Many of my thoughts in this paper come from my experience in conducting comprehensive reviews of agricultural economics departments.

Changing portfolio of agricultural economics departments

When I was a student and then a young assistant professor, departments were focused on farm management and commodity marketing with some work in economic development, price analysis and policy. These areas have all ebbed, or diminished in importance, as waves of agribusiness and resource/environmental economics have flowed in. I am proud that our profession has been able to discern changes in demand and adapt to the changing market. After all, we are a “learning organization” that can exploit “opportunity gaps” – to use terms I learned in yesterday’s discussion of “knowledge management.”

Perhaps the most wrenching problem has been what to call the former department of agricultural economics. Many have adopted versions of “applied economics,” “resource economics,” and/or “management;” and one is planning to become a “school of applied economics and management.” I would guess that agribusiness is going to be a popular focus for a number of years.

But while making that prediction, based on the current trends and state of knowledge, I’m may be as wrong as Thomas Watson, Chairman of IBM as it was developing the first computer; in 1943, he said: "I think there is a world market for maybe five computers."

Or, Ken Olson, president, chairman and founder of Digital Equipment Corp. who in 1977 said: “There is no reason anyone would want a computer in their home.”

Or, multi-billionaire Bill Gates, who said in 1981: "640K ought to be enough for anybody."

Perhaps some insights about the future could be gained from examining the forces behind the changing demand facing agricultural economics departments.
Changing student mix

The declining number of students from farms and from rural areas has presented some big challenges to colleges of agriculture. Most colleges have adapted their curricula to appeal to a segment of urban students, now comprising more than 75% of the student body. Ag Econ departments have adapted quite well and attracted urban students interested in business and the environment. Student numbers have grown; new faculty announcements appear in my email almost every week.

PhD programs, once the pride of most agricultural economics departments, and a source of cheap labor, are in jeopardy in all but the largest departments, as the demand for traditional agricultural economists has slackened and funding for international students has dropped off. New faculty for agribusiness programs come from business schools and other areas. A few years ago I heard talk about needing only about 8-10 agricultural economics PhD programs in the United States. Most small departments didn’t like that idea, and many hang on with 1 to 2 new PhDs a year. A few have sought new strategies, such as creating a joint PhD program with the economics department or wholesale merging the departments. At the same time, agribusiness programs have pursued joint arrangements with business colleges for MS, MBA, and PhD degrees.

The undergraduate and graduate curricula for agricultural economics majors are including more courses in allied fields – business, statistics, natural resource management, economics, etc. As a result inertia has kept far too many courses on the books, consuming scarce faculty resources for only a few students. The problem is compounded by agricultural economics departments that feel they can teach some economics, math and other courses better than other departments on campus. What ever happened to the concept of comparative advantage? Course offerings need to be revised, and the number of courses needs to be reduced so as to use our scarce resources to best meet the needs of students. Another problem is the ability of agricultural economics departments to get students into the business and other classes they need.

When you reduce the number of courses and have students take many classes outside, I sometimes have to wonder what will become of the agricultural economics department. Could the business college run the program better and offer an agribusiness option? And could economics run the resource economics program? Or do we really offer some unique perspectives that students and society need?

We also need to think about how we will meet the needs of future students. Potential students are likely to include more minorities, more part-time to accommodate work, more interested in web-based education, more interested in experiential learning through involvement with real firms.

Changing portfolio of funds

Traditional money sources, “hard money” accounts for very broadly defined work, are shrinking. The new money sources are largely grants and contracts for specific kinds of business development, value-added ventures, resource and environment issues.
I recently did a departmental review where 2/3 of the financial resources (salaries, benefits, operating expenses) came from grants and contracts – “soft money.” Almost 2/3 of the faculty and staff were paid with these funds. Don’t quit asking your dean for money to fund exciting new programs, but we all know he/she is much more likely looking for more ways to recall dollars rather than new ways to spend them. Faculty at land grant universities, must search and compete for funds just like faculty at other institutions, as “hard” dollars for teaching, research, and outreach from federal and state appropriations continue to decline in real dollars and sometimes in current dollars. In large measure, faculty must build their programs with their own funding, and the direction of that program will be affected by who is paying the bill. On the positive side, such funding encourages relevance and provides considerable flexibility to change a program. On the other hand, it increases the risk of failure, as new sources of funds may not be sustainable.

