"Managing for Success: Universities and Corporations in the Twenty-First Century"

ADDRESS BY DUKE UNIVERSITY PRESIDENT NANNERL O. KEOHANE
TO THE AMERICAN CHAMBER OF COMMERCE IN JAPAN

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I. GREETINGS

Arigato gozimus. Thank you for kind words of introduction, Mr. Fukushima, and for your warm welcome.

I am very pleased to be here with you. I have addressed a number of Chambers of Commerce in my day, as you might guess, but before now have never traveled more than a few miles to do so. It is an honor to be among the select company to address the members of the American Chamber of Commerce in Japan during your 50th anniversary celebration. It is a particular pleasure to address a group whose members understand the importance of educating and developing managers skillfully and successfully.

I must, however, confess to some trepidation at the thought of speaking on this subject to this audience, packed with so many knowledgeable executives. I feel like the man who survived the terrible Johnstown Flood in nineteenth-century Pennsylvania. When he died and went to heaven, he was told by St. Peter that all new arrivals may introduce themselves to the heavenly hosts the first night, telling anything about their lives they wish to share. Well, of course this guy said he would speak about the Johnstown Flood; to which St. Peter responded: "Do this if you wish, by all means, but you should remember that Noah will be in the audience."

I am a manager, yes, and I hope to make it into the 21st century as a manager. But I am a rather unorthodox manager, by the usual standards of corporate activity, since the entity I am asked to "manage" is a university. Universities are in some ways similar to corporations, but in many ways very different. These similarities, and these differences, are what I want to illumine in at least a cursory fashion today, with hopes that this will be both helpful to many of you as managers, and interesting to those who care about Duke University or American higher education.
As president, I am responsible for the overall health and welfare of Duke University, reporting to the Board of Trustees, which, unlike all my other bosses (faculty, students, parents) is legally responsible for my performance. As a member of the Board of IBM, and at one point a member of the Board of State Street Boston as well, I have learned something about management from the perspective of a director. At IBM, I participate in strategic decision making for one of the world's leading corporations, and I get to watch some incredibly interesting leaders in action -- notably Lou Gerstner.

II. THE DIFFERENCES BETWEEN HIGHER EDUCATION AS AN 'INDUSTRY' AND CORPORATE LIFE

As I consider the major differences between a university and a corporation, from a manager's point of view, several items come readily to mind.

A) First, a university has no bottom line, in the sense of easily available financial measures of success -- whether it is earnings per share or return on investment or net earnings before taxes. There are some units of a large research university like Duke that do operate in a corporate fashion, particularly the hospital, and some of our auxiliary enterprises such as our retail stores. And in some cases -- admissions or development, for instance, one can measure success by the size and quality of the applicant pool, or the number of dollars raised per FTE employee in development.

These are useful measures, and it makes sense to find other parts of the university where folks can be asked to think in terms of a bottom line, and thus be held responsible for performance.

But in several of our most important enterprises it really is extremely difficult to measure productivity and success with the degree of specificity one associates with the for-profit institutions. How do you figure out whether a particular course, whether in our Fuqua School of Business or in the religion department, has been a success? Over the long term, the enriched mind and enhanced performance of at least some of those who were students in the class is probably the best measure, but these things are all mixed up with other experiences and it's hard to sort out the specific contribution of that class. Yet that success is the most important thing about what we do, our only real "bottom line," and it is devilishly difficult to measure and hold folks accountable for.

B) Along the same lines, there is no product of a university, or rather, there are multiple products. We produce knowledge, through research, and patient care in the hospital, and educated students -- but the students and the patients are consumers at least as much as they are products, so the whole thing gets quite confused. The product/consumer confusion is particularly clear with students. It would be a strange corporation indeed that would year in and year out spend more than it made on each product. A corporation almost certainly would be accused of product dumping and face the interest of the Justice Department's Antitrust Division or a law suit by a competitor losing market share and stock value.

But universities, particularly the best ones, annually spend more to educate students than they pay
in tuition. Each of our students receives an education that costs substantially more than his or her tuition. According to Gordon Winston, an economist at Williams College, the average college and university in America in 1995 produced a $12,000 education that it sold to its students for approximately $4,000, giving each of them a subsidy of $8,000 per year. The average public institution, which most students attend, provided a $10,000 education at an average cost to the student of $1,200. At Duke, a highly selective and expensive private university, that cost/price differential is even larger, nearly $12,000. In effect, every student who comes to Duke -- even those who pay full tuition, receives a $12,000 scholarship. And for the 42 percent of our students who receive financial aid, the subsidy is far greater.

