide alternative perspectives and credibility to the effort. In fact, it is the duty of the governing board to charge a president with the responsibility to develop a plan for the future of the university (setting goals and developing the means to achieve them), if it is to have a framework for assessing presidential performance.

Mechanisms for active debate concerning the transformation objectives and process must be provided to the campus community. At Michigan, we launched a series of presidential commissions on such key issues as the organization of the university, recruiting outstanding faculty and students, and streamlining administrative processes. Each of our schools and colleges was also encouraged to identify key issues of concern and interest. Effective communication throughout the campus community is absolutely critical for the success of the transformation process.

Efforts should be made to identify individuals—at all levels and in various units of the university—who will buy into the transformation process and become active agents on its behalf. In some cases, these will be the institution's most influential faculty and staff. In others, it will be a group of junior faculty or perhaps key administrators. Every opportunity should be used to put in place leaders at all levels of the university—executive officers, deans and directors, chairs and managers—who not only understand the profound nature of the transformations that must occur in higher education in the years ahead but are effective in leading such transformation efforts.

Clearly, significant resources are required to fuel the transformation process, probably at the level of 5 to 10 percent of the academic budget. During a period of limited new funding, it takes considerable creativity (and courage) to generate these resources. As I noted earlier in considering financial issues, the only sources of funding at the levels required for such major transformation are usually tuition, private support, and auxiliary activity revenues, so reallocation must play an important role.

Large organizations will resist change. They will try to wear leaders down or wait them out (under the assumption "This, too, shall pass"). Administrators must give leaders throughout the institution

every opportunity to consider carefully the issues compelling change and must encourage them to climb on board the transformation train. For change to occur, administrators need to strike a delicate balance between the forces that make change inevitable (whether threats or opportunities) and a certain sense of stability and confidence that allows people to take risks. For example, how do administrators simultaneously establish sufficient confidence in the long-term support and vitality of the institution and make a compelling case for the importance of the transformation process?

Leading the transformation of a highly decentralized organization is a quite different task than leading strategic efforts that align with long-accepted goals. Unlike traditional strategic activities, where methodical planning and incremental execution can be effective, transformational leadership must risk driving an organization into a state of instability in order to achieve dramatic change. Timing is everything, and the biggest mistake can be agonizing too long over difficult decisions, since the longer an institution remains in an unstable state, the higher the risks of a catastrophic result can be. It is important to minimize the duration of such instability, since the longer it lasts, the more likely it is that the system will move off in an unintended direction or sustain permanent damage. Those who hesitate are lost.

I had learned from my days as dean of the College of Engineering that during the early stages of transformative leadership, you can make a great deal of progress simply because most people do not take you very seriously, while those who do are usually supportive. However, as it becomes more apparent not only that you mean what you say but that you can deliver the goods, resistance begins to build from those moored to the status quo. I sensed that I was becoming increasingly dangerous to those who feared change.

As we broke our thinking out of the box, pushing the envelope further and further, I worried that it was increasingly awkward and perhaps even hazardous for the president to be carrying the message all the time. As my awareness grew about just how profound the changes occurring in our world were becoming, my own speculation about the future of higher education was beginning to approach what some might consider the lunatic fringe. I worried that my own capac-

ity to lead could well be undermined by my own provocative thinking on many of these issues. There were times when I wondered if it was time for the president to stop simply posing public questions (and taking behind-the-scenes actions) and instead begin to provide candid assessments of how we were changing and where we were headed. Or perhaps it was time to set aside the restrictive mantle of university leadership and instead join with others who were actually inventing this future.

Yet university leaders should approach issues and decisions concerning transformation not as threats but, rather, as opportunities. It is true that the status quo may no longer be an option. However, once one accepts that change is inevitable, it can be used as a strategic opportunity to shape the destiny of an institution, while preserving the most important of its values and traditions.