**Changing portfolio of farm family enterprises**

The data from the annual ERS/NASS ARMS study indicates that the average farm family, after accounting for all government payments, gets only 10% of its family income from the farm operation. While more true of smaller farms, larger farms also are surprisingly diversified with substantial off-farm income. We need think about farms as diversified small businesses. And we need to include them in our concept of agribusiness, just as Davis and Goldberg did in 1957 when they coined the term “agribusiness.” There are many research and education opportunities in working with farmers of all sizes in such topics as strategic planning, portfolio management, knowledge management, entrepreneurship, and marketing. Steve Blank (Review of Agricultural Economics, Fall/Winter 2001) has done some theoretical work on farmers’ portfolios and gives nine propositions to explain why farmers diversify both within the farm and off the farm. My plea: Don’t leave farmers at the mercy of traditional farm management programs.

**Changing environment of agribusiness**

Ongoing changes in the environment within which agribusiness firms operate provide an expanding array of opportunities for research and education. Here are a few interesting ones.

*Demographic changes* mean changes in consumers, students, and society as a whole.  
The 1990-2000 Census period:
- More people. Faster population growth rate than last two decades. U.S. growth rate was faster than other major developed countries.
- More Hispanics. Whereas total population increased 13.2%, Hispanic segment increased 57.9%; Asians/Pacific Islander, 46.3%; Blacks, 15.6%; Hispanics (all races) now outnumber Blacks.
- More foreign born. 10.4% of population; largest percentage since 1930 and before.
- More people over 65, but a smaller percentage of the population.
- More people living alone; larger percentage of population (20.6%)

*Plight of large cooperatives,* including the very recent Chapter 11 decision by Farmland Industries.
How well can cooperatives adapt to the changing structure of the food system? What kinds of research and outreach are needed from our land grant universities?

*Globalization.* Global markets are bigger and more diverse; foreign direct investment is playing an increasing role in the ownership and control of the U.S. food system.

*Concentration.* Mergers and acquisitions in retailing and manufacturing are continuing and in a few cases triggering government antitrust action. When will consumers be harmed? How will we get data and information for research and outreach?

*Environment and Global Climate Change.* Environmental concerns will continue to be a growing business issue for this natural resource-based industry.

*Biotechnology.* The potential for exciting new products on one hand; questions about safety and the environment on the other provides some challenging decision making problems and risks.

*Ethics.* In recent months, there is growing concern about business ethics; investors are concerned about the safety of their money; society is concerned about the stability of its economy. How are we training our students in this area of growing concern?

**Public policy issues**

Many of the above topics are important public policy issues that are often ignored by agribusiness research and education programs. There is a tendency for many agribusiness programs to be patterned after MBA programs which focus on a variety of management issues. They tend to be pro-business and afraid to tackle a variety of public concerns that the public expects from a land grant university. I think we need to keep a broad agribusiness clientele base, student base, and potential resource base by taking a comprehensive, objective approach to agribusiness research and education.

**Conclusion**

We need to look at the forces affecting the demand for our products and be willing to challenge many of the myths about the structure and performance of the university system and the agribusiness system. Agriculture is losing a lot of its uniqueness and becoming part of the mainstream. Colleges of agriculture have changed considerably in the last 50 years; they will change even more in the next fifty years. What is our unique niche? How willing are we to adapt to its challenges?

Perhaps you have found none of this information useful, so I have one final quote: “I haven't failed, I've found 10,000 ways that don't work” – Thomas Edison.