To put this in familiar business terms, a Honda or Toyota that cost $20,000 to make would sell for just $6,700, on average.

Moreover, at Duke, as at Harvard or MIT, we set a price that is much lower than what the market would bear, as study after study tells us. We have eight applicants for every opening, and thousands more would apply if they thought they could meet our competitive admissions standards. I doubt that stockholders would permit management of a corporation to forego higher profits. I'm sure an economist would say that our restraint is related to fears of creating a price resistance, or a tuition-war among competitors. But our subsidies of students also should be seen as flowing from our mission in higher education. As an industry, higher education is pledged to educate all eligible students, regardless of their backgrounds and circumstances, for useful lives as individuals and as members of a capitalistic and democratic society. We must be accessible to all and we feel an added obligation to reach out to historically underrepresented groups. Society would lose a great deal if we sold our products only to the highest bidder. And our students, whose educational experience is enriched by exposure to a diverse group of fellow students, would lose as well. That is perhaps the key difference between most corporations and our universities.

These tuition subsidies come from universities themselves, in the form of gifts and grants from individuals, corporations, and the government, or earnings from the institution's investments. Public institutions by definition are taxpayer supported, although increasingly they, too, are increasingly seeking private support.

The presence of subsidies defies the usual lessons of basic corporate economics. They also confuse the public about what college actually costs.

C) To continue with our comparison, just as it is hard to identify our "product," so it is hard to talk about productivity -- at least in our central enterprise. We can try to measure productivity in some of our peripheral support enterprises, and this is a healthy thing to do.

But if you try to raise the productivity of faculty members (and you would be a brave manager even to try to do this) by the obvious ploy of having them teach more students, through larger classes or more frequent class sessions, you will quickly run into some Alice-in-Wonderland scenarios.

Don't misunderstand me: I do think that many of our faculty members in at least some departments
of the university could teach another class or two occasionally to the benefit of their students and
the university and no great harm to themselves, and I believe the critics are right in thinking that
we could stand to pay more attention to some aspects of scholarly "productivity" on campus. But
adding more classes, for instance, means less time for other things: for research, for non-traditional
forms of teaching such as thesis advising, for service to the university through faculty governance,
sharing expertise with others through consulting, etc. And adding more students to a class, after a
point, changes the dynamics and alters the whole experience. Indeed, at Duke, where our student-
faculty ratio is about 11:1, the quality of much of what we do is related to the size of our classes.

In a university like Duke, much of the "value added" comes in the quality of the educational
interchange between students and faculty members -- and you can't have that interchange only in
classes of 300 or 400 and expect to retain the quality we so proudly profess.

To put this point another way, we have no standardized means of production that work well in our
most essential mission, no "assembly line" that one can hone to improve productivity, and few
economies of scale, since most of what we do most distinctively, in education, seems for the most
part to be done best with a small ratio of students to faculty members.

D) Another difference between the university and the corporation is the multiple constituencies that
must be satisfied, and their relatively equal, but dissimilar, stake, in what we do. Corporate
managers have to think about their shareholders, their boards of directors, their bosses and
immediate reports, their customers, their employees, their community relations. But most if not all
these stakeholders have a similar interest in a profitable corporation which is making money with
some attention to employee morale and good community relations -- which we have all learned
contribute in their own ways to that bottom line of success.

On campus, we have students, faculty members, employees in both professional and support
categories, alumni, townspeople, state and local governments, sports enthusiasts, boards of trustees
and boards of visitors, parents, all of whom have a legitimate interest in the success of the
university as they define it -- but they don't all define success in the same way. So a manager of a
university must be a political leader as much as a corporate manager, a visible educator to the
students, respected scholar to the faculty. A university manager is like the mayor of a middle-sized
city who also needs to be skilled as a teacher, scholar, preacher, diplomat, financial wizard,
cheerleader, fund-raiser, charismatic public speaker, role-model and lobbyist. Very few folks, if
any, are equally good at all those things.

E) Perhaps one of the most important of these multiple constituencies, of course, is the tenured
faculty: In many ways, they are the heart and soul of the university; students, administrators, even
boards of trustees may come and go, but the faculty carries on. (In one way or another). Faculty
members are largely right in this belief: universities grew up around the core of professing
scholars, with whom students came to study, for whom administrators were hired to get the scut
work done, and over whom boards of trustees came to sit to monitor what was going on for the
public good.

The work of the faculty, both in teaching and research, is indeed at the heart of the university, and
the rest of us are there because they are. But it is easy for faculty members to have a love/hate relationship with management, zealously guarding faculty prerogatives in governance to make sure everything is being done as well as they would do it themselves, but lacking the time or the skills of negotiation, patience, strategic thinking on general issues, financial understanding and desire to act in such a way as to benefit the whole institution, rather than just the part they care most about -- lacking, in other words, all the things that make university managers successful and define our jobs. Yet tenured faculty members also have a great deal of power, power which comes not only from their professional skills and formidable intelligence but also because they cannot be fired, except in the most egregious circumstances -- and sometimes not even then.

Thus a university manager must work within and around the power of the tenured faculty, cajoling, inciting, nagging, persuading, rather than just making a decision and getting on with it. There is probably no single factor that is more different in Lou Gerstner's job than in my own (and there are many differences, I can assure you) than this one. When Lou, acting with the advice and information of his senior team, decides to close the IBM plant in Boca Raton, he can just go out and do it -- with due attention, of course, to the concerns of laid-off employees, the economics of the town, the image of the company, etc. -- but this is damage control, not impenetrable roadblocks.

If the provost or the president decides that one of the departments of the university ought on grounds of rational governance to be closed -- perhaps a science or service program or language in which we are not really very good, so that there is no market reason why we should stay in business to do it, and there are some significant costs to be saved if we stop doing it -- if such a decision is made on rational grounds, that is only 1% of the battle.

Trying to persuade members of the faculty in that department to accept gracefully, or even grudgingly, its demise, and other members of the faculty to see the wisdom of this when they are staunch defenders of faculty prerogatives and also worry that they might be next, is a truly herculean task. It can be done: One of Duke's legendary chancellors closed the undergraduate nursing program and the education department in the early 1980s, but it took a great deal of political skill and capital and he bore the scars for quite some time, eventually leaving Duke for another university. It's very different from IBM's decision on Boca Raton.

So these are some of the most significant differences I see between university and corporate management. There are also some interesting similarities, and in naming these, I will move more directly into the topic of what managers of the 21st century need to know.

III. SIMILARITIES BETWEEN UNIVERSITIES AND CORPORATIONS

A) One of the most important similarities, surely, is that like almost every corporation these days, we in the university are in the business of using people wisely. Deploying skills, advancing careers, drawing on expertise and good advice, creating synergies, building teams.

In days past, it might have been seen as one of the differences between universities and
corporations that we have to work more collegially on campus, whereas corporations get things done by hierarchial mandate. There is still some truth to that, as I've just pointed out in the case of Boca Raton vs. The Education Department. But more and more, corporate managers are discovering the truth in dicta that would in the past have been thought impossibly fuzzy: enabling others, building the vision, working from the heart, questioning the process. These are the new mantras in management manuals, and they sound like the most radical parts of anti-patriarchal feminist political theory of the 1970s.

B) However, such mantras only carry you so far -- and it is also true that much of management, in corporate and university settings alike, requires making tough decisions, often with imperfect information.

A large part of what I or any manager spend time doing is making decisions, large and small -- and as the root of the word "decision" lies in the same word as "incision," or cutting, it is inevitable that decisions will lead to winners and losers, those who get cut in on the deal and those who get cut out, however hard you try to be inclusive and collegial. Some folks will get more of what they wanted than others, and you have to be prepared to face the consequences of that, day after day after day.

C) Just as the decisions are often made with imperfect information, either because the information can't be acquired or can't be assembled in a timely fashion before the decision has to be made, so decisions are also usually about scarce resources.

This is surely true both on campus and in the corporation -- we all manage by making decisions about how to deploy scarce resources to achieve the best possible effect. We have to decide where to invest selectively, which horses to back, which bets to make. And even as we scrabble to increase our resources -- whether from tuition, government grants, gifts, on the one hand, or pricing strategy or new product development, on the other -- we recognize that scarcity is the condition under which we must always live.

A large part of the time of a manager, whether in for-profit or not-for-profit enterprises, is spent in balancing a budget and trying to make sure that the budgetary realities reflect the best judgment about company priorities, about where scarce resources can best be deployed.

D) Universities and corporations are also similar in that we both seek to increase market share in situations that are often intensely competitive. We try to attract customers through skillful advertising and by getting out and talking with potential customers, as well. We try to differentiate ourselves from others who are doing the same thing we are, or something very like it, in order to persuade people to buy Duke instead of Yale, Fuqua instead of Wharton or Stanford.

E) We also have a heavy stake in building institutional or product loyalty, especially with our alumni and traditional customer base.

F) And we share the crucial importance of a sense of purpose, of mission, of distinctiveness that puts us ahead of the competition, and of having a strategic plan that gets us there, instead of just
muddling through.

Duke University's own mission has been basically constant for many decades, ever since a small schoolhouse in central North Carolina became a fine regional liberal arts college, and then over the past few decades, one of the nation's leading research universities. Our goals are complex and multifaceted, as is the institution; but they may be summarized in three words: to teach, to discover, and to serve.

V. MANAGERS FOR THE FUTURE

How will we manage better? Here are some key words that have surfaced at Duke in our strategic thinking about the future:

* Becoming more global, or internationalization
* Multi-disciplinary
* Technologically sophisticated
* Innovation
* Flexibility
* Diversity
* Community

A) In an increasingly global business environment, our business school, Fuqua, must go global to prosper. It is doing so with new partnerships and by originating the Global Executive MBA program. Meanwhile, Duke itself is reaching out to students and faculty the world over, through the subjects it teaches and those who are taught. We want to become more thoroughly international in our curriculum, our outreach, the people who teach and learn on campus -- so that being global is not an add-on, but an intrinsic part of what we do.

This same path has been followed much more boldly by major multi-national enterprises, which were at first US-based with small subsidiaries off-shore, but are now committed, through various stages and with varying success, to becoming truly global enterprises. Managers of tomorrow will have to know how to function and compete in a global environment if they are ambitious for their companies to succeed.

B) A multidisciplinary approach might sound quite parochially campus-based, but the best corporations are pursuing multitasking strategies vigorously as well. Bringing together experts and strategists from several different parts of the company, having the R&D folks sit down with the salespeople, to listen to each other and take advantage of the sparks and synergies that come from...
such combinations of ideas and energies -- this is an increasingly important management tool, one of the secrets for success in the 21st century.

No longer can we take the "division of labor" theory in the strict sense of "everybody who makes a pin only does one tiny piece of work," as Adam Smith envisioned it, because it has been shown that in today's complex production and service enterprises, such constraining work rules hamper creativity and progress, at every part of the organization.

C) Technology is clearly central to any reasonable vision of the 21st century, in some ways we cannot even anticipate, no doubt, but in others that we can and must.

The rate of technological change puts us to the test -- are we adaptable enough, resourceful enough to take advantage of new technologies and to compete? Managing technology is a continuing challenge, whether at Duke or IBM. Can we make sure that technology serves our needs, rather than becoming the master that drives everything we do? Recent grants from IBM and Hewlett Packard will help boost our technological competence.

Our goal must be to use technology inventively, not as a substitute for personal interaction in the workplace or the classroom, but to supplement it in marvelous and powerful ways that are both more efficient and also open up entirely new vistas of experience and opportunity. At Duke, it is routine to teach and share medical techniques and breakthroughs by way of international videoconferences. More recently, through the Global Executive MBA, we have combined distance learning, made possible by technology, with campus-based instruction in a new and highly successful program. By the way, our faculty members report that using electronic mail with students on four continents has given a whole new meaning to the concept of office hours!

D) We managers will also need, more generally, innovation and ingenuity, if we are to continue to stimulate and satisfy desires, for new knowledge, for new products, for better ways of doing things. And this does not just mean doing more, but doing things more effectively. With greater friendliness to the environment, for example -- responsible managers of the 21st century will surely need to be increasingly aware of the impact of human activity across the globe, and think about the consequences of what we do.

In being ingenious, however, we should not forget to learn lessons from past experience, to build on what has worked, not always to be inventing the wheel. Santayana's dictum that those who ignore history are doomed to repeat it received a telling modern update in a joke that Jack Matlock, Duke alumnus and former U.S. Ambassador to Russia Jack Matlock, tells.

Matlock described two Russian bear hunters who wanted to go up into Siberia to hunt, and chartered a small plane to take them there. As the pilot left them for a week, he said: "I'll be back here to pick you up, but remember, this plane only has room for one bear. So do what you like for the week, but we can only take one bear home."

A week later he came back and they had two bears. "What did I tell you?" he said. "We can only take one bear -- three people, one bear." The hunters responded: "Well, you said the same thing last
year, and we paid you $100, and you got two bears in the plane." The pilot said, "OK, I guess that's true."

So they paid him $100, and he pushed and tugged and shoved and hauled and got both bears and all three people and all their gear into the plane. The plane took off, groaning and sputtering, just cleared the trees, and fifteen minutes later it crashed. Nobody was badly hurt, but they were all shook up. One hunter said to the other, "Where are we?" "I don't know," replied the other guy. "But I think it's just about the same place we crashed last year."

E) We will also need to be flexible, adaptable, to find new ways to haul those bears or build mid-sized planes if there is enough of a market of hunters who want to haul them. We will need to respond to the multiple appetites, needs and interests of far-flung people, changing quickly through the power of instant communication, in a world grown accustomed to instant gratification and the pleasures of novelty.

We will have to adapt to new ways of doing things, new needed skills, new markets, new alliances and partnerships with folks who yesterday and tomorrow may be our fiercest competitors as well.

This goes for all of us: not just IBM partnering with Apple or Intel or Fujitsu, but Duke partnering with North Carolina universities, as we do in our library system or Latin American Studies, to take full advantage of our parallel strengths and realize at least some economies of scale -- even as, at other times on the playing fields, we are the fiercest of rivals.

F) Next, we will need to be thoughtful and sophisticated in dealing with diversity. The workforce for any manager to organize and lead in the 21st century will almost inevitably be more diverse than has been true in the past -- ethnically, by gender, in terms of languages spoken, by geographic origin, by religion, and in every other way. Managing diversity successfully requires thinking in new ways about the needs and skills of many different kinds of people, and being sensitive to their different backgrounds and cultural expectations.

Managing diversity may mean managing tensions and conflicts among the people who work for you, who may not initially understand or respect each other sufficiently to form a team and get the job done well for your enterprise. It means addressing such challenges head-on, with imagination and perseverance, recognizing the contributions of many people to the overall effort.

Managing diversity requires us to place even more emphasis on educating men and women for leadership roles. In this regard I emphasize education of women, because, according to a number of executives interviewed last December by Business Week magazine, gender is as much an issue in business success on a global scale as hiring and promoting nationals in each country of business. If we fail to address this issue, we are neglecting half the talent and energy in the world -- and no savvy manager should do that.

Diversity, particularly in the corporate setting, may be reasonably defined as the result of a set of values and policies that prize cultural diversity in the workforce. It prizes each individual employee, and his or her potential, as well as the marketplace (each country in which the company
does business). The 3M Corporation, for example, talks of a workforce that reflects its global market and builds on each employee's capabilities -- part of the company's plan 100 percent customer satisfaction, growth and success. IBM, where I am a director, has 32 "diversity councils" in regions of the world and assembles top leadership for a "global diversity council" twice a year. Most if not all our best and most successful corporations have learned to prize diversity as much as Duke and other universities.

VI. LEADERSHIP FOR THE FUTURE

Let me close by mentioning a distinction that I have so far avoided, given the topic you have provided for me, which dwells on management. Many folks draw a distinction between management and leadership, usually to the advantage of the latter.

I have great respect for good management, but to be successful in the corporation and the university of the 21st century, management must not be divorced from leadership. It must not be management in some narrow, bureaucratic sense of just moving the pins around on the world map to track our customers, or making sure the forms all get filled out in time.

Good management must also involve leadership, in three different senses of the word:

a) leadership as problem solving -- asking the right questions, getting the right team assembled to work on the problem, defining the problem correctly in the first place and inspiring others to tackle it and solve it together.

b) leadership as making things happen -- having a vision and a sense of purpose and goals, being a vigorous competitor, moving people around, making a difference in what people choose to do.

c) leadership as taking a stand -- being willing to make tough choices, being identified with a set of principles or core values that stand for something important, and most of all, being courageous enough to stake out your position in defense of something you think is right, even if it may not be popular or to your own short-term advantage, or that of your company.

Leadership in this dimension means acting ethically, in the awareness that not only the long-term self-interest of your own enterprise, but also the fundamental principles that keep our whole system of politics and economics working over the long term require adhering to some basic rules of honesty, truth in advertising, fair dealing and accountability.

Jim Burke's actions in the Tylenol crisis at Johnson & Johnson are one well-known example of such courage and principled reaction; fortunately, they also turned out to be shrewd business, after a high initial cost. But principled reactions are not always obviously good business, in the short or middle term, when you stand up to prevailing community sentiment on issues like race or sexuality or religion. In the longer term, however, the soul of a company or a university and its longest term success depend upon such leadership to differentiate itself from more timid or pallid competitors.
Duke has a history of entrepreneurial vision and achievement -- and we have the advantage of momentum built up over recent decades. The university is relatively young -- not quite 75 -- competing with the older, wealthier elites, and we aim to do even better.

Ultimately, all of us here will be judged by how well we steer our way through the rapids of change. As managers and leaders in the next century, we are going to have to be flexible, creative, and responsive to change while mastering new and complex technologies in an increasingly interdependent world. We have a great set of opportunities in front of us, and they are very exciting.

Thank